

# CENTRAL MAINE COMMUNITY COLLEGE 2022-2023 Catalog Table of Contents

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# Academic Calendar 2022 - 2023

## Fall 2022

Thursday, August 25 .....	Faculty & Staff Meetings
Monday, August 29 .....	First day of full Fall & Fall I semester classes
Wednesday, August 31 .....	Last day to add fall I courses without instructor permission
.....	Last day to drop fall I courses and receive 100% refund
Friday, September 2 .....	Last day to drop fall I courses without record and receive 50% refund
Monday, September 5 .....	Labor Day – no classes
Tuesday, September 6 .....	Last day to add full Fall courses without instructor permission
.....	Last day to drop full Fall courses and receive 100% refund
Monday, September 12 .....	Last day to drop full Fall courses without record and receive 50% refund
Friday, September 23 .....	Last day to drop Fall I courses without academic penalty
Monday, October 10 .....	Indigenous Peoples Day - no classes
Monday, October 10-11 .....	Fall recess - no classes
Wednesday, October 12 .....	Classes resume
Friday, October 21 .....	Mid-semester of full Fall courses
.....	Last day to drop full Fall courses without academic penalty
.....	End of Fall I semester: Final grades are due 48 hours after last class
Monday, October 24 .....	First day of Fall II semester classes
Wednesday, October 26 .....	Last day to add Fall II courses without instructor permission
.....	Last day to drop Fall II courses and receive 100% refund
Friday, October 28 .....	Last day to drop Fall II courses without record and receive 50% refund
Monday, October 31 .....	Spring registration opens for current degree-seeking students with 30 or more credits
Monday, November 7 .....	Spring registration opens for current degree-seeking students with fewer than 30 credits
Friday, November 11 .....	Veterans Day - no classes
Friday, November 18 .....	Last day to drop Fall II courses without academic penalty
Monday, November 21 .....	Spring registration opens for non-degree-seeking and new students
Wednesday, November 23-25 .....	Thanksgiving recess - no classes
Monday, November 28 .....	Classes resume
Friday, December 16 .....	End of full Fall and Fall II semesters: Final grades are due 48 hours after last class

## Winter 2022

Wednesday, December 21 .....	First day of Winter classes
.....	Last day to add/drop and receive a refund
Monday, January 9 .....	Last day of Winter classes

## Spring 2023

Wednesday, January 11 .....	Faculty & Staff Meetings
Thursday, January 12 .....	Faculty & Staff Meetings
Monday, January 16 .....	Martin Luther King Day - no classes
Tuesday, January 17 .....	First day of full Spring and Spring I semester classes
Thursday, January 19 .....	Last day to add Spring I courses without instructor permission
.....	Last day to drop Spring I courses and receive 100% refund
Monday, January 23 .....	Last day to drop Spring I courses without record and receive 50% refund
Tuesday, January 24 .....	Last day to add full Spring courses without instructor permission
.....	Last day to drop full Spring courses and receive 100% refund

Monday, January 30 .....	Last day to drop full Spring courses without record and receive 50% refund
Friday, February 10 .....	Last day to drop Spring I courses without academic penalty
Monday, February 20 .....	President's Day - no classes
Monday, March 6 .....	Summer and Fall registration opens for current degree-seeking students with 30 or more credits
Friday, March 10 .....	Mid-semester of full Spring courses
.....	Last day to drop full Spring courses without academic penalty
.....	End of Spring I semester: Final grades are due 48 hours after last class
Monday, March 13-17 .....	Spring recess - no classes
Monday, March 20 .....	Classes resume
.....	First day of Spring II semester classes
Wednesday, March 22 .....	Summer and Fall registration opens for current degree-seeking students with fewer than 30 credits
.....	Last day to add Spring II courses without instructor permission
Friday, March 24 .....	Last day to drop Spring II courses and receive 100% refund
Monday, March 27 .....	Last day to drop Spring II courses without record and receive 50% refund
Monday, April 10 .....	Summer and Fall registration opens for new students
Friday, April 14 .....	Summer registration opens for non-degree-seeking students
Monday, April 17 .....	Last day to drop Spring II courses without academic penalty
Monday, May 8 .....	Patriots Day - classes in session
Thursday, May 11 .....	End of full Spring and Spring II: Final grades are due 48 hours after last class

## Summer 2023

Monday, May 22 .....	First day of full Summer and Summer I term classes
Wednesday, May 24 .....	Last day to add Summer I courses without instructor permission
.....	Last day to drop Summer I courses and receive 100% refund
Friday, May 26 .....	Last day to drop Summer I courses without record and receive 50% refund
Monday, May 29 .....	Memorial Day - no classes
Tuesday, May 30 .....	Last day to add full Summer courses without instructor permission
.....	Last day to drop full Summer courses and receive 100% refund
Monday, June 5 .....	Last day to drop full Summer courses without record and receive 50% refund
Friday, June 16 .....	Last day to drop Summer I courses without academic penalty
Monday, June 19 .....	Juneteenth - no classes
Friday, June 30 .....	Mid-term of full Summer courses
.....	End of Summer I term: Final grades are due 48 hours after last class
Monday, July 3 .....	First day of Summer II term classes
Tuesday, July 4 .....	Independence Day - no classes
Thursday, July 6 .....	Last day to add Summer II courses without instructor permission
.....	Last day to drop Summer II courses and receive 100% refund
Monday, July 10 .....	Last day to drop Summer II courses without record and receive 50% refund
Friday, July 28 .....	Last day to withdraw from Summer II courses without academic penalty
Friday, August 18 .....	End of full Summer and Summer II term: Final grades are due 48 hours after last class

# General Information



## A Message from the President

We appreciate this opportunity to show you Central Maine Community College. Through the pages in this catalog you can learn more about the programs, courses, and services available to you. While we are proud of the offerings we present to you here, we cannot show you on mere printed pages the human dimension of our College—a caring faculty and a supportive staff.

There are many places you can go to learn, but there are few where you can find people who are as dedicated to serving you as the faculty and staff at this College. Our advisors will help you select a program and register. Instructors will work with you inside and outside of class to develop your full potential. Financial aid specialists will help secure the resources you need to pay for your education. A career and transfer services advisor will help you decide on a career path or where to continue your education. You will find caring and supportive people wherever you turn.

Please accept our personal invitation to visit the College, to walk through our facilities, to see our state-of-the-art equipment, but most of all to meet the people who will help you open the doors to your future.

Betsy H. Libby  
President

## Accreditation

Central Maine Community College is accredited by the New England Commission of Higher Education (formerly the Commission on Institutions of Higher Education of the New England Association of Schools and Colleges, Inc.).

Accreditation of an institution of higher education by the Commission indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the Commission is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding the accreditation status by the Commission should be directed to the administrative staff of the institution. Individuals may also contact:

New England Commission of Higher Education  
3 Burlington Woods Drive, Suite 100, Burlington, MA 01803-4514  
(781) 425 7785  
[info@neche.org](mailto:info@neche.org)

## Notice of Non-Discrimination

Central Maine Community College (Central Maine Community College) does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, disability, age, or marital, parental or veteran's status. Inquiries about the college's compliance with, and policies that prohibit discrimination on, these bases may be directed to: Human Resources, affirmative action officer, Jalbert Hall, Central Maine Community College, 1250 Turner Street, Auburn, ME 04210. Telephone: 207-755-5100. Maine Relay Service: 800-457-1220. Fax: 207-755-5491. Email: [humanresources@cmcc.edu](mailto:humanresources@cmcc.edu). Internet: [www.cmcc.edu](http://www.cmcc.edu). United States Department of Education, Office for Civil Rights, 33 Arch Street, Suite 900, Boston, MA 02110. Telephone: 617-289-0111. TTY/TDD: 617-289-0063. Fax: 617-289-0150. Email: [OCR.Boston@ed.gov](mailto:OCR.Boston@ed.gov). Internet: <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/TDD: 207-624-6064. Fax: 207-624-6063. Internet: <http://www.state.me.us/mhrc/index.shtml>; 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/>.

# General Information

## About Central Maine Community College

**A public institution of higher learning, Central Maine Community College (CMCC) was established by the Maine State Legislature to provide associate degree and certificate programs directed at the educational, occupational, and technical needs of the State's citizens and the workforce needs of the State's employers. It is one of seven colleges in the Maine Community College System (MCCS). Other colleges are located in Bangor, Calais, Fairfield, Presque Isle, South Portland, and Wells.**

### Governance

The Maine Community College System is governed by a board of trustees appointed by the governor. Policies and decisions of the board are implemented through the MCCS president, who has an office in Augusta and serves as the System's chief executive officer.

The president of the College serves as the chief executive officer and official spokesperson for the College.

### Vision

Central Maine Community College is committed to enduring excellence as a comprehensive community college; dedicated to student academic, career, and personal success in preparation for the career opportunities of tomorrow; focused on continuous self-evaluation and improvement; and strengthening the open-door philosophy of educational opportunity.

### Mission

Central Maine Community College provides quality, accessible college education and lifelong learning opportunities by offering career and technical education; education for transfer to the baccalaureate level; and services to support economic development and community vitality.

To achieve this mission, Central Maine Community College offers:

- Career and technical education that prepares students for employment and continued education;
- Education that prepares students for transfer to the baccalaureate level;
- Lifelong learning opportunities to area residents to improve workplace skills, enhance job and career prospects, and enrich their lives;
- Services to support economic development and community vitality; and
- The highest quality services while maintaining the broadest accessibility to our students and community.

### Program Advisory Committees

Each program offered at Central Maine Community College has an advisory committee, the members of which are representative of the

community and the industries that employ graduates of the College. In addition to assisting with program planning and development, advisory committee members provide helpful information about jobs and employment trends, educational opportunities, and serve as an important communications link between industry and the community.

### Central Maine Community College Education Foundation and Education Advisory Council

The Central Maine Community College Education Foundation (The Foundation) is a community-based, nonprofit corporation that has as its sole mission "support for Central Maine Community College and its students."

The Foundation is governed by a volunteer board of directors made up of community and business leaders.

The Foundation has contributed over \$1,200,000 to Central Maine Community College for scholarships, program improvements and capital projects.

The Central Maine Community College Education Foundation Board of Directors also serves as the education advisory council (The Council), providing a forum for matters that have a broad impact on the College. Specific responsibilities of the Council include reviewing proposals for major changes in policies and programs, participating in the development of long-range plans, and assisting with the interpretation of College goals, programs and needs to the general public. Members of the education advisory council are representative of the constituencies served by the College.

### Transfer Programs and Agreements

Most Central Maine Community College credit courses are accepted for transfer at other colleges and universities, although they may not apply to a specific program of interest. In addition, Central Maine Community College has agreements with several institutions that allow graduates of some College associate degree programs to transfer with advanced standing into specific baccalaureate programs. In order to ensure optimal transfer of credits to upper division programs, students should work

# General Information

corroboratively with their academic advisor and the director of placement and transfer Services to plan a course of study that meets their goals. To facilitate the transfer of courses, students should identify, as soon as possible, the upper division program and institution in which they plan to enroll. A complete listing of transfer agreements may be found on the College website at [https://cmconnect.cmcc.edu/ICS/Campus\\_Life/Campus\\_Groups/Transfer\\_Services/Transfer\\_Events\\_Services.jnz?portlet=Transfer\\_Agreements](https://cmconnect.cmcc.edu/ICS/Campus_Life/Campus_Groups/Transfer_Services/Transfer_Events_Services.jnz?portlet=Transfer_Agreements).

## History and Growth of Central Maine Community College

Central Maine Community College traces its origin to 1963 when the 101st Maine Legislature submitted to public referendum the question of establishing a postsecondary vocational training program in Androscoggin County. The voters of Maine gave their consent for such an institution in November 1963, and in September 1964, Androscoggin State Vocational Institute opened in the facilities of a former automobile dealership at 385 Main Street in Lewiston.

In 1965 the State Board of Education renamed the institution Central Maine Vocational Technical Institute (CMVTI) and in January 1966, CMVTI was moved to the present campus on Turner Street in Auburn.

The Legislature changed the name of Central Maine Vocational Technical Institute to Central Maine Technical College (CMTC) in 1989 to more accurately reflect CMTC's role and status as a comprehensive institution of higher education. On July 1, 2003, CMTC became Central Maine Community College, offering transferable degrees in the arts and sciences as well as career and technical programs.

During its first year, the institution enrolled 48 students in four programs (Auto Mechanics, Building Construction, Industrial Electricity, and Architectural Drafting) and was staffed by 13 persons, of whom seven were instructors. The first graduating class, consisting of six students, received diplomas in June 1965.

Today there are approximately 3,000 students enrolled in Central Maine Community College courses. In addition, many area residents participate each year in conferences, courses, and programs offered through the Center for Workforce and Professional Development division of the College. The students are served by approximately 150 faculty and staff members. Each year approximately 500 students graduate; most of them receive associate degrees, while others earn certificates.

The College offers educational opportunities for both transfer to baccalaureate programs and career preparation. Associate in arts and associate in science degrees are designed as the first

two years of a more advanced degree. The associate in applied science degrees and certificates are designed to prepare students for direct entry into the workplace. All graduates are expected to have a set of core competencies that will enable them to be qualified and productive members of the workforce and to continue their education after they graduate and throughout their lives.

## Accreditation and Program Certifications

As the College has grown in size, it has also grown in quality. In December 1976, the New England Association of Schools and Colleges, Inc. (NEASC) granted Central Maine Community College initial accredited status (effective October 8, 1976). Continued accreditation through 2028 was most recently granted in 2018 by the New England Commission of Higher Education (formerly NEASC). In 1978 the Maine State Board of Education authorized the College to confer associate in applied science degrees beginning in January 1979. In September of 1995 the Maine Technical College System authorized the College to grant associate in science degrees. In 1998 the associate in arts degree, which mirrors the first two years of many bachelor degree programs, was authorized.

In 1986, the Automotive Technology program first received continuing full Master Certification in all eight specialty areas from the National Institute for Automotive Service Excellence (ASE), 101 Blue Seal Drive, SE, Suite 101, Leesburg, VA 20175, telephone (703) 669-6650, making it the first program in New England to be so recognized. Continued certification was awarded in 2004. The Automotive Technology program was granted reaccreditation by the National Automotive Technicians Education Foundation (NATEF) in 2016.

In 2003, the Ford ASSET program received continued Master Certification in all eight specialty areas from the National Institute for Automotive Service Excellence (ASE), 101 Blue Seal Drive, SE, Suite 101, Leesburg, VA 20175, telephone (703) 669-6650.

The Nursing program is approved by the Maine State Board of Nursing, 158 State House Station, 16 Capital Street, Augusta, Maine 04333-0158, telephone (207) 287-1133. In addition, the Associate Degree Nursing program was granted initial accreditation by the National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326, telephone (404) 975-5000. The program was reaccredited in July 2012.

Central Maine Community College seeks and accepts accreditation, certification or recognition of its programs only when those designations are consistent with the policies and plans of the College. The College does not guarantee that those designations will be maintained in the future.

# General Information

## Campus Growth

Central Maine Community College's physical facilities have been enlarged to keep pace with increased demand for programs and services. In 1967, an addition was completed to the original instructional facility and the first residence hall was constructed.

In January 1969, another addition, an extension of the North Wing, was completed and later in the year the entire instructional complex was designated by the State Board of Education as the Louis Jalbert Industrial Center, now Jalbert Hall.

The portion of Jalbert Hall known as the South Wing was constructed in 1972 and expanded in 1979 and 1986. Jalbert Hall now encloses 175,750 sq. ft. (over 4 acres) under a single roof.

In 1975 two apartment style dormitory buildings and the present dining room/kitchen facilities were ready for use.

A building to house the Culinary Arts program was completed in 1989.

In November of 1989 Maine voters authorized capital bonding for the 40,000 sq. ft., Geneva A. Kirk Hall, which houses Nursing, and Life Sciences and Allied Health programs; science laboratories; gymnasium; and the fitness center. The building was dedicated for use on May 6, 1993.

Bonding to fund the new Lapoint Center was approved by the voters in 1999. The Lapoint Center, which opened in fall 2002, houses state-of-the-art classrooms as well as additional office facilities, student use areas, and library access facilities, and the Center for Workforce and Professional Development.

To accommodate the demand for additional on-campus housing, Central Maine Community College constructed a new residence hall which opened in the fall of 2007.

A new nursing simulation lab was completed in the fall of 2008, the Jalbert lecture hall was completely renovated in the spring of 2009, and a major renovation of the 400/500 wing of Jalbert was completed in the spring of 2010.

A new, state-of-the-art Criminal Justice/CSI Lab in Jalbert Hall was completed in early 2012. The ground level of Jalbert Hall was completely renovated in the fall 2012 to include new classrooms and labs for the Graphic Communications program; a new and expanded college store; and a new central services center.

A new academic building, The Tower, connected to Jalbert Hall, was completed in August, 2015. This building houses case-study rooms, presentation and seminar rooms, an organic chemistry lab, a reception area, a conference room and the Office of Admissions.

The Precision Machining Technology program wing was renovated and expanded in 2017 and renamed the Gene Haas Precision

Machining Technology Center. The Learning Commons was completed in 2017 and houses library services, reference support, space for individual and small-group work, and an open computer lab. The Learning Commons also features interactive digital touch screens, and other technology. The Writing Center and Math/Science Center are also located in the Learning Commons.

In the spring/summer of 2019, the new Esports Arena was completed; the Nursing lab was renovated into a high-end Hospital Simulation Lab; the Plumbing/HVACR lab was completed; the new multi-sport, synthetic turf athletic complex was completed; and the new Criminal Justice lab was completed.

## Location

Located in Auburn at 1250 Turner Street in Auburn, Maine, two miles from the center of the city, CMCC occupies a picturesque 135-acre site on the shore of beautiful Lake Auburn. As Maine's second largest urban center, Lewiston-Auburn offers numerous opportunities for social, recreational, cultural and educational activities. Auburn is located in the south central region of Maine and is the 'Gateway to the Western Mountains'. It is midway on the Maine Turnpike between Maine's capital, Augusta and its largest city, Portland—approximately 35 miles from each city.

## Off-Campus Locations

In addition to the main campus in Auburn, (Androscoggin County) Central Maine Community College also serves Franklin, Lincoln, and Oxford Counties. For more information on off-campus offerings and locations, visit [www.cmcc.edu/off-campus](http://www.cmcc.edu/off-campus) or call the Office of Admissions at (207) 755-5273.

### OXFORD COUNTY

#### Oxford Hills Comprehensive High School

256 Main Street  
South Paris, ME 04281

### LINCOLN COUNTY

#### Central Maine Community College/ Lincoln County Healthcare Education Center

66 Chapman Street  
Damariscotta, ME 04543

### FRANKLIN COUNTY

#### Mt. Blue Learning Center

129 Seamon Road  
Farmington, ME 04938

# Admissions

**Central Maine Community College welcomes applications from all persons whose academic record and personal qualifications suggest that they may benefit from enrollment in any of the programs offered. Central Maine Community College maintains a rolling admissions policy for most of its programs, allowing candidates to apply and be considered for acceptance throughout the year. Prospective students will be considered for the next matriculating class on a first come, first served basis. All programs begin in the fall semester. Spring semester admission is possible for most programs and for students who wish to begin with primarily general education courses. CMCC also offers summer matriculation. Contact the Office of Admissions for more details.**

Graduation from an approved high school or passing scores on the General Educational Development (GED®) Examination/HiSET offered by the Maine Department of Education or other state department of education is required for admission to the College. Applicants may also be required to meet special admission requirements and prerequisites established for the specific program of interest. Central Maine Community College works in active partnership with regional and statewide high schools and adult education centers in order to help students prepare for college requirements.

Note to Nursing Program Applicants: Students for this program are selected on a competitive basis once per year, to begin each fall semester. Application materials are accepted between September 1st and May 20th. Selection decisions are made when the applicant has met point total requirements.

**Note to 100% Online Applicants:** The College has several programs and certificates that are available 100% online. The priority enrollment deadline for online programs and certificates is May 15 for a fall start, Nov. 1 for a spring start, and March 1 for a summer start. This means the application and requirements such as placement scores, transcripts from previously attended schools, tuition deposit and completion of online orientation are done by the deadline in order to get seats in online courses. It is possible to be admitted to a 100% online program or certificate after May 15, but availability of online courses is not guaranteed for the first semester.

## Admissions Process

Applications are evaluated after applicants have submitted the following:

1. An official high school transcript for all years attended, including at least the first marking period of the senior year (for current high school seniors). A final transcript will be needed for all graduating seniors prior to the first day of classes.

**or**

- Official GED® test scores, for non-high school graduates. Students who have earned an Associate's degree or successfully completed 60 or more credit hours toward a Bachelor's degree do not need to supply their high school transcript or GED®.
2. Official college transcript(s) from all colleges attended. A final transcript with final grades will be needed prior to the first day of classes.
3. Documentation of all program prerequisites. Prerequisites may appear on the high school or adult education transcripts, college transcripts, or other documentation. Please carefully read the prerequisites for the preferred program of study. Prospective applicants who do not meet these requirements are strongly encouraged to contact the Office of Admissions to discuss alternatives and may start in General Studies.
4. For Nursing Program applicants only: results of the ATI TEAS Exam must be submitted to the Office of Admissions by the May 20th application deadline.

## Course Registration/ Enrollment

All accepted students will have to submit one or more of the following:

Official Scholastic Aptitude Test (SAT®) scores meeting College requirements. Applicants are strongly encouraged to take the SAT®, especially if their educational goals may include transferring to a four-year institution after Central Maine Community

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College. American College Testing (ACT) scores will also be accepted.

**or**

Prior success (grade C or better) in a college level English and/or math course at a 100 level or above, taken at an accredited institution.

**or**

If neither SAT®/ACT scores (within 5 years) or transfer credits are available Central Maine Community College Accuplacer® placement assessment in reading, writing, math (quantitative reasoning) or English as a Second Language (ESL) will be required. Please call the Center for Testing and Assessment to schedule an assessment session.

SAT®/ACT results, high school transcripts, placement assessment, and college level course work are used for academic counseling and course placement. Multiple measures will be taken into consideration by the Admissions Department in determining course placement. Applicants may be advised to enroll in preparatory courses or receive assistance at an adult education center.

## Admissions Prerequisites

All Central Maine Community College catalog programs require a high school diploma or GED®. The following are additional high school prerequisites for admission to these specific programs:

- Accounting - Algebra I
- Career Studies - Significant career training and experience
- Computer Technology - Algebra I
- Education (Advanced Certificate): Students who have earned an associate degree or higher in the field of education, early childhood education, human services, or another field as approved by the program chairperson may be admitted to the program.
- Electromechanical Technology - Algebra I, (Algebra II preferred)
- Ford ASSET - Must meet ENG 101 or ENG 105 and MAT 100 prerequisites in order to take FOA courses. Prior to enrolling in FOA 151, students must first obtain a dealer sponsor. The inability to secure a dealership could jeopardize an individual's ability to meet all the requirements for this degree. Before agreeing to sponsor a student, a dealer may request a criminal background check on that student. Furthermore, dealerships often require that students hold a current and valid driver's license free from "current major" violations, as that term is defined in standard auto insurance policies. Dealerships also retain the right, in their sole discretion, to accept or deny students based on their findings.

- Liberal Studies - Must meet ENG 101 or ENG 105 and MAT 101 prerequisites
- Medical Assistant - Biology with laboratory, must meet ENG 101 or ENG 105 and MAT 100 prerequisites
- Nursing - Algebra I, Anatomy with laboratory, Biology with laboratory, completed application process and results of the ATI TEAS Exam by May 20th each year for competitive review process.

## Campus Tours

All applicants are strongly encouraged to contact the Office of Admissions for a campus tour or for an individual meeting with an admissions representative. The primary purpose of the visit is to give the applicant a firsthand look at the college and to have the opportunity to seek additional information about any aspect of the College. You may schedule a campus tour at [www.cmcc.edu/tour](http://www.cmcc.edu/tour) or by calling the Office of Admissions at (207) 755-5273.

## New England Student Regional Program - Non-Resident Applicants

Central Maine Community College is a participating college in the New England Board of Higher Education's Regional Student Program (RSP). As such, non-resident students are eligible for special tuition rates of 150% of the in-state tuition rate when the RSP participant pursues a degree program not offered by their home state public institutions. To be considered, applicants must clearly indicate on the Central Maine Community College application form that they wish to participate in the New England Regional Student Program.

## Rules Governing Residence

The College's dean of finance and general services shall determine at the time a student is admitted whether they are a resident or non-resident for tuition purposes, based on information furnished in the student's application and on other relevant considerations. Students, once having registered as a non-resident, can claim resident status only after they have resided in the state for a least one-year prior to registration for the term during which they claim resident status. For College purposes, students do not acquire a bona fide domicile in Maine until they have lived here for at least a year, primarily as a permanent resident and not merely as a student. Resident status implies a probability that a student will remain in Maine after completing college. Members of the Armed Forces and their dependents are normally granted resident tuition rates while on active duty within the state. The domicile of unmarried minors generally follows that of their parents or legally appointed guardian. Students who are married or who have attained their eighteenth birthday are considered adults,



# Admissions

and will be classified as Maine residents if they have lived for the past 12 consecutive months in the state. If a non-resident student has a spouse who is a resident of Maine, the student will also be classified as a resident. Students who wish to change their status should complete a "Request for Change of Resident Status" form and submit it to the Business Office. A student may appeal the dean of finance and general services' decision first to the College president, then to the president of the Maine Community College System, whose decision in all cases will be final. If the dean of finance and general services receives information indicating that a student's status should be changed from resident to that of non-resident, the student shall be informed in writing of the proposed change in status and shall be given the opportunity to argue against it. The student may appeal the dean of finance and general services' decision as previously outlined. No application for change of status will be considered after September 1 for the fall semester or after January 15 for the spring semester. All changes approved during a semester will be effective at the beginning of the next semester; none will be retroactive.

## Transfer Students

In addition to the admission procedures for students with no previous college work, transfer students must submit official college transcripts from all colleges attended for both placement and transfer credit purposes before they will be admitted. College transcripts are required regardless of expected coursework transferability.

## International Students

Central Maine Community College welcomes international students seeking F1 Student Visa status from around the world. As part of the admission process, international students are encouraged to submit TOEFL (iBT, CBT, or PBT) scores to the College in order to determine admission to an academic program. Students need a TOEFL score of 530 (paper version) or 197 (computer version) or 71 (internet based) to be accepted to the College. Additional testing may be necessary. Students without a TOEFL score may arrange to take Central Maine Community College's ESL Accuplacer® Placement Assessment from a far. In countries where English is a primary language, students may provide evidence of substantial program coursework in English.

International students must provide:

- Foreign student financial form indicating sufficient funds to meet educational and living expenses for a minimum of program length.
- Official translated transcripts. For foreign transcript translation, we recommend using an evaluation service accredited by the National Association of Credential Evaluation Services

(NACES). Students should carefully review the list of evaluation services as prices and timing vary. ([www.naces.org/about](http://www.naces.org/about))

- TOEFL score or Central Maine Community College Accuplacer® Placement Assessment scores.

## Admission Categories

Central Maine Community College uses the following categories during the admissions process:

- **Incomplete** - Applicant has not yet met all required steps in the admissions process to gain acceptance.
- **Acceptance** - Applicant has met the requirements within the admissions process and has been approved for a program of study.
- **Deferred\*** - Applicant has met the requirements within the admissions process and has requested a deferred acceptance to a future semester.

*\*(Due to program capacity limits the College reserves the right to defer qualified applicants to another semester)*

## Upon Acceptance to the College

Upon acceptance to the College, students will be asked to complete and submit the following:

- \$75.00 tuition deposit that will be credited to the first semester bill. The deposit is refundable up to 120 days prior to the start of the semester of acceptance. You may defer for one semester.
- A Central Maine Community College Health and Emergency contact form documenting emergency information and an Immunization Record form which must include proof of two doses of measles, mumps, and rubella immunizations for any students born after 1956, plus a tetanus immunization within 10 years for all students. Students accepted into Life Sciences and Allied Health programs will be required to provide additional health data. Maine State law requires Central Maine Community College to collect this immunization information (a hold may be placed on a student's account if health forms are not submitted by the semester following admission).
- If applicable, students with a documented disability must register with the disabilities coordinator on campus in order to discuss needed accommodations.
- For those who wish to live on campus, we requires submission of a Residence Hall application and \$100.00 residence hall and meal plan deposit to be credited toward the first semester bill. The deposit may be submitted online at CMConnect. You

# Admissions

may connect to the deposit form through [www.cmcc.edu/admissions-aid/admissions/once-youre-accepted/](http://www.cmcc.edu/admissions-aid/admissions/once-youre-accepted/)

## After Acceptance to the College

All college students will be signed up for an Orientation Day (or online orientation if enrolled in an online program) to learn important policies, select courses, and get their college photo ID. Orientation Day information is mailed to new students after they submit the \$75.00 tuition deposit. Students are expected to be at the College for their assigned Orientation Day.

Financial Aid award packages will be processed and communicated to students by the Office of Financial Aid. Processing can take two weeks from the time the student has been accepted. For students beginning in the fall semester, awards will be processed beginning in the early spring. For students beginning in the spring semester, awards will be processed beginning in the fall.

For high school seniors, an official final transcript must be submitted to the Office of Admissions upon high school graduation. The Office of the Registrar will process transcripts from other colleges/universities for transfer credit to Central Maine Community College upon a student's acceptance and communicate results directly to students.

## Tech Prep Courses and Program Prerequisites

Applied Math I and II courses, designed by the Center for Occupational Research and Development (C.O.R.D.) may substitute for the Algebra I prerequisite. The C.O.R.D. Principles of Technology (units 1 to 14) may substitute for the General Physics prerequisites.

## Tech Prep and Advanced Standing

Central Maine Community College has formal, written agreements with a growing list of Maine high schools to award credit for course work, which has been reviewed and approved by both high school and College faculty representatives.

Students who qualify for this opportunity must be admitted to a Central Maine Community College catalog program and registered for courses before the Tech Prep transfer credit is posted on their transcripts. As this catalog goes to press, Central Maine Community College has advanced credit agreements with the following secondary schools and adult education centers.

Each agreement has specific conditions in terms of required competencies, credit hours and effective dates. Interested students should contact the Central Maine Community College Office of Admissions and/or their high school guidance counselors for complete details.

## MAINE

BATH REGIONAL VOCATIONAL CENTER

Automotive Technology, Culinary Arts

BIDDEFORD REG. CENTER OF TECH.

Automotive Technology, Precision Machining, Criminal Justice

BONNY EAGLE HIGH SCHOOL

Automotive Technology

CAPITAL AREA TECH. CENTER, AUGUSTA

Automotive Technology, Culinary Arts, Graphic Communications, Precision Machining Technology

CARIBOU REG. TECHNOLOGY CENTER

Automotive Technology

KENNETH FOSTER APPLIED TECHNOLOGY CENTER, FARMINGTON

Automotive Technology, Business Administration and Management, Graphic Communications

HANCOCK COUNTY TECHNICAL CENTER, ELLSWORTH

Automotive Technology, Culinary Arts

LAKE REGION VOC. CENTER, BRIDGTON

Accounting, Automotive Technology, Culinary Arts

LEWISTON REGIONAL TECH. CENTER

Automotive Technology, Business Administration and Management, Computer Technology, Culinary Arts, Early Childhood Education, Precision Machining Technology, Criminal Justice

MAINE VOCATIONAL REGION #10, BRUNSWICK

Automotive Technology, Culinary Arts, Early Childhood Education

MID-MAINE TECH CENTER, WATERVILLE

Automotive Technology

MID COAST SCHOOL OF TECHNOLOGY, MVR #8, ROCKLAND

Automotive Technology, Culinary Arts, Precision Machining

NORTHERN PENOBSCOT REGION III

Automotive Culinary Arts

OXFORD HILLS TECHNICAL SCHOOL

Automotive Technology, Business Administration and Management, Computer Technology, Culinary Arts, Graphic Communications, Criminal Justice

PORTLAND ARTS & TECHNOLOGY HIGH SCHOOL, PORTLAND

Automotive Technology, Culinary Arts, Graphic Communications, Precision Machining

SANFORD REGIONAL VOC. CENTER

Automotive Technology, Precision Machining Technology, Computer Technology, Graphic Arts, Culinary Arts

SCHOOL OF APPLIED TECHNOLOGY, REGION 9, RUMFORD

Automotive Technology, Computer Technology, Precision Machining Technology

# Admissions

SOMERSET CAREER & TECHNICAL CENTER  
Automotive Technology, Computer Technology, Culinary Arts

ST. JOHN VALLEY TECHNOLOGY CENTER  
Automotive Technology, Computer Technology

ST. CROIX REGIONAL TECHNICAL CENTER  
Automotive Technology

TRI-COUNTY TECH. CENTER, DEXTER  
Automotive Technology, Culinary Arts, Graphic Communications,  
Precision Machining, Criminal Justice

UNITED TECH. CENTER, MVR #4, BANGOR  
Automotive Technology, Culinary Arts

WALDO COUNTY TECHNICAL CENTER  
Automotive Technology, Culinary Arts

WESTBROOK REGIONAL VOC. CENTER  
Automotive Technology, Early Childhood Education, Building  
Trades

## Out-of-State

### MASSACHUSETTS

ASSABET VALLEY REGIONAL VOCATIONAL SCHOOL,  
MARLBORO, MA  
Automotive Technology, Culinary Arts, Graphic Communications,  
Precision Machining, Medical Assistant

ATTLEBORO HIGH SCHOOL, ATTLEBORO, MA  
Automotive Technology, Computer Technology, Culinary Arts,  
Graphic Communications

BAY PATH REGIONAL VOCATIONAL HIGH SCHOOL,  
CHARLTON, MA  
Automotive Technology, Culinary Arts, Graphic Communications,  
Precision Machining Technology

BLACKSTONE VALLEY TECHNICAL HIGH SCHOOL, UPTON, MA  
Automotive Technology, Computer Technology, Culinary Arts,  
Graphic Communications, Precision Machining Technology

BLUE HILLS TECHNICAL HIGH SCHOOL, CANTON, MA  
Automotive Technology, Culinary Arts, Graphic Communications

BRISTOL PLYMOUTH TECHNICAL HIGH SCHOOL, TAUTON, MA  
Automotive Technology, Culinary Arts, Graphic Communications,  
Precision Machining Technology

CAPE COD TECHNICAL HIGH SCHOOL, HARWICH, MA  
Automotive Technology, Culinary Arts, Graphic Communications

GREATER LAWRENCE TECHNICAL CENTER, LAWRENCE, MA  
Automotive Technology, Culinary Arts, Graphic Communications,  
Precision Machining Technology

LYNN VOCATIONAL TECHNICAL INSTITUTE, LYNN, MA  
Automotive Technology, Culinary Arts, Graphic Communications

MINUTEMAN REGIONAL HIGH SCHOOL, LEXINGTON, MA  
Automotive Technology, Culinary Arts, Graphic Communications

NORTH SHORE TECHNICAL CENTER, MIDDLETON, MA  
Automotive Technology, Computer Technology, Culinary Arts,  
Precision Machining Technology

NASHOBA VALLEY TECHNICAL CENTER, WESTFORD, MA  
Automotive Technology, Culinary Arts, Precision Machining  
Technology

PATHFINDER REGIONAL VOCATIONAL/TECHNICAL HIGH  
SCHOOL, PALMER, MA  
Automotive Technology, Culinary Arts, Precision Machining  
Technology

RINDGE SCHOOL OF TECHNOLOGY ARTS, CAMBRIDGE, MA  
Automotive Technology, Culinary Arts, Graphic Communications

SHAWSHEEN VALLEY TECHNICAL CENTER, BILLERICA, MA  
Automotive Technology, Culinary Arts, Precision Machining  
Technology, Graphic Communications

SOUTHEASTERN REGIONAL VOC. TECH. HIGH SCHOOL,  
SOUTH EASTON, MA  
Automotive Technology, Culinary Arts, Graphic Communications,  
Precision Machining Technology

SOUTH SHORE VOCATIONAL TECHNICAL HIGH SCHOOL,  
HANOVER, MA  
Automotive Technology

WALTHAM HIGH SCHOOL, WALTHAM, MA  
Automotive Technology, Graphic Communications

WEYMOUTH HIGH SCHOOL, WEYMOUTH, MA  
Automotive Technology, Computer Technology, Culinary Arts,  
Graphic Communications

WHITTIER REGIONAL VOCATIONAL HIGH SCHOOL, HAVERHILL,  
MA  
Automotive Technology, Business Administration/Management,  
Computer Technology, Precision Machining Technology, Graphic  
Communications

### NEW HAMPSHIRE

BERLIN HIGH SCHOOL, BERLIN NH  
Automotive Technology, Culinary Arts

CHESHIRE CAREER CENTER, KEENE NH  
Automotive, Culinary Arts, Precision Machinery

CONCORD REGIONAL TECHNICAL CENTER, CONCORD, NH  
Automotives

HUOT TECHNICAL CENTER, LACONIA, NH  
Automotive Technology, Culinary Arts, Precision Machinery

MASCENIC REGIONAL HIGH SCHOOL, NEW IPSWICH, NH  
Automotive Technology

# Admissions

MANCHESTER SCHOOL OF TECHNOLOGY, MANCHESTER, NH  
Automotive Technology, Precision Machining Technology

MOUNT WASHINGTON VALLEY CAREER TECHNICAL CENTER,  
NORTH CONWAY, NH

Automotive Technology, Precision Machining Technology

NASHUA TECHNOLOGY CENTER, NASHUA, NH  
Graphic Communications, Precision Machining Technology

R.W. CRETEAU TECHNICAL CENTER, ROCHESTER, NH  
Graphic Communications, Precision Machining Technology

SEACOAST SCHOOL OF TECHNOLOGY, EXETER, NH  
Automotives, Culinary Arts

SOMERSWORTH REGIONAL VOCATIONAL CENTER,  
SOMERSWORTH, NH

Automotive Technology, Graphic Communications

SUGAR RIVER VALLEY RTC, CLAREMONT, NH  
Precision Machining Technology, Culinary Arts

SUGAR RIVER VALLEY RTC, NEWPORT, NH  
Automotives

## VERMONT

CENTER FOR TECHNOLOGY, ESSEX, ESSEX JCT, VT  
Automotives

COLD HOLLOW CAREER & TECHNICAL CENTER, ENOSBURG,  
VT

Automotive Technology

GREEN MOUNTAIN TECHNICAL CAREER CENTER, HYDE PARK,  
VT

Automotive Technology, Culinary Arts

NORTH COUNTRY CAREER CENTER, NEWPORT, VT  
Automotives, Computer Technology, Culinary Arts

NORTHWEST TECHNICAL CENTER,  
ST. ALBANS, VT

Automotive Technology, Culinary Arts

PATRICIA HANNAFORD CAREER CTR., MIDDLEBURY, VT  
Automotive Technology, Graphic Communications, Precision  
Machining Technology

## RHODE ISLAND

CRANSTON AREA CAREER & TECHNICAL CENTER, CRANSTON,  
RI

Culinary Arts, Graphic Communications

CHAIRHO CAREER/TECH CTR., WOOD RIVER JUNCTION, RI  
Automotive Technology, Culinary Arts, Graphic Communications

WOONSOCKET CAREER & TECHNICAL CENTER,

WOONSOCKET RI

Automotive Technology, Graphic Communications, Computer  
Technology

EAST PROVIDENCE CAREER & TECH. CENTER, EAST  
PROVIDENCE RI

Graphic Communications

# Tuition and Fees

## Costs\* 2022-2023

The following table summarizes estimated expenses for Central Maine Community College students during the 2022-2023 academic year.

**Application Fee:** (non refundable) ..... \$20.00

### Tuition:

Maine Residents..... \$96.00 p/credit hour  
 New England RSP Participants..... \$144.00 p/credit hour  
 Non-Resident..... \$192.00 p/credit hour

### Room & Board Fees:

Based on Fall and Spring semesters.  
 All Programs (except Ford ASSET<sup>1</sup>) per academic year .. \$8,610 - \$9,968  
 \*\*Key and Damage Deposit ..... \$200.00  
 \*\*Cable/Internet Fee (per semester)..... \$185.00  
 \*\*Laundry Fee (per semester) ..... \$80.00

### Other Fees:

Comprehensive Fee (includes up to 10 transcripts, graduation registration, security, orientation, etc.) ..... \$9.60 p/credit hour  
 Student Services Fee (includes student clubs/activities and on-campus parking)..... \$9.60 p/credit hour

Accident Insurance (required of all students) ..... \$16.00 p/year  
 Technical Course Fee ..... \$19.20 p/credit hour  
 Non-technical Course Fee ..... \$9.60 p/credit hour

### Program Fees:

#### Automotive Technology

Tool Rental Fee..... \$50.00 p/semester  
 Tool Deposit (refunded at the end of the year if the tools are returned in good condition)..... \$100.00 p/year  
 Ford ASSET Fee (for each FOA course per semester)..... \$96 in state/\$192 out-of-state

#### Building Construction Technology

Building Construction Code Fee (BCT 126) ..... \$55.00  
 OSHA Course Fee (OHS 111) ..... \$8.00

#### Culinary Arts

Consumables Fee ..... \$50.00 p/semester

#### Early Childhood Education

Background Review Fee ..... \$25.00  
 Fingerprinting Fee (Required for ECE taking EDU 150 & ECE 297) ..... \$80.00  
 Liability Insurance ..... \$15.00 p/year

#### Human Services

Liability Insurance ..... \$15.00 p/year  
 Human Services Fee (HUS 158) ..... \$85.00

#### Medical Assistant

Liability Insurance ..... \$15.00 p/year

#### Nursing

Liability Insurance ..... \$15.00 p/year  
 Immunization & CPR Data Keeping ..... \$28.00 p/semester  
 Nursing Testing Fee ..... \$250.00 p/semester

#### Physical Fitness Specialist

American College of Sports Medicine (ACSM) Certified Personal Trainer Exam (Required for PHF 299)..... \$250.00

#### Precision Machining Technology

Tool Rental Fee ..... \$50.00 p/semester

\*Charges are subject to change. \*\*Required for Resident Students <sup>1</sup>See explanation on page 14.

# Tuition and Fees

Tuition for the 2022-2023 academic year is ninety-six dollars (\$96.00) per credit hour for Maine residents. A Maine resident enrolled for two academic semesters with fifteen credit hours of coursework in each is charged two thousand eight hundred and eighty dollars (\$2,880) for tuition. However, student course loads and required credit hours vary with each program.

Room and board charges are based upon Fall and Spring academic semesters and prorated for summer, extended, and other special schedules.

<sup>1</sup>Ford ASSET and Dealer Trax students that live on campus for half of a semester when they are on-site doing the required dealer training will be charged half of the Room/Board rate for each semester, beginning in the 2nd semester of their schooling at CMCC.

Applicants with questions about financial aid should contact the Central Maine Community College Office of Financial Aid at (207) 755-5328.

Inquiries concerning all other financial matters should be directed to the Business Office (207) 755-5219.

## **New England Regional Student Program**

Tuition for non-resident students admitted to Central Maine Community College programs through the New England Regional Student Program is established at 150% of the tuition charged to Maine residents. For 2022-2023, the amount is \$144.00 per credit hour. To be considered, students must clearly indicate on their application form that they wish to participate in the New England Regional Student Program.

## **Textbooks and Tools**

Books and supplies may be purchased at the College Store in Jalbert Hall. Information about uniforms and special tool requirements is available from department heads. The cost of textbooks and course supplies/tools varies according to the program, but averages about \$900—\$1800 per year. Some departments furnish students with tools. Students using College tools pay a \$100 deposit, which is refunded at the end of the year if the tools are returned in good condition.

## **Payment of Bills**

Matriculating students are billed by semester for tuition, room and board charges, and fees. Bills are payable in full in August for the fall semester and in January for the spring semester. The late payment fee is \$50.00 per month. Failure to pay a bill within the prescribed period may keep a student from receiving grades, degrees, diplomas and transcripts and/or completing registration or being included on official class lists. Central Maine Community College offers an interest free payment plan for a \$35.00 fee.

A fee increase of \$15.00 is added on (\$50.00 total fee) to delinquent accounts.

The College does not otherwise carry open student accounts. Students may not attend classes unless they have paid all bills or have made payment plan arrangements with the Business Office for deferred payments.

Non-matriculating students must make full payment of tuition and fees at the time of course registration. A purchase order or letter authorizing sponsorship must be submitted to the Business Office in order to defer payment.

It is the policy (No. 709) of the Maine Community College System to withhold all official credentials, including grade reports, transcripts and recommendations, until all student accounts, charges, fees and fines, including any late charges, are paid in full. Students who have delinquent accounts may be assessed late fees and not allowed to register for classes until all financial obligations are met.

## **Refund Policy - Degree-seeking Students**

The Maine Community College System Board of Trustees has established the following schedule as policy (No. 707) for refunding tuition and room and board payments to full and part-time degree-seeking students who withdraw from the College or course(s) in accordance with the schedule and provision set forth below.

Tuition and room deposits are refundable for a period up to 120 days prior to the start of a semester.

### **Tuition Refunds\***

**100% refund** Official withdrawal from College or course within 6 business days of the semester's first day of classes. Short session course withdrawal dates are reduced. Please refer to add/withdrawal period reimbursement which is available in CMConnect and the academic calendar.

**50% refund** Official withdrawal from College or course between 7 and 10 business days of the semester's first day of classes. Short session course withdrawal dates are reduced. Please refer to add/withdrawal period reimbursement which is available in CMConnect and the academic calendar.

**0% refund** Official withdrawal from College or course after 10 business days of the semester's first day of classes.

**100% refund** Course canceled by College.

# Tuition and Fees

## Refunds of Room and Board Charges

1. College residence canceled by college:  
**100% of room and board charges**
2. Official withdrawal from college residence prior to the:
  - Semester's first day of classes  
**100% of room and board charges**
  - End of the semester's second week of classes  
**80% of room and board charges**
  - End of the semester's third week of classes  
**60% of room and board charges**
  - End of the semester's fourth week of classes  
**40% of room and board charges**
  - End of the semester's fifth week of classes  
**20% of room and board charges**
3. Official withdrawal from a college residence after the end of the semester's fifth week of classes  
**0% of room and board charges**
4. Unofficial withdrawal from a college residence at anytime  
**0% of room and board charges**

**Exceptions:** Notwithstanding the foregoing, the following exceptions apply:

- Refunds for room and board cancelled after a semester begins due to a force majeure or like event will be pro-rated; and
- Colleges may also provide exceptions on a case-by-case basis for students who present unusual and compelling medical or other significant extenuating circumstances. Each college shall adopt a form and process for reviewing student requests for such exceptions.

**\*For purposes of calculating refunds, the attendance period begins on the first day of the academic semester and ends on the date the student notifies the Office of the Registrar in writing of her/his withdrawal.** Students receiving federal financial aid funds are subject to mandated federal refund procedures upon withdrawal from the college. Please see page 14 for details.

Resident students who must move out of the residence halls to participate in a field experience internship to meet a curriculum requirement may be eligible for a refund of the unused portion of room and board expenses.

## Refund Policy - Non-Degree-seeking Students

The refund policy for non-degree-seeking students is the same as that for degree-seeking students. Official "drop" forms may be obtained from the Office of the Registrar. Properly completed and dated "drop" forms must be in the Office of the Registrar prior to the end of the "refund period" above for the applicable course(s). The Office of the Registrar will notify the Business Office of all approved course withdrawals. Refunds usually require two to four weeks for processing.

Refund levels may vary for special or short-term courses depending upon the circumstances. No refunds are given for terminations resulting from academic, disciplinary or financial dismissal. Students who believe that individual circumstances warrant exceptions from the published policy may appeal to the College president or their designee during the semester. Central Maine Community College reserves the right to withhold grades, transcripts, certificates, diplomas or degrees from students who have not met all financial obligations to the College.

\*Students are required to have a computer, which in many cases can be covered by financial aid. The computer requirement is to help ensure access to Brightspace course shells, software and other electronic course materials, as well as access to online and virtual academic student support (e.g. tutoring, research assistance and the Online Writing Center), which all contribute to overall student success.

# Financial Aid

**Central Maine Community College is committed to assisting students in finding the means to pay for their education. A basic principle of financial aid programs is that the student and their family are expected to contribute toward their college expenses. Over 80 percent of our degree-seeking students receive some form of financial assistance, in the form of grants, scholarships, sponsorships, loans, and student employment opportunities. Office of Financial Aid staff is available to advise and assist students with financial aid questions or concerns. Students who need assistance in completing their financial aid application materials are encouraged to contact the office.**

## ***Applying for Financial Aid***

Central Maine Community College requires all students who are interested in receiving financial aid (including loans) to complete the Free Application for Federal Student Aid (FAFSA). Each year the FAFSA is available as early as October 1st at [www.fafsa.gov](http://www.fafsa.gov). CMCC's school code for completing the FAFSA is 005276.

**Deadlines:** Students are strongly encouraged to complete their FAFSA as soon as possible or by May 1st. This is to ensure that the student will be considered for all types of available assistance. Students who file their FAFSA within one week of the start of classes may be required to arrange a payment plan with the Central Maine Community College Business Office to pay for their charges while they are waiting for their financial aid eligibility to be determined.

**Notification:** Once the Office of Financial Aid has received a student's FAFSA and any required documentation, and the student has been accepted for admission, the student will be notified of their financial aid eligibility. The notification will include a listing of the student aid programs that the student may be eligible to receive, and will also include any additional steps that the student must take to receive those funds.

**Disbursement of Funds:** The College schedules financial aid disbursements to occur after the add-drop period is completed during the first two weeks of each semester. Funds are always disbursed first to the student's Business Office account to pay for any outstanding charges due the College. Any excess funds are then refunded to the student by the Business Office within 14 days after the disbursement of funds. Students usually receive their funds approximately five weeks into the semester.

**Maintaining Eligibility:** Financial aid funds can only be used to pay for courses that count toward the student's current degree or certificate program. All students are required to maintain satisfactory academic progress as defined by the College. For information on satisfactory academic progress, refer to the Academic Policy and Procedures section of this catalog.

## ***Financial Aid Programs***

Central Maine Community College offers scholarship assistance to students through the generosity of donors to the Maine Community College System and to the Central Maine Community College Education Foundation. Scholarships are awarded on the basis of financial need and other criteria set forth by the scholarship donor, and do not have to be repaid.

Federal Pell Grants provide assistance to students demonstrating exceptionally high levels of financial need. Award amounts are based on individual student eligibility, enrollment status (full vs. part time), and number of semesters enrolled. Federal Pell Grants do not have to be repaid.

Federal Supplemental Educational Opportunity Grants (FSEOG) assist needy students who have qualified for the Federal Pell Grant. FSEOG grants do not have to be repaid.

State of Maine Grants provide financial assistance to undergraduate Maine students demonstrating high levels of financial need. Students must complete the FAFSA each year by May 1st in order to be considered for this program.

The Child Care Scholarship program was established in 2008 as a way to begin to address the demonstrated financial need of students who require assistance with child care expenses in order to attend or remain in college. Applications are available in August of each year from the Office of Financial Aid.

The Native American Tuition Waiver Program provides waivers of tuition for qualified Native Americans residing in Maine attending Central Maine Community College. An applicant must meet the academic qualifications of the program, apply for federal financial aid, and establish proof of tribal eligibility. Eligible applicants include (1) persons whose names appear on the current tribal census of the Passamaquoddy or Penobscot tribes and (2) persons who have resided in Maine for at least one year and at least one of whose parents or grandparents either was included on the census of a North American tribe or held a band number of the Maliseet or Micmac tribes.

Students may apply to work on campus in part-time (no more than 20 hours per week) positions in various departments at the College. Financial need is not a criterion for hiring. The College



# Financial Aid

maintains a listing of available positions on its CMConnect student portal. Students are paid at the minimum state or federal wage, whichever is greater.

Federal Direct Subsidized Loans are available to students demonstrating financial need who are enrolled at least half time (six credits) per semester in an eligible Central Maine Community College degree or certificate program. Subsidized Loans have the interest paid by the federal government while the student is enrolled half time and for six months following the student's separation from the College. After this six month 'grace period' is over, interest begins to accrue on the loan.

Federal Direct Unsubsidized Loans are similar to Federal Direct Subsidized Loans (see above) except that the federal government does not subsidize the interest at any point. The student is responsible for the interest from the time the loan is disbursed. Students have the option of paying the interest or having the lender capitalize the interest that accrues; this will result in the student having the accrued interest added to the student's outstanding principal balance at the start of repayment.

## **Veterans Education Benefit Programs**

Central Maine Community College as many education programs approved for the training of veterans and their dependents. All students who expect to receive veteran education benefits are encouraged to visit <http://www.benefits.va.gov/gibill> to review important information about how each benefit program works and to complete an application for benefits.

Students who expect to receive veteran education benefits are encouraged to contact the Office of Financial Aid at (207) 755-5328.

## **Withdrawal from the College (Financial Aid)**

Students who receive federal student aid funding are subject to mandated federal refund procedures upon withdrawal from the College. The Office of Financial Aid is required to calculate which portion of federal grant and loan funds must be returned to the federal aid programs in situations where a student recipient withdraws before the 60 percent point in the semester. If the student withdraws after the 60 percent point in the semester, the student is considered to have earned all of their federal student assistance for the semester and funds will not be returned.

The date the student is considered to have withdrawn (as determined by the College) is the date the student returns a completed withdrawal form to the Office of the Registrar or otherwise provides official notification to the College of his or her intent to withdraw. If the student does not officially notify the College of his or her intent to withdraw, the official withdrawal point will be considered to be the midpoint of the semester.

Students should be aware that the re-calculation performed by the Office of Financial Aid to determine a withdrawn student's federal aid eligibility for the semester will not necessarily mirror the percentage of tuition charged to the student by the Business Office.

## **Contacting the Office of Financial Aid**

The Office of Financial Aid is located in 7 Jalbert Hall (across from Central Station Cafe). Office hours are 8:00 a.m. to 6:00 p.m. Mondays - Thursdays, and 8:00 a.m. to 4:30 p.m. Fridays.

Phone: (207) 755-5328

Email: [finaid@cmcc.edu](mailto:finaid@cmcc.edu)

# Student Services

**Realizing that education consists of more than what occurs in classrooms and laboratories, Central Maine Community College administrators and faculty members make an effort to know each student as an individual and to respond to non-academic problems, needs, and interests. They regard student services as an integral part of the educational process.**

As fully participating members of the Central Maine Community College community, students are asked to attend promptly to all obligations, to use the College's facilities with care and respect, to obey local, state and federal laws, and to comply with the policies of the College.

These policies are more fully described in the Student Handbook, available online at [www.cmcc.edu/discover-cmcc/overview/policies-procedures-plans](http://www.cmcc.edu/discover-cmcc/overview/policies-procedures-plans). Students are encouraged to become familiar with the Handbook and with other publications issued periodically, and to stay abreast of any changes in policy.

Students are assigned a Central Maine Community College email account upon enrolling in classes. Students are expected to check their Central Maine Community College email account regularly for important updates and information from the College.

## College Store

The College Store sells required textbooks, course tools and supplies, and novelty items. The College Store, located in Jalbert Hall, has posted hours of operation. Within one week after the beginning of a course, clean, unmarked books are returnable with a receipt for a full refund.

## Housing

Four residence halls provide on-campus accommodations for Central Maine Community College students. Rancourt Hall accommodates over 150 students in a double-room format with a private bathroom. Fortin Hall accommodates 60 students and contains dormitory rooms for double occupancy. The other two halls contain apartment units, each consisting of four single bedrooms, a common living room, and a bathroom. All rooms are furnished with single beds, a closet, a chest of drawers, a desk, and a chair. Students provide additional furnishings as desired. Students living in residence halls furnish their own sheets, blankets, towels, and pillows. Rooms are assigned to full-time Central Maine Community College students.

A residence hall council, consisting of resident assistants and interested resident students, plans activities throughout the year. A director of housing, and resident directors, live on campus and are available to assist student residents at all times.

## Food Service

The Central Maine Community College Dining Commons serves commuting students, as well as those who reside on campus. Nutri-

tionally balanced meals as well as short order service and snacks are available. The Dining Commons is open seven days a week.

## Student Health Services

Central Maine Community College is in close proximity to two major hospitals. Residence hall students who need healthcare services are encouraged to carry health insurance coverage.

Accident only coverage is provided through tuition cost. See "Insurance" section below.

In addition to the various Life Sciences and Allied Health programs hosting health information and wellness clinics, CMCC partners with Healthy Androscoggin to promote a balanced health perspective.

## Insurance

Our insurance plan covers students for medical costs incurred as a result of accidents during the school year. All full-time students are enrolled due to the intensive shop, laboratory and field activities that are inherent to the training programs offered at Central Maine Community College. A nominal fee is charged.

Students majoring in Early Childhood Education, Medical Assistant and Nursing, are required to purchase professional liability insurance through Central Maine Community College, which provides coverage during their clinical experience. Students in the Associate Degree Nursing Program (who are LPNs) are required to provide their own professional liability insurance as LPNs, as well as purchase liability insurance through Central Maine Community College as RN students.

## Tobacco-Free Policy

Central Maine Community College is a tobacco-free campus. The use of tobacco products or any object or device intended to simulate that use, including e-cigarettes, is strictly prohibited on campus. The sale, distribution or advertisement of tobacco products is prohibited. This policy applies to faculty, staff, students, contractors, vendors and visitors. The use of tobacco and all smoking products is not permitted on any college property, including but not limited to buildings, campus grounds, parking areas, campus walkways, recreational facilities, and college-owned vehicles. Tobacco use includes the possession of any lighted tobacco products, or the use of any type of smokeless tobacco, including but not limited to chew, snuff, electronic cigarettes, and all other nicotine delivery devices that are non-FDA approved as

# Student Services

cessation products. Students smoking are in violation of College policy and will be subject to disciplinary actions.

## **Student Activities**

Many major activities and events on campus are initiated by Central Maine Community College's Student Senate, composed each year of student representatives from each college academic program and senate-recognized clubs. Student activities are varied and are intended to appeal to the educational, recreational, athletic, and social interests of students. Financed by student activity fees, the activity program includes both campus-based activities and the use of community recreational facilities. The Kirk Hall Gymnasium has posted hours for recreational activities and a fitness center. With support from the dean of student services office, commuting and residential students at Central Maine Community College may organize activities and events. Scheduled events are announced on Central Maine Community College's electronic bulletin board, which can be found in most campus buildings and by email and the Mustang Message and through CMCC's mobile app Mustang Mobile, available for both iOS and Android.

In arranging student activities, the Student Senate takes full advantage of the rich recreational and entertainment possibilities in Auburn/Lewiston, Maine's second largest urban area. Funds allocated to the Student Senate budget are used to offset the cost of such outings.

Other student clubs and organizations are available from year to year for students. See the Office of Student Services for a full list of available student clubs, organizations, and activities!

## **Phi Theta Kappa**

Alpha Phi Xi is the Central Maine Community College Chapter of the Phi Theta Kappa, an international honor society serving two-year colleges offering associate degree programs. Central Maine Community College students who have completed 12 credit hours, and who have established a cumulative grade point average of 3.5 are eligible for membership.

## **Athletics**

All students have the opportunity to participate in intramural sports and a variety of student initiated gym games. Full time degree-seeking students may also try out for our intercollegiate teams. The college offers baseball, basketball, cross country, esports, ice hockey, soccer, and track for men. The college offers basketball, cross country, esports, soccer, softball, track, and volleyball for women. All teams participate in the United States Collegiate Athletic Association. We also participate in a New England and Maine league for selected teams. Students have the opportunity to petition the athletic department to form other teams. Students must meet athletic and academic eligibility requirements to participate in intercollegiate sports. We offer open gym whenever the teams

are not in season. We offer open esports arena access for currently enrolled students on a variable basis.

## **Motor Vehicles**

Vehicles and all other personal property on campus are the sole responsibility of their owners. Off-road vehicles are not permitted on campus. For parking regulations please see the Student Handbook online at:

[www.cmcc.edu/discover-cmcc/overview/policies-procedures-plans](http://www.cmcc.edu/discover-cmcc/overview/policies-procedures-plans).

## **Student Counseling**

Student counseling is available during the week by seeing the dean of student services; the associate dean of student services; the housing director; the director of human resources; the executive assistant to the president; or the assistant to the deans/evening administrator. Personal issues and concerns can be discussed confidentially to help students deal with issues that may hinder their ability to fully attend to their studies. Students may be referred to an outside consulting agency who the college has established an agreement.

Department heads, faculty; and personnel in the Office of Student Services, including Learning and Advising; offer academic advising. The Office of Academic Affairs and the Learning and Advising Center are also available to assist students with academic issues.

## **Career Planning and Transfer Services**

Advising in areas of career exploration, career planning, transferring and choice of major is provided. Students are encouraged to utilize the "Candid Career" portal on the college website at <https://www.cmcc.edu/life-after-cmcc/career-resources/>. This feature provides career program information and job search support. Individual advising is also available by appointment

Placement services are provided for students through consultation with program chairpersons. Central Maine Community College staff works closely with business and industry to promote opportunities for positions throughout the state. Assistance in developing a resume, cover letter, and preparing for a job interview can be accessed through the Director of Placement and Transfer Services Office in Student Services.

Many department heads and faculty have close working relationships with community businesses, and they assist and advise students regarding placement in occupations relating to students' training. Part-time and summer positions are also available to students who want to work while attending college. For the latest job listings visit the College website at <http://www.cmcc.edu/business-community/community-services/community-partner-jobs/>.

Transfer services are available to students through transfer fairs,

# Student Services

college interview days and individual advising. A robust schedule of transfer events is available during the fall and spring semesters.

## **Gender Equity**

Central Maine Community College supports its students by providing a part-time coordinator for gender equity issues and programs. The gender equity coordinator is instrumental in recruiting and retention efforts especially for the college's female and male students who pursue non-traditional majors. The coordinator acts as advisor to the Gender Equity club, and provides for many exploratory opportunities for men and women in technical education and careers.

## **Change of Award**

When catalog programs lead to more than one award (Associate in Arts, Associate in Science, Associate in Applied Science, Certificate or Advanced Certificate), students may change their goal from one award to another through the add/withdrawal period of their final semester with the permission of their academic advisor and the registrar. As program requirements vary among awards, students should consult the College catalog in effect in the semester of their admission to the program. Academic achievement, motivation, and commitment to the desired program will be used as criteria for granting a change of award. Contact the Office of the Registrar. Legitimate medical or personal emergencies, as determined by the dean of student services, may justify waiver of this policy.

## **Confidentiality Policy and Release of Student Information**

The College complies fully with the Family Rights and Privacy Act of 1974 (The Buckley Amendment). According to the Family Educational Rights and Privacy Act of 1974, a student has the right to inspect and review any of their official records, files, and dates directly related to him/her that are in the possession of the College. Only with written consent of a student is such information released to someone other than an official of Central Maine Community College. Central Maine Community College considers the following information to be directory information, which is available to the general public, unless a student notifies the Office of the Registrar that they wish the information to be withheld: name, address, telephone number, major, dates of attendance, date of graduation and other non-academic information. If a student wishes to withhold this information, they may indicate so by notifying the Office of the Registrar in writing.

## **Transferring Credit from Central Maine Community College to Other Colleges and Universities**

Central Maine Community College is accredited by the New England Commission of Higher Education, Inc. Because of this accreditation, most academic credits will transfer to other colleges and universities. The receiving school has the right to determine whether or not academic credit will transfer, and how the transfer credit will apply toward specific degree programs.

To have a Central Maine Community College transcript sent to another institution, please request it online at [www.cmcc.edu](http://www.cmcc.edu). Please visit the Transcript Request page and use Parchment to electronically request a transcript.

For further assistance in transferring from Central Maine Community College, contact the director of placement and transfer services at (207) 755-5239.

## **Students Called to Military Service**

A number of students at the College are active military members. Central Maine Community College recognizes the educational rights and responsibilities of these students must be protected in the event the students are called to service as a result of international or national crises. A Withdrawal form is available from the Office of the Registrar.

In the event a degree-seeking service member is called to active service, the following will apply:

## **Financial**

- 1. Tuition and Fees:** When students return, they will be entitled to free tuition and fees equal to the number of credits they were carrying at the time of departure.
- 2. Room and Board:** Students will be entitled to a prorated refund of room and board charges.

## **Re-Admission/Registration**

1. The student's file will be kept active for 12 months. Upon request, this status may be extended if military service exceeds 12 months.
2. The College will guarantee a slot in the student's original program of study provided that the student notifies the institution on a timely basis of intent to return to the College.

# Academic Policies and Procedures

**The College endeavors to provide educational opportunities allowing graduates to be productive and successful individuals, in the workplace, in upper division programs of study, or in other endeavors they may pursue. The Office of Academic Affairs provides the leadership, guidance and support necessary to ensure excellence and integrity of all academic programs and related policies.**

## General

### ***Auditing Courses***

A student may audit a course to acquire knowledge but not earn credit or a grade. Audited courses do not count toward completion of a certificate or degree and an auditor may not change their status after the second class meeting. Auditors are expected to attend class regularly, participate in class discussion, and complete assigned readings, but are excused from examinations and homework. Auditors are admitted to a course based on available space or instructor approval. Students auditing classes pay regular tuition and related fees. There is no limit to the number of courses a student may audit. To audit a class a student must meet the prerequisite and complete and submit an audit form by the end of the add/withdrawal period. Forms are available in the Office of the Registrar.

### ***Academic Integrity***

Honesty in all academic work is expected at Central Maine Community College. A student's work should be a result of independent effort and ideas. Any student who is suspected of academic dishonesty will face investigation and possible disciplinary action which may include dismissal from the College. Academic dishonesty includes, but is not limited to: cheating, using unauthorized aids, taking a test for someone else, copying another person's work on exams, quizzes, or assignments; or plagiarism, taking language, information or ideas from another person or source without attributing the appropriate reference, fabrication, or forgery. Refer to Maine Community College System Academic Affairs Policy 309 Academic Misconduct for further information. A teacher who suspects or discovers an incident of academic dishonesty may deal with the situation directly with a fair and appropriate sanction, postpone action until consulting with other College officials or refer the incident to the college discipline officer for review and action.

Academic integrity and student issues that arise at clinical affiliates are handled under MCCS policy 310.

### ***Credit Hour Definition***

Central Maine Community College follows the New England Commission of Higher Education's definition of the credit hour:

Federal regulation defines a credit hour as an amount of work represented in intended learning outcomes and verified by

evidence of student achievement that is an institutional established equivalence that reasonably approximates not less than:

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or
2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practical, studio work, and other academic work leading to the award of credit hours.

### ***Attendance Policy***

Students are expected to attend all classes and labs, arrive on time, and remain in class for the allotted period. Instructors report attendance weekly.

It is critically important students communicate with faculty prior to or immediately after any absence. The student is responsible for making arrangements with each instructor to complete all missed course requirements.

#### *Extracurricular and College-Sanctioned Activities*

Central Maine Community College recognizes several types of activities that enhance the educational experience. Students who engage in any college-sanctioned activity must:

1. Notify instructors at the beginning of the semester of any potential absences and establish a plan to make up the work.
2. Notify instructors as early as possible to the absence.
3. Understand the attendance and make up policy for each course as established by the course syllabus.
4. Understand that academics have priority over extracurricular activities.

### ***L Policy***

Students who are absent for three consecutive weeks of classes for a fifteen week course or two consecutive weeks of classes for an eight week course will be awarded a grade of L for leaving the class. Online courses must track participation. Exceptions to awarding a grade of L can be made upon mutual agreement of

# Academic Policies and Procedures

the course instructor and the academic dean in rare circumstances. Exceptions might include family or medical emergencies or military obligations, and in all cases should be well communicated to the instructor at the earliest possible time. If a faculty member and the academic dean grant permission for a student to return to classes after receiving an L grade, and the student has the ability to pass the course, the L can be removed by completing the Change of Grade form.

## **Add/Withdrawal Policies for Catalog Courses**

**Enrollment Confirmation:** Upon registration, each student's name is placed on the official class roster. A student attending class and not on the roster must report to the Office of the Registrar and officially enroll.

The student's name remains on the list and they assume financial obligation for the course unless the student officially withdraws from that course as that term is defined under "Add/Withdrawal Procedures".

Students placed on a wait list must monitor their registration carefully should they be contacted via CMConnect that they are authorized to add the course. The communication will be sent to the student's Central Maine Community College email.

Students must submit all add/withdrawal forms and/or email approvals directly to the Office of the Registrar. Central Maine Community College reserves the right, without notice, to extend the add/withdrawal period because of weather related cancellations or other extraordinary circumstances.

**Adding a Course:** Courses may be added only within 6 business days of the semester's first day of classes (fall and spring semesters).

**Withdrawing from a Course:** In order to receive a full or partial refund, a student must officially withdraw from a class or classes within 10 business days of the fall or spring semester's first day of classes. If a student officially withdraws from a class within 6 business days of the semester's first day of classes, the student is entitled to a refund of 100% of each withdrawn class. If the student officially withdraws within the 7th and 10th business day from the semester's first day of classes then the student is entitled to a refund of 50% of each withdrawn class. Students who either fail to officially withdraw within 10 business days of the semester's first day of classes or unofficially withdraw at any time assume all financial obligations for tuition and fees. Properly completed add/withdrawal forms and emails with approval received by the Office of the Registrar shall be date stamped and considered official. Students must retain their copies as evidence of successfully dropping each class. Students will be asked to provide such evidence should a dispute arise.

**Degree-seeking and non-degree-seeking students who drop from all classes are subject to the Maine Community College System Board of Trustees refund policy (see page 14).**

**Course Withdrawal:** Up to mid-semester, a student withdrawing from a class will receive a "W" which will not affect their GPA. However, the credit hours will be counted as credits attempted when computing "Pursuit of Program" (See SAP policy, page 32). After mid-semester, courses may be withdrawn but a grade of "F" will be recorded on the student's transcript and will be calculated into the GPA.

**Administrative Withdrawal:** In rare and documented cases, due to unique and extraordinary circumstances involving medical, economic or personal hardship, the academic dean may authorize an Administrative Withdrawal (AW) from course(s) which will not affect the grade point average. However, the credit hours will be counted as credits attempted when computing "Pursuit of Program" (See SAP policy, page 32). All AW requests must be submitted in writing with appropriate documentation.

## **Add/Withdrawal Procedures**

"Official Withdrawal" means the student's timely and complete execution of documents required by the college to accomplish formal removal from a course. "Unofficial Withdrawal" means any absence without the notice required for an official withdrawal.

Adding and withdrawing from a class must be done in writing and there are two options for a student to consider:

1. Add/withdrawal forms are available at the Office of the Registrar.
2. Email the Registrar at registrar@cmcc.edu and request a class be added or withdrawn. Email must include student's full name, ID number, course name, number and section. The Registrar will process and respond to the student. In some situations, the instructor may need to submit an add/withdrawal form to the Registrar.

In the event of conflicting information of an issue surrounding the add or withdrawal of a class, students must supply either their copy of the add/withdrawal form or their copy of the Registrar's email response.

## **Waitlist Procedure**

Once a section closes students attempting to register online will receive a prompt asking to be placed on the waitlist or to decline the option.

If a seat becomes available, the first student on the waitlist will receive an email invitation authorizing that student to move into the course.

Once the student receives the authorization, the student will have

# Academic Policies and Procedures

the opportunity to add the course by clicking on the “move to current” link on the registration screen.

If the student does not select the “move to current” link within 24 hours of the invitation, the student is dropped from the course and the invitation to the next student on the waitlist. A “dropped” student may re-register for that course but will be placed at the end of the waitlist.

The same process described above takes place for each wait-listed student in the exact order the students were added to the waitlist. This function continues full course enrollment or until the waitlist is depleted.

Due to the waitlist feature, advisors and instructors ability to assign a course capacity authorization override will not be operable.

Students cannot be registered or wait-listed for courses that are scheduled at the same time of day (a time conflict will appear).

Students can be wait-listed for several courses as long as they do not present a time or same course conflict.

Prerequisites will be upheld for wait-listed students.

The waitlist authorization period of 24 hours must not be confused with any student holding an AA advising code. These are different functions and must be treating independently.

## **Withdrawal from the College**

To officially withdraw from the College, a student must submit a withdrawal form from the Office of the Registrar during the first ten (10) days of a semester (5 days during the summer session) ; no grades will be recorded on the transcript. Students who do not officially withdraw from the College will receive grades of “WF.” Students receiving financial aid may be subject to federal fund obligations or conditions and should contact the Office of Financial Aid prior to withdrawal. Please refer to the College refund policy in this catalog.

## **Changing Major Programs of Study**

A degree-seeking student may change from one major program of study to another by notifying the Office of the Registrar via email or visiting the Office of the Registrar on campus.

Previously earned courses at Central Maine Community College, along with their grades, that are applicable and transferable to the new program major remain part of the new program major and cumulative GPA. Students may request a recalculation of cumulative grade point average (GPA) at the time of change of program major. If granted, courses with earned grades of F, L, or WF not applicable to the new program major would no longer count in the cumulative GPA.

A recalculation of GPA can occur only once in the student's tenure and is not reversible. Students who have received academic

renewal are not eligible for such recalculation. To request a recalculation of GPA for changing a major program of study, students can contact Academic Affairs in Jalbert 13 or via telephone at (207) 755-5277.

## **Academic Renewal Policy**

Academic renewal is an option used to recalculate the cumulative grade point average (GPA) of a student admitted to a degree program after an absence of at least three consecutive years. Academic renewal provides the student with an opportunity to have their academic standing reflect their increased maturity, readiness, and focus on academic work.

Students who meet the eligibility criteria listed below may seek renewal to have grades of D, F, L, or WF earned in a previous attendance no longer count toward cumulative GPA. Courses approved for academic renewal remain on record and count as credits attempted. If granted, academic renewal is not reversible. To be eligible for academic renewal, a student must meet the following criteria:

- Be admitted to a degree program after an absence of at least three consecutive years
- Have a cumulative GPA less than 2.0 in previous enrollment(s)
- Earn at least 6 credits at CMCC after readmission with a minimum GPA of 2.0
- Complete at least 67% of the credits attempted since readmission
- Have not previously received academic renewal

For more information about academic renewal, please contact the Office of Academic Affairs at (207) 755-5277.

## **Course Availability**

Central Maine Community College reserves the right to cancel courses due to insufficient enrollment or make changes in course offerings and charges without formal notice at any time.

## **Transfer Credit Policy and Procedure**

Transfer credits are evaluated once students are accepted into a program of study and have submitted the tuition deposit to attend Central Maine Community College. All courses with a minimum grade of “C” or better are reviewed for transfer credit and will be posted within 5 business days of receipt of the official transcript. In some cases, course descriptions and/or syllabi may be required prior to transfer credit acceptance. Students are required to supply these materials if needed. Transfer credit is not calculated in the student's grade point average. However, transfer credits applied to the degree program will be counted in pursuit of the degree program.

The College accepts academic credits from institutions or programs

# Academic Policies and Procedures

of post-secondary institutions accredited by organizations that are recognized by the Council for Higher Education Accreditation and/or the U.S. Department of Education based upon the equivalency of course content to program requirements and the equivalency of academic credit hours.

**Students requesting Veteran's Educational Assistance are required to have all previous post-secondary educational experience evaluated for possible transfer credit in order to be eligible for benefits.**

## **Academic Credit for Prior Learning**

Central Maine Community College recognizes the value of learning acquired outside a college setting. Students are encouraged to explore all credit options that Central Maine Community College has available to them. It is possible to earn credit through national exams such as CLEP or DSST, portfolio review, or Central Maine Community College course challenge examinations. Credit may also be earned for college-level learning gained through paid or unpaid employment and internships or on a limited basis, independent study. For further details regarding prior learning options, students should contact their academic advisor or the Office of Academic Affairs. For more information, visit the Credit for Prior Learning page on the College's website at [www.cmcc.edu/academics/programs/credit-for-prior-learning/](http://www.cmcc.edu/academics/programs/credit-for-prior-learning/).

Students who seek credit for prior learning must be formally admitted (degree-seeking) into a Central Maine Community College degree program. Students must have a requirement(s) in their academic programs, to which prior learning credits could apply. In addition, students who are admitted to the College must earn a minimum of 25% of their associate degree program course requirements from Central Maine Community College. College credit earned through any of these options count toward degree/certificate requirements but are not calculated into the grade point average (GPA). All college courses taken more than ten (10) years ago are subject to review and acceptance. Note: Academic credit awarded through prior learning does not satisfy credit load requirements for veteran benefits funding or other similar third party financial assistance programs.

## **Types of Prior Learning**

The following are types of prior learning Central Maine Community College will assess for the award of credit.

### **Transfer Credit**

Central Maine Community College will accept academic credit transcribed by other institutions (accredited by the Council for Higher Education Accreditation and/or the U.S. Department of Education) when the course, credit, and transcript key are clear and consistent. Credit should be relevant in the Central Maine Community College degree program and is subject to review by

Department Chairperson.

Students should request official college transcript(s) be sent directly to the Central Maine Community College Office of the Registrar for review and transcription. The transcript provided to Central Maine Community College must be in English. Students will be referred to World Education Services (WES) for the translation of transcripts in other languages. If another institution's course description/learning outcomes are not readily available from that website/catalog, the Registrar may contact a student to obtain these.

## **National Exams**

**Central Maine Community College will award academic credit for learning demonstrated by successfully passing a national examination. The college awards credit for examinations based on current American Council on Education (ACE) recommendations. Such exams include:**

### ***CLEP (College Level Examination Program)***

Students may earn college credits toward a degree by passing CLEP exams in a wide variety of subjects such as English, math, biology, chemistry, psychology, sociology, economics, accounting, marketing, business law, and others. CLEP standardized examinations are conducted at the Central Maine Community College Center for Testing & Assessment, located in Jalbert Hall. Students must make their own arrangements to take the CLEP exam(s) and have official scores sent directly to the Central Maine Community College Office of the Registrar. To schedule a CLEP examination, please contact the Central Maine Community College Center for Testing & Assessment at (207) 755-5450.

For minimum CLEP score acceptance relative to the subject examination, contact the Office of the Registrar. Acceptable CLEP examination scores will be recorded as a "T" on the student's transcript and will not be calculated in the GPA. More information can be found online at [www.collegeboard.com](http://www.collegeboard.com).

### ***DSST (DANTES Subject Standardized Test)***

DSST are credit-by-examination tests originated by the United States Department of Defense, but open to all learners. DSST is a of series examinations in college subject areas that are comparable to the final or end-of-course examinations in undergraduate courses, including subjects such as business, history, criminal justice, U.S. history, psychology, and technology. DSST examinations are conducted at the Central Maine Community College Center for Testing & Assessment, located in Jalbert Hall. Students must make their own arrangements to take DSST exams and have official scores sent directly to the Central Maine Community College Office of the Registrar. To schedule a DSST examination, please



# Academic Policies and Procedures

contact the Central Maine Community College Center for Testing & Assessment at (207) 755-5450.

Acceptable DSST examination scores will be recorded as a "T" on the student's transcript and will not be calculated in the GPA. More information about DSST exams can be found at: [www.getcollegecredit.com](http://www.getcollegecredit.com).

## **AP (Advanced Placement)**

A student will have taken a College Board AP exam(s) during her/his high school career. The AP score(s) should be requested by the student and sent directly to the Central Maine Community College Office of the Registrar for review and transcription. For more information, visit [www.collegeboard.com](http://www.collegeboard.com).

## **International Baccalaureate (IB – Higher Level Exams)**

A student will have taken IB exams at high schools offering an international baccalaureate program. IB score(s) should be requested by the student and sent directly to the Central Maine Community College Office of the Registrar for review and transcription. Central Maine Community College recognizes IB achievement by awarding credit to students who score 5 or above on Higher level IB exams. For more information, visit [www.ibo.org](http://www.ibo.org).

## **Foreign Language Achievement Testing**

Foreign language achievement testing can assist students in receiving credit for a broad array of languages. CLEP, Brigham Young University (BYU) and New York University (NYU) offer testing options for this purpose. CLEP offers foreign language exams in three languages: French, German, and Spanish. Credit awards are based on minimum scores. Both BYU and NYU offer exams in over 60 languages. Credits for BYU language tests are awarded based on scores from 8 through 12. No credit is awarded for scores below 8. Credit for NYU language tests will be given as follows: 3 credits for the 12 point exam and 6 credits for a 14 point exam.

**To schedule a foreign language examination, please contact the Central Maine Community College Center for Testing & Assessment at (207) 755-5450. More information on registration for foreign language achievement tests can be found at the following links: [clep.collegeboard.org/register/exam](http://clep.collegeboard.org/register/exam), [flats.byu.edu/](http://flats.byu.edu/) or [scps.nyu.edu/academics/departments/foreign-languages/testing/process.html](http://scps.nyu.edu/academics/departments/foreign-languages/testing/process.html).**

## **Credential Review**

Students may receive academic credit for some non-credit courses, certifications, licenses, examinations, registered apprenticeships, etc. gained outside of traditional college programs. A crosswalk for the most common and pre-approved credential recommendations by Central Maine Community College degree program are available at the college's Credit for Prior Learning website. Many other credit recommendations are listed in the American Council on Education (ACE) National Guide to College Credit for Workforce Training, and may also be used by department chairpersons to produce proficiency credit equivalencies with Central Maine Community College courses.

Other trainings not already reviewed by Central Maine Community College or ACE may also be reviewed by the appropriate department chairperson for academic credit. Credential assessment will require valid proof of learning such as the license, certification copy, course materials, certificates, or other information. Credit award is subject to applicability of the learning to the student's program of study. Credential review requires a meeting with the appropriate department chairperson and/or the associate dean of academic affairs for consideration.

## **Military Review**

Students may receive credit demonstrated by formal service school training programs and off-duty educational activities in the Armed Forces, including: basic training, military service school recommendations by the American Council on Education (ACE), and U.S. Armed Forces Institute correspondence courses. Students request military transcripts either through the Joint Services Transcript (JST) or the Community College of the Air Force for military experience they wish to have evaluated for credit. Students who meet with Central Maine Community College's Veterans' Services officer directly will be able to request a JST transcript immediately.

## **Challenge Examination**

Central Maine Community College offers degree-seeking students the opportunity to take a challenge examination in lieu of a catalog course for which the student believes they are knowledgeable. Challenge examinations are limited to one attempt per course and may not be taken for courses in which a CLEP or DSST examination exists. Exams do not exist for all Central Maine Community College courses, but may be requested where the exam is written and available.

Requests for the challenge examination must be approved by the department chair, academic dean and relevant faculty member. A grade of C or higher must be attained on the examination but will be recorded as a "P" on the student's transcript and not factored into the grade point average. Students may apply for credit by

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examination through the Office of the Registrar but are encouraged to consult their academic advisor first. The non-refundable fee for the exam is \$100, plus, if applicable, the cost of laboratory supplies and materials. Payment to the Business Office is required prior to taking the exam.

Challenge exams should be accomplished in time to impact a student's upcoming course schedule. Though the fee is non-refundable, if the student is enrolled in the challenged course, a refund of pre-paid tuition will be authorized if a course is successfully challenged within the add/withdrawal period.

## Portfolio Review

A prior learning portfolio offers degree-seeking students in some programs the opportunity to demonstrate learning gained through relevant work and life experiences which may convert to academic credit toward a degree program. The portfolio is an extensive written presentation of evidence assembled and submitted to a department chair or faculty member under the direction of the Office of Academic Affairs.

Only when the student has significant prior learning and none of the prior learning assessment methods listed above can help demonstrate the learning for Central Maine Community College credit, should the student develop a prior learning assessment portfolio. The award of PLA Portfolio credit is dependent on relevancy to courses in the Central Maine Community College degree program; including general education, major and elective courses. The portfolio includes several major sections including a thorough resume, a narrative summary of relevant work and learning experiences, demonstrated skills and training in specialized areas, and applied knowledge and competencies in a specific course for which Central Maine Community College credit is available.

Portfolio review requires that a student show proof of college-level writing credit/equivalent, prior to preparing any portfolio for credit. There is a \$125 non-refundable fee for the review of a portfolio. Payment to the Business Office is required at the submission of the portfolio.

A portfolio is reviewed on a pass/fail basis. This recommendation is based on the student showing narrative and evidence of learning outcomes that would constitute a grade level of C (2.0) or better for the course. The submission of a portfolio for review does not guarantee credit award.

## Matriculation Status

A degree-seeking student has met the prescribed admission requirements, has been officially accepted into a catalog program and has registered for a credit bearing course in the curriculum.

Matriculation status is maintained from the first enrolled semester provided SAP is met. One three credit hour course with a passing

grade must be taken annually or an application for readmission must be submitted to the Office of Admissions to regain degree-seeking status.

## Non-Degree-seeking

Non-degree-seeking students (not formally admitted to a catalog program) may register during open registration periods for scheduled catalog courses providing the student meets the prerequisite(s) for the course. Such registration should be completed through the Office of the Registrar and must be paid the same day.

## Evaluations

Central Maine Community College is committed to the improvement of student learning. Students participate in instructor evaluations at the end of each semester. Students may also participate in standardized pre and post testing, providing valuable information on the learning process.

## Distance Education

Central Maine Community College offers a large variety of online courses and degree programs. Distance education courses are taught by the same qualified instructors, follow the same curriculum, and maintain the same quality and standards as traditional classroom courses. It is recommended that students be comfortable with computers, particularly the Internet, before taking an online course. Students must also have access to a computer and regular uninterrupted internet service.

## Course Numbering

Central Maine Community College has a group of specialized courses that may be activated by a department as the need arises:

Special Topics – 296: This is a class that can change the topic within the department with each section. The topic will be a class that is not part of the normal inventory of classes. For example, HIS-296 may have a special topic "The History of Fort Knox in Bucksport Maine, 1863-1866".

Independent Study - No unique course number: This is a class that is designed to be delivered independently of a formal classroom setting. There are two scenarios for this class; independent study for a class in our inventory or a special topics class taught in an independent study format. In both cases the course number of the class used in the classroom scenario is used with the letters (IS) added to the course title. Any formal meetings will be in the instructor's office.

Prior Learning – 199: Apprenticeship/Prior Learning - Variable credit is awarded for up to 18 credits after committee review. See pp. 24.

Practicum – 299: A practicum is a college course, often in a

# Academic Policies and Procedures

specialized field of study, which is designed to give students a supervised practical application of a previously studied theory. If more than one practicum is allowed or required, then this should be repeatable with adjustments to the course title.

Field Experience/Internship — 197 and 297 (depending on first year vs. second year): Field Experience is application of knowledge and analysis in professional settings. If more than one field experience is allowed or required, then this should be repeatable with adjustments to the course title.

Capstone – 298: Capstone experience is an activity for students that is designed to demonstrate comprehensive learning in the major through some type of product or performance.

## **Transcript of the Permanent Academic Record**

The permanent academic record is maintained by the Office of the Registrar for all students of the College. While the grade report is the official notification to the student and the faculty advisor of the student's academic standing for a given semester, the only true and valid documentation of academic work and student status is an official transcript of the academic record, stamped with the Registrar's signature and the seal of the College. The transcript is available only with the permission and signature of the student, and will be released to that student or a designee only if there are no outstanding charges/holds against his or her account. Transcript applications are available from the Office of the Registrar, College website.

## **Academic Conflict Resolution/Grievance Procedures**

Whenever an academic question or difference arises between an instructor and a student, the following procedure will be followed:

1. The student will discuss the issues with the instructor; if unresolved,
2. The matter may be discussed with the department chair or program administrator which the class is offered; if still unresolved,
3. The matter may be appealed to the dean of academics for a final decision.

## **Final Grade Appeals**

In accordance with the Maine Community College System Policy 309, Student Grade Appeals and Academic Misconduct, the following procedure shall take place for final grade appeals.

The student will first converse with the instructor to determine the contributing factors that determined the final grade.

If the student is not satisfied with the result of the conversation, the student may then file a formal appeal to the department chair of the

course offered unless the instructor is the department chair then the student can forward directly to the academic dean.

A formal appeal must be submitted in writing within 30 days of the posted grade. Such an appeal must state mitigating circumstances that are supported by documentation and also state the resolution that is sought.

Mitigating circumstances are objective in nature. Under most circumstances, disagreements over the quality of work or instructor competence are considered subjective and are not subject to appeal. A student must establish that the final grade was:

- Based on arbitrary or personal reasons unrelated to the instructor's judgment of the academic performance of the student and/or
- Assigned not in accordance with the course syllabus or related adjustments of the syllabus that may have occurred during the semester and/or
- The result of an error in calculating or recording of the grade

Documentation might include test results that were not used in grade computation. Such evidence must be attached to the appeal. Falsification or fabrication of information provided by the student may be subject to disciplinary action under Academic Misconduct of Maine Community College System Policy 309.

Resolution may be a request to recalculate the final grade based on the evidence provided.

The appeal will first be submitted to the department chair offering the course. If still unresolved, the appeal will then be submitted to the academic dean, whose decision is final. Note: This policy applies only to final course grades, not individual assignments.

## **Disability Services**

Central Maine Community College is committed to providing the means to enable equal access to education for students with disabilities. Pursuant to federal law (Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and Americans with Disabilities Act Amendment Act of 2008) individuals with disabilities (those defined as having "a physical or mental impairment that substantially limits one or more of the major life activities of such individual, a record of such impairment, or being regarded as having such an impairment") who are otherwise qualified, may be eligible to receive academic support and/or accommodation(s). Eligibility is based on documentation that establishes that the individual has a disability and the current functional impact of the disability as it relates to the school environment. Reasonable academic accommodations are provided on an individual, case-by-case basis to an admitted or enrolled student. Essential components of any course of study may not be eliminated or circumvented. These accommodations are intended to promote equal access, not special privilege. It

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is the student's responsibility to make the disabilities coordinator aware of their disability and possible need for accommodation. The disabilities coordinator may be reached by calling (207) 755-5277 or visit our website at [www.cmcc.edu](http://www.cmcc.edu).

## Academic Support

The College provides a variety of academic support services and programs designed to assist students in achieving their academic goals.

### Advising

All full and part-time degree-seeking students are assigned an academic advisor after being admitted to a program. The primary role of the advisor is to guide the student toward accomplishment of their academic goals and meeting degree or certificate program requirements. The student is responsible for adhering to the College's policies and procedures while also meeting the educational requirements for the selected program of study. The primary functions of the academic advisor are to meet with the student periodically to review their academic status and progress to review and approve courses, and to guide on career/education goals. Students may request a change of advisor at any time during their program. Change requests must be approved by the department chair or the dean of academic affairs and submitted to the registrar.

### Developmental Courses

Developmental courses are formal courses designed to improve study and learning habits, reading skills, writing competence, and/or mathematical abilities. Developmental courses are listed in the Course Descriptions section of this catalog and do not apply toward degree completion. These courses should be completed in the first year. If students need to take developmental courses, it may lengthen the time it takes to complete a degree.

### Learning Commons

The Learning Commons provides library services, reference support, space for individual and small-group work, and an open computer lab. The Learning Commons also features interactive digital touch screens, and other technology. The Writing Center and Math/Science Center are also located in the Learning Commons.

### Learning and Advising Center

The Learning and Advising Center provides students with guidance,

information and support in their academic journey at CMCC. Professional advisors work as partners with students and their faculty advisor to help create academic plans to meet academic requirements while meeting the personal needs of students.

### The Writing Center

Located in the Learning Commons and online, the Writing Center provides individualized non-credit instruction to students working on writing assignments for any Central Maine Community College course, as well as resumes and cover letters, essays for scholarships, and college admission.

### The Math/Science Center

Located in the Learning Commons, the Math/Science Center provides tutoring services in the areas of math and science. Students may drop in for support or make an appointment for more in-depth individual tutoring to help understand and solve problems.

### TRIO Student Support Services/ Success Center

TRIO Student Support Services is a federally funded program providing a variety of resources including tutoring, advising, transfer services, mentoring and other individual academic support, for qualified students. TRIO participants must complete an application and meet certain eligibility guidelines before participating in the Program. Students interested in finding out more about TRIO should contact the TRIO Director (207) 755-5238 or visit the TRIO Success Center in Jalbert Hall, room J-415.

### Transferring from Central Maine Community College

Central Maine Community College is accredited by the New England Commission of Higher Education. Because of this accreditation, most academic credits will transfer to other colleges and universities. Liberal Arts (general education) courses may transfer more easily than technical courses. The receiving institution determines transferability of academic credit, and how the transfer credit will apply toward specific degree programs.

To have a Central Maine Community College transcript sent to another institution, please contact the Office of the Registrar for the form "Transcript & Record Request Form." This form is also available on the college website.

For further assistance transferring from Central Maine Community College, contact the Director of Placement and Transfer Services at (207) 755-5239.

### Transfer Agreements

Transfer agreements, sometimes called articulation agreements, exist between the College and other institutions to ensure

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transferability of academic credit. Most of the College's agreements link Central Maine Community College courses and degrees with baccalaureate degree programs.

## AdvantageU Program

Central Maine Community College has a direct transfer agreement with the University of Maine System, through the AdvantageU Program. Designed for students completing the Associate in Arts degree in Liberal Studies, participation in AdvantageU provides a number of benefits to students throughout the transfer process. Contact the Director of Placement and Transfer Services at (207) 755-5239 for more information.

## Other Transfer Agreements

Central Maine Community College has additional transfer agreements with the University of Maine System, private Maine colleges and universities, as well as institutions outside the state. Some agreements are with institutions offering distance learning degree programs, providing the convenience of online courses.

For a complete list of current Central Maine Community College transfer agreements, refer to the college website at [https://cmconnect.cmcc.edu/ICS/Campus\\_Life/Campus\\_Groups/Transfer\\_Services](https://cmconnect.cmcc.edu/ICS/Campus_Life/Campus_Groups/Transfer_Services).

These agreements facilitate student transfer from Central Maine Community College to the institutions listed, recognizing that specified Central Maine Community College courses will apply toward the Baccalaureate Degree.

For further information on the transfer of Central Maine Community College credit to other institutions, contact the Director of Placement and Transfer Services at (207) 755-5239 or the Office of Admissions at (207) 755-5273.

## Satisfactory Academic Progress (SAP)

The standards of satisfactory academic progress for federal financial aid are the same as the College's standards for matriculation. The following are the requirements for a student (degree or certificate) to be in good academic standing.

**Academic Standing:** The academic status of degree-seeking students is determined by:

1. Total credit hours attempted and earned in an established time frame called "pursuit of program," and
2. Semester and cumulative grade point average as calculated at the end of every grading period including summer terms.

**Good Academic Standing:** A degree-seeking student is considered to be in good academic standing at the end of a semester and for subsequent semesters if the student meets the

criteria for satisfactory progress and pursuit of program.

**Satisfactory Progress:** A student is considered to be making satisfactory progress if they maintain a cumulative GPA at or above the level defined in Table 3 (pg. 36).

**Satisfactory Pursuit of Program:** Students are considered to be making satisfactory pursuit of program by maintaining 67% completion rate of attempted credit hours. Successful completion is defined by receiving a grade of A, B, C, or D for any course taken in residence (including plus/minus grades).

**Maximum Time Frame:** All students must complete their program in a period not exceeding 1.5 times the normal length of the program as measured in credit hours attempted. For example, if a program requires successful completion of 60 credit hours, the student may not attempt more than 90 credit hours (1.5 X 60). In order to graduate, a student must successfully complete 100% of the required courses and obtain a minimum CGPA of 2.0 within the 1.5 maximum time frame.

The 67% completion rate supports those students who repeatedly change their enrollment status from full-time to less than half-time. For example, if students maintain a 15 hour credit load per semester, they could complete a 60 credit hour degree in 4 semesters but they could have up to 6 semesters.

**Enrollment Status:** Maximum time frame is based on number of semesters and enrollment status. Full-time = 6 semesters, 3/4 time = 8 semesters, 1/2 time = 12 semesters, and less than 1/2 time = 24 semesters. The SAP policy is applied consistently for students who are enrolled in any enrollment status and any academic program.

**Credit Hours Attempted:** Credit hours attempted include all credit hours taken in residence at Central Maine Community College. This includes courses with grades of W, R, I, L, F, AW. In addition, applicable transfer (T) credits are included in the total credit hours attempted, but they are not calculated in the GPA. If the student has attempted less than 150% of all the course work at that time, they will be considered for Title IV aid for the following semester. If due to withdrawal, failed courses, etc., the student has exceeded the maximum number of attempted credits for their program, they will no longer be eligible for federal financial aid programs (grants or loans) for any future semester.

**Developmental Courses:** Developmental and ESL courses, if taken, will affect satisfactory academic progress. These courses will be counted in the number of credit hours attempted, in the GPA and in the maximum time frame calculation.

**Repeated Courses:** If a student repeats a course, the course will count in the maximum number of attempted credits each time the course is taken. However only the highest grade achieved will be calculated in the cumulative GPA. A student's financial aid

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may not cover multiple retakes of the same course. A review by the Office of Financial Aid should be completed to verify financial compliance.

**Course Withdrawn:** If a student withdraws from courses in the add/withdrawal period, those courses will not be included in the count of credits attempted.

**Change of Major:** If a student changes majors, only courses that apply to the new program will be calculated in the 1.5 maximum time frame and cumulative GPA.

**Sanctions:** Any student who fails to achieve any of the requirements above is subject to some type of sanction and may lose all eligibility for federal, state, and institutional financial aid (grants, scholarships, and loans). Faculty advisors will be notified of the academic status of their advisees.

**Academic Probation:** A student will be placed on probation if they:

1. Fails to maintain the cumulative GPA as indicated in Table 3 (pg. 36), or
2. Has a cumulative completion rate of less than 67%

A student on probation must receive a semester GPA of 2.0 at the end of the next term to avoid suspension. Students should meet with their academic advisor to obtain an intervention strategy for returning to good academic standing.

**Academic Suspension:** A student will be placed on suspension if they either:

- In the first year, first semester, earns less than .70 GPA;
- After a probationary term, the following semester GPA is less than 2.0;
- After a probationary term the cumulative completion rate is below 67%;
- After a probationary term fails to maintain a cumulative GPA as indicated in Table 3 (pg. 36).

A student on suspension may request reinstatement after one academic semester. During suspension the student may not take Central Maine Community College course work even as a non-degree-seeking student.

**Academic Dismissal:** Students faced with academic suspension for a second time are dismissed from the College. Students who are dismissed may not take courses at Central Maine Community College, even as non-degree-seeking students.

**Academic Appeals:** A student may appeal the academic suspension by submitting a letter to the dean of academic affair. It is highly recommended the student submit the appeal several weeks before the start of the semester.

The letter must include clearly stated and documented examples

of extenuating circumstances that prevented satisfactory progress. Examples of extenuating circumstances include severe illness, severe injury, death in the family, and/or unforeseen or unavoidable personal situation.

Third party documentation is also encouraged. Some examples include: medical and/or legal statements and/or documents that verify the student's appeal request. These documents will be held in strict confidentiality on behalf of the student. The appeal may also include written support from either a faculty or staff person stating their opinions and possible assistance they are willing to provide.

The appeal must also explain why the circumstances no longer exist and what the student will do to ensure that they meet satisfactory academic progress in the future. If the appeal is granted, a letter will be emailed to the student that stipulates a contractual intervention strategy that would assist the student in meeting educational standards. Such strategies may include but are not limited to:

- Repeating all courses where the final grades of D, F, L, AW, or W were recorded; and/or
- Enrolling in fewer courses in a given term; and/or
- Limiting participation in nonacademic activities.

If the appeal is denied the student may apply for reinstatement to the College after meeting the terms of the suspension or dismissal. Reinstatement requests follow the same procedures as an initial appeal and typically provide evidence of significant academic improvement. Such evidence would normally include high quality academic course work at another institution.

**Appeals of Maximum Time Frame:** A student who has been suspended or dismissed due to exceeding the maximum time frame may wish to appeal that status if they believe there are mitigating circumstances. Examples of mitigating circumstances include: medical problems, death in the family, and curriculum changes.

If a student changes major or graduates and requests a second degree, their transcript will be evaluated to determine what portion of the requirements for that curriculum has been satisfied. After a degree audit has been completed, a new count of credits attempted will be determined based upon the credits completed that satisfies requirement for the new major. For example, if a student attempted 60 credits but only 30 credits (including transfer credits) will satisfy requirements for the new major, the count of the attempted credits will be reset from 60 to 30. The student will now have a new minimum of 30 additional credits to complete the new major.

**Other than when an appeal is granted for unusual or mitigating circumstances, a student can reestablish eligibility only by taking action that bring him/her into compliance with the quantitative and qualitative components of Central Maine Community College's**

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**standards for satisfactory academic progress including maximum time frame.**

## **Academic Progress Reports**

During the semester, when faculty deems it appropriate, notice is issued to students whose performance is unsatisfactory. The notice may be posted in CMConnect or communicated directly to the student.

## **Grade Reports**

Printed grade reports are not mailed to students unless specifically requested. Students can login to view and print their grades. Students who want to access their academic transcript should go to [www.cmcc.edu](http://www.cmcc.edu). Once there, click on the "MyCM/Student login" link. This will bring you to the log in screen where the transcript can be accessed. For logon problems contact the Office of the Registrar at (207) 755-5292. For an explanation of Grades, Symbols and Codes, see Table 1 (page 35). For an explanation of GPA, see Table 2 (page 36).

## **Residency**

All Associate degree and Certificate programs require a minimum of twenty-five percent (25%) of degree credit to be completed at Central Maine Community College. The degree or certificate will be awarded after all credits have been earned.

## **Degrees**

Central Maine Community College students may earn multiple degrees but only one degree and major may be pursued at a time. An additional 15 credits and all program requirements must be completed.

## **Academic Honors**

At the end of each semester an honors list is published for the purpose of recognizing the achievement of degree-seeking students who have carried a minimum of 6 credit hours and earned a minimum semester grade point average (GPA) of 3.300. No course grade within the term may be below a "C". Any term with an "I" grade will be ineligible for honors recognition. The 3 categories of academic honors are: honors - 3.300 to 3.599; high honors - 3.600 to 3.899; president's honors - 3.900 to 4.000. Students who selected "FERPA restriction" on the application for admission will not have their name published. To make changes to the "FERPA restriction" please contact the Office of the Registrar.

## **Academic Record Changes**

Considerable care is taken to ensure that course registration and grades entered on a student's permanent record are accurate. Any student who suspects a clerical error has been made should contact the Office of the Registrar. Records are assumed to be correct if

a student does not report to the Office of the Registrar within one year of the completion of the course. After that time, the record becomes permanent and cannot be changed.

## **Graduation**

### **Graduation Requirements**

Central Maine Community College awards the Associate in Arts (AA), Associate in Science (A.S.), Associate in Applied Science (A.A.S.) degrees, Certificate and Advanced Certificate programs are also available. Eligibility for degree or certificate conferment is contingent upon completion of all requirements of a designated program of study in accordance with the Maine Community College System and Central Maine Community College requirements. Students must:

1. Satisfactorily complete all courses in the program.
2. Complete the aggregate number of credit hours in a program with a minimum cumulative grade point average (GPA) of 2.0.
3. Participate in College-wide or program-specific assessment activities.
4. Meet the minimum residency requirements as defined in the Central Maine Community College catalog.
5. Fulfill all financial obligations to the College in order to receive a degree or certificate.

### **Effective Catalog for Graduation Requirements**

New students must satisfy the graduation requirements set forth in the catalog in effect for the first semester of their attendance as a degree-seeking (admitted) student. A student whose matriculation has expired will graduate under the catalog requirements in effect when readmitted. A student who changes programs will also follow the catalog in effect at the time of the matriculation change. The electronic version of the catalog is the official edition.

### **Graduation Procedure**

1. Before registering for the semester in which graduation requirements will be completed, students should meet with their advisor to review eligibility to graduate.
2. After meeting with advisor, student will log into CMConnect and fill out the Graduation Confirmation (found on the left side of Student Tab page). There are three graduation points in the academic year. The Graduation Confirmation form should be completed by:
  - Last Friday of March for May graduation
  - Last Friday of July for August graduation
  - Last Friday of November for the December graduation

# Academic Policies and Procedures

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3. The Registrar's office will preview the student's degree audit and email student if there are any issues that arise.
4. The College holds an annual graduation ceremony each May. Students wishing to participate in commencement ceremony must submit the Graduation Confirmation form, (found on the left side of Student Tab page) and ordered regalia (cap and gown) no later than the last Friday in March. Late submissions may prevent the student from being in the Graduation program and/or not having regalia available.
5. Students within six credit hours of program completion requirements may participate in the graduation ceremony. However, enrollment for remaining coursework is required in the next, immediately available semester.
6. A final official transcript is required for all approved and completed transfer credit prior to the last semester of enrollment. Transfer credit acceptance after this period will result in a delay of degree or certificate award.



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TABLE 1

Explanation of Grades, Symbols and Codes

The quality of performance in any academic course is reported by a letter grade. The letters are translated to grade points for the purpose of calculating semester and cumulative averages. These grades denote the character of work and are assigned grade points as follows:

<i>Letter Grade</i>	<i>Description</i>	<i>Grade Points</i>
<b>A</b>	Excellent Achievement	4.00
<b>A-</b>	3.67	
<b>B+</b>	3.33	
<b>B</b>	Good	3.00
<b>B-</b>	2.67	
<b>C+</b>	2.33	
<b>C</b>	Satisfactory	2.00
<b>C-</b>	1.67	
<b>D+</b>	1.33	
<b>D</b>	Poor/Low level achievement	1.00
<b>F</b>	Failure to meet the minimum level of course objectives	0.00

**I** Incomplete - No credit. The "I" grade is used for verifiable and unavoidable reasons. Since the "incomplete" extends enrollment in the course, requirements for satisfactory completion must be established through student/faculty agreement and approved by the department chair, dean of academic affairs or designee. Courses for which the grade of "I" (incomplete) has been posted must be completed by the end of the subsequent semester (excluding summer) or the "I" will be converted to an "F."

**T** No grade points; grades for courses that have been accepted by Central Maine Community College as transfer (T) credit from other institutions are not computed in the grade point average.

**L** Stopped attending a course without officially "withdrawing." The grade of "L" will be computed as an "F."

**NS** No show - did not attend. No grade points; "NS" grade will be removed from the transcript.

**AU** Audit - No credit (permission of the instructor is required to audit a class). Student attended the course on a non-credit basis.

**R** Repeated Courses - When a student repeats a course and earns a grade of A, B, C, D, or F, the initial grade remains on the transcript but only the highest grade is used in computing the grade point average.

**AW** Administrative Withdrawals. Authorized by the dean of academic affairs, usually for compelling personal and/or confidential circumstances.

**W** Withdrawal. No grade points. A "W" is assigned to students who withdraw from a course or the College after the "Add/Withdrawal" period through the date of the mid-semester or term.

**WF** Withdrawal/Failing. A "WF" grade is assigned to students who withdraw from a course or the College after the last day to withdraw from a course without academic penalty listed on the Academic Calendar. It is computed as an "F".

\* No grade reported. The student should contact the instructor to resolve the matter.

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TABLE 2

## Grade Point Average

Academic standing is reported at the end of each semester by using the grade point average, which is determined by multiplying the grade point value (0.00 to 4.00) for each letter grade by the number of credits earned in the course, totaling the grade points, and dividing the sum by the total number of credits attempted for the semester. For example:

Course	Credit Hrs Attempted	Letter Grade	Grade Pt. Value	Credit Awarded	Grade
PMT 228 Metallurgy	1	F	0.00	0	0.00
PMT 214 Advanced CNC	2	A	4.00	2	8.00
PMT 103 Print Reading & Sketching	3	B-	2.67	3	8.01
LER 100 First Year Seminar	1	L	0.00	0	0.00
MAT 105 Geometry & Trigonometry	3	A	4.00	3	12.00
ENG 201 Technical Writing	3	C	2.00	3	6.00
ENG 101 College Writing	NA	T	0.00	3	0.00
	13			14	34.01

Computation of Grade Point Average  $34.01 \div 13 = 2.616$

TABLE 3

Total Hours Attempted

Cumulative GPA at or Above

1 - 23*	1.5
24 - 35	1.75
36 - 47	1.9
48 and above	2.0

\*A student completing the first semester of the first year must earn a GPA of .70 or higher to avoid automatic suspension.

# Placement and Prerequisites/ AdvantageU

**Prerequisites/Placement for Mathematics:** Prerequisite courses from Central Maine Community College or other institutions must be a grade of C (not C-) or higher.

Course Number and Title	Central Maine Community College Course Prerequisites	or	SAT® Math Score	or	SAT® Math Score with 12th Grade College Prep Math	or	ACT Math Score with College Prep Senior Year Math	ACT Math Score without College Prep Senior Year Math	Next-Generation ACCUPLACER		
									Quantitative Reasoning for Algebra and Statistics (QRAS)	or	Math
MAT 030 - Basic Math	---	or	200	or	200	or	13	14	<230	and	200
MAT 050 - Algebra I	MAT 030	or	450	or	420	or	15	16	<230	and	250
MAT 080 - Pre Statistics	MAT 030	or	450	or	420	or	15	16	<230	and	250
MAT 100 - Intermediate Algebra	MAT 050 or 080	or	480	or	450	or	17	18	230	and	N/A
MAT 101 - Business Math	MAT 030	or	480	or	450	or	17	18	230	and	N/A
MAT 102 - Numbers and Logic	MAT 030	or	480	or	450	or	17	18	230	and	N/A
MAT 104 - Technical Mathematics	MAT 050 or 080	or	480	or	450	or	17	18	230	and	N/A
MAT 105 - Geometry & Trigonometry	MAT 100 or 104 or 115	or	480	or	450	or	17	18	230	and	N/A
MAT 115 - Quantitative Reasoning	MAT 050 or 080	or	480	or	450	or	17	18	230	and	N/A
MAT 122 - College Algebra	MAT 100 or 115	or	500	or	480	or	19	20	250	and	N/A
MAT 125 - Finite Mathematics	MAT 100 or 115	or	500	or	480	or	19	20	250	and	N/A
MAT 132 - Pre-Calculus	MAT 122	or	550	or	500	or	N/A	N/A	275	and	N/A
MAT 135 - Statistics	MAT 080 or 100 or 115	or	500	or	480	or	19	20	250	and	N/A
MAT 283 - Calculus I	MAT 132	or	600	or	580	or	N/A	N/A	300	and	N/A
MAT 284 Calculus II	MAT 283										

**Students must earn a B or higher in ENG 090 to move onto ENG 101.**

Course	Central Maine Community College Course Prerequisites	SAT® ERW Score	or	ACT Score	or	Next-Generation READ & WRIT Combined Score	LOEP Accuplacer® Combined Score
ENG 090 - English Workshop		200		15	or	300-459	—
ENG 105 - College Writing Seminar		420	or	17 or higher	or	460-499	—
ENG 101 - College Writing	ENG 090 (B (not B-) or higher]	480	or	18 or higher	or	500	327 or higher
ESL Level I						—	196-279
ESL Level II						—	280-326

\*Current Next-Generation Accuplacer® scores are subject to change

# Placement and Prerequisites/HiSET

The HiSET exam is a five-part exam that the State of Maine uses in the process of issuing a high school equivalency credential. The Maine Community College System (MCCS) has a partnership with Maine Department of Education (MDOE) Adult Education programs to state-wide utilization of HiSET scores for placement into math and English courses when they enroll in the MCCS.

This partnership ensures that Maine students who score > 15 on the math HiSET can start in college-level math courses. It also ensures that Maine students who score a cumulative score of > 30 in the HiSET Reading and Writing exams can start in ENG 101.

HiSET scores	Central Maine Community College Course Placement
>15 in test element MATH	MAT 100, 101, 102, 104, 105 or 115
> 17 in test element MATH	MAT 122, 125, or 135
13-14 in test element MATH	MAT 050 or 080
<13 test element MATH	MAT 030
> 30 test element READ + WRIT	ENG 101
27-29 test element READ + WRIT	ENG 105
<27 test element READ + WRIT	ENG 090

\*Current Next-Generation Accuplacer® scores are subject to change

# Multilingual Learners

**Central Maine Community College’s English as a Second Language Program is designed to help students learn English used at the college level, and builds upon previous English language study. These courses help prepare students for the TOEFL, so they can continue their education at another college or university.**

## ESL Placement

Students are placed into courses with the help of an academic advisor. This allows students to be in courses with others of approximately the same level of proficiency in English. In addition, students receive the correct type and intensity of instruction for their proficiency level.

The Level of English Proficiency (LOEP) test is offered to all incoming students whose first language is not English. The LOEP is a computerized test used by many colleges and universities.

Scores from the three sub-tests—Reading skills, sentence meaning and language use - are added to determine the overall score.

The following guidelines assist in advising students:

- 327 or higher—the student is exempt from taking ESL courses
- 280 to 326—the student is placed in Level II ESL courses
- 196-279—the students is placed in Level I ESL courses
- Less than 196—the student is advised to take ESL courses through adult education. After three months of English classes, the student may return to CM to retake the tests, which will re-activate the Central Maine Community College application.

## The ESL Curriculum

Central Maine Community College offers eight ESL courses, roughly divided into two levels. Level I is for students entering with a low intermediate level of proficiency in English, with LOEP scores between 196 and 279. Level II is designed for students entering with a high intermediate level of proficiency in English, with LOEP scores between 280 and 326. Students are able to attend full-time, which allows qualifying students to receive financial aid. Courses numbered below 100 are not awarded degree credit.

### Level I ESL courses include:

071: Writing and Grammar. Focuses on developing intermediate academic English skills using standard American English. The priority is written work, though reading, speaking and listening are also expected. Take with ESL 072.

072: Reading and Vocabulary. Focuses on reading as a method to build a strong working English vocabulary as well as to understand the techniques used in American texts to organize information, convey meaning and to stimulate thought. Written and oral responses to reading are expected. Take with ESL 071.

073: Oral Language. Focuses on developing oral fluency in conversation, pronunciation, and presentation skills, and improving

listening comprehension. Some reading and writing is also expected.

075: Building an Academic Vocabulary. Focuses on helping students acquire sufficient vocabulary to succeed in college. The course covers words, idioms, academic terms (such as those used on tests and assignments) and course-specific vocabulary (such as for math, or science). Open to any ESL student, regardless of placement level. All ESL students are strongly encouraged to take this course.

### Level II ESL courses include:

101: Academic Writing and Grammar. This course focuses on developing advanced academic writing skills, and covers the simple and progressive tenses, adverbs, time clauses, and conditionals. It also introduces academic writing form and style. Take with ESL 102. Successful completion is a prerequisite for ENG 101 or ENG 105.

102: Literature. This course introduces students to various genres of literature, with a focus on exploring cultural influences and social interaction. It includes both historical and contemporary literature, as well as writing, speaking and listening. Take with ESL 101

103: American Studies. This course helps students develop an understanding and appreciation of the current social and economic structure of the US, as well as the history of the country’s institutions. The course introduces students to the rigor of college coursework, academic vocabulary and a variety of assignment types.

105: Listening. This course focuses on aural comprehension of academic lectures taken from core courses typically recommended for first year students. The course rigorously prepares students to take notes on the salient lecture points. Students will be exposed to a variety of academic lectures to enhance their listening comprehension skills.

Prerequisite: Placement in ESL courses is open only to speakers of other languages and is based on students’ score on Central Maine Community College’s placement test. (See catalog ESL LOEP Placement scores.)

The Level II courses may be awarded Associate degree credit, and may be applied to the Central Maine Community College core, depending on the student’s major:

- ESL 101: Communication Core (3 credits)
- ESL 102: Humanities Elective (3 credits)
- ESL 103: Social Science Elective (3 credits)
- ESL 105: Humanities Elective (3 credits)

# Credential Descriptions

## Criteria for Academic Credentials

The successful completion of a catalog program of study offered by a Maine Community College System college entitles the student to a certificate or associate degree as appropriate to the curriculum (Maine Community College System Policy 302). The basic criteria, in part, for the award of these credentials are described below. In all instances, care must be taken to ensure compliance with accreditation standards which includes the achievement of a minimum cumulative grade point average of 2.0.

A **Certificate** is awarded upon successful completion of a prescribed program of vocational and/or technical courses that leads to an occupational skill. Certificates may also be considered as the first year of an associate degree program and, if so, must meet the appropriate academic requirements.

- Building Construction Technology
- Business Administration and Management
- Conservation Law Enforcement
- Culinary Arts
- Electromechanical Technology
- Heating Ventilation, Air Conditioning and Refrigeration Technology
- Human Services
- Medical Coding and Electronic Health Records
- Plumbing
- Precision Machining Technology
- Social Sciences

An **Advanced Certificate** is awarded upon the successful completion of a prescribed program of vocational and/or technical courses designed to enhance the occupational skills of students seeking employment in highly specialized occupations.

- Network Security
- Police Operations
- Precision Machining Technology

An **Associate in Applied Science** credential is awarded upon the successful completion of a program of studies designed for employment in a specific occupation. The curriculum for such programs may offer some opportunity for transfer into a baccalaureate program.

- Accounting
- Architectural and Civil Engineering Technology
- Automotive Technology
- Automotive Technology Ford ASSET
- Building Construction Technology In-House Track
- Building Construction Technology Jobsite Track
- Business Administration and Management
- Career Studies

- Computer Forensics
- Computer Technology
- Conservation Law Enforcement
- Criminal Justice
- Culinary Arts
- Cyber Security-Digital Forensics
- Early Childhood Education
- Electromechanical Technology
- Esports Management
- Facilities Maintenance & Management
- Forensic Science
- Graphic Communications
- Heating Ventilation, Air Conditioning and Refrigeration Technology
- Human Services
- Medical Assistant
- Medical Coding and Electronic Health Records
- Network Security/Computer Forensics
- Physical Fitness Specialist
- Plumbing & Heating Technology
- Precision Machining Technology
- Restaurant Management

An **Associate in Science** credential is awarded upon successful completion of a program designed primarily to prepare students to transfer to an upper division baccalaureate program. The curriculum for such programs shall also provide employment skills.

- Business Transfer
- Computer Technology
- Education
- Exercise Science
- Justice Studies
- Liberal Studies
- Life Sciences
- Nursing

An **Associate in Arts** credential is awarded upon the successful completion of a program designed to prepare students to transfer to an upper division baccalaureate program. Curriculum for such programs is built on the foundation of liberal studies with considerable flexibility in selecting strands of electives to develop depth in a prerequisite knowledge required for further study at the baccalaureate level.

- General Studies
- Liberal Studies
- Social Sciences

# Programs and Course Abbreviations and Titles

AA	=	Associate in Art	HIS	=	History
AAS	=	Associate in Applied Science	HUM	=	Humanities
AS	=	Associate in Science	HUS	=	Human Services
ACC	=	Accounting	HVT	=	Heating Ventilation, Air Conditioning & Refrigeration Technology
ACE	=	Architectural & Civil Engineering			
ANT	=	Anthropology	INS	=	Interdisciplinary Studies
ART	=	Art	JUS	=	Justice Studies
ASL	=	American Sign Language	LER	=	Learning Resources
AST	=	Astronomy	LIF	=	Life Sciences
AUT	=	Automotive Technology	LIB	=	Liberal Studies
BCA	=	Business & Computer Applications	MAT	=	Mathematics
BCT	=	Building Construction Technology	MCO	=	Medical Coding and Electronic Health Records
BIO	=	Biology	MEA	=	Medical Assistant
BUS	=	Business Administration and Management	MET	=	Medical Transcription
CAD	=	Computer Aided Drafting	MUS	=	Music
CAS	=	Career Studies	NUR	=	Nursing
CHY	=	Chemistry	OHS	=	Occupational Health and Safety
CNL	=	Conservation Law Enforcement	PHI	=	Philosophy
CNS	=	Network Security/Computer Forensics	PHF	=	Physical Fitness Specialist
COM	=	Communication	PHT	=	Plumbing & Heating Technology
CPT	=	Computer Technology	PHY	=	Physics
CRJ	=	Criminal Justice	PMT	=	Precision Machining Technology
CFI	=	Criminal Justice/Forensic Investigation	POS	=	Political Science
CJF	=	Criminal Justice/Computer Forensics	PSM	=	Parts and Service Management
CUA	=	Culinary Arts	PSY	=	Psychology
ECE	=	Early Childhood Education	REE	=	Real Estate
ECO	=	Economics	REL	=	Religion
EDU	=	Education	REM	=	Restaurant Management
ELT	=	Electromechanical Technology	SCI	=	Science
ENG	=	English	SOC	=	Sociology
ESL	=	English as a Second Language	SPA	=	Spanish
ESP	=	Esports Management	SSC	=	Social Science
EXS	=	Exercise Science	THE	=	Theater
FMM	=	Facilities Maintenance & Management	WST	=	Women's Studies
FOA	=	Ford ASSET (Automotive Technology)			
FRE	=	French			
FRN	=	Forensic Science			
GEO	=	Geology			
GEY	=	Geography			
GRC	=	Graphic Communications			
GEN	=	General Studies			

Attention: Located on the following pages are the program descriptions and matrices. Prospective students are advised to also check individual program prerequisites in the Admissions section of the catalog.

# Programs of Study

Central Maine Community College (CMCC) offers numerous programs of study that lead to the Associate Degree, Certificate and Advanced Certificate award. Beginning in the fall of 2002, the College adopted a minimum General Education Core Curriculum that is applicable to all Associate Degree programs. All Associate Degree programs of study require courses in General Education studies in the disciplines of Humanities, Social Sciences, Mathematics and Sciences'. These courses provide students with the opportunity to develop competencies deemed necessary by faculty, employees and students. The goal of General Education at CMCC is to foster development of common competencies among all Associate Degree students. This enables graduates to be successful and productive, be it in the workplace, in upper division programs of study or in any other personal or professional endeavor.

**Central Maine Community College believes that the educated person possesses the following competencies in:**

**Critical Thinking and the Scientific Method of Reasoning by being able to:**

- Identify and define a problem or research topic to be studied
- Frame the problem with questions and identify the best methodologies for studying the issues
- Effectively gather information
- Investigate potential solutions
- Analyze and interpret results
- Present results in a clear and well-articulated manner

**Communication by being able to:**

- Interpret and effectively present, either in oral or written format, well-reasoned interpretation of assignments
- Write a logical, well-organized document utilizing proper grammar, punctuation and spelling
- Effectively communicate (individually or as part of a team) with diverse audiences in a variety of settings

**Social Responsibility by being able to:**

- Recognize and appreciate individual and cultural differences in human behavior, attitudes and social norms
- Examine their attitudes, values, and beliefs regarding the human experience
- Recognize the value of civic and political participation in the local, national and global arena

**Lifelong Learning and Self Growth Skills by being able to:**

- Evaluate opportunities for personal and career growth
- Initiate self-planning and management programs
- Incorporate new ideas and experiences into a personal value system
- Appreciate the importance of life-long learning

**Information Literacy by being able to:**

- Interpret and effectively disseminate information from a wide variety of materials such as books, journals, reports, tables, and graphs located in either print or electronic formats
- Use citations in written projects that show clearly their understanding of the issues of copyright and plagiarism and the ethical use of information
- Use computers and other technology appropriately to complete assigned tasks

**Creative Arts by being able to:**

- Study, create or participate in a work that demonstrates artistic and/or aesthetic value
- Critique a work's artistic and/or aesthetic value
- Demonstrate an appreciation of the creative arts in personal, cultural and historical perspectives

**General Education Core Curriculum**

**Associate in Applied Science**

Writing	6 credits
Quantitative Literacy (any MAT) /Natural Science	6-7 credits
Creative Arts/Humanities/Social Science	6 credits
Any General Education Elective	3 credits

**Associate in Science**

Writing/Communication	*6 credits
Quantitative Literacy (any MAT) /Natural Science	12*-15 credits
Creative Arts/Humanities	3 credits
Social Science	3 credits
Humanities	3 credits
Diversity/Ethical Reasoning	3 credits
Any General Education Elective	3** credits

\*Students must complete at least one lab science

\*\* Programs requiring 12 math/science credits must also require an additional three credits in general education domain.



# Programs of Study

## Associate in Arts

Writing	6 credits
Quantitative Literacy (any MAT)	3-4 credits
Natural Science	4 credits
Creative Arts	3 credits
Social Science	6 credits
Humanities	6 credits
Diversity	3 credits
Ethical Reasoning	3 credits

## Approved Courses for Writing, Creative Arts, Ethical Reasoning and Diversity

### Writing

CRJ 222 Criminal Law & Report Writing I  
 CRJ 212 Criminal Investigation & Report Writing II  
 ENG 101 College Writing  
 ENG 105 College Writing Seminar  
 ENG 125 Introduction to Literature  
 ENG 150 Introduction to Journalism  
 ENG 201 Technical Writing  
 ENG 211 Creative Writing  
 ENG 220 Business Communication  
 ENG 221 Advanced Composition and Research  
 SSC 200 Research Methods for Social Sciences

### Creative Arts

ART 101 Introduction to 2-D Design  
 ART 102 Principles of 3-D Design  
 ART 103 Drawing I  
 COM 100 Public Speaking  
 ECE 204 Creative Arts & Creativity for Young Children  
 GRC 102 Graphic Design I  
 GRC 118 Introduction to Digital Photography  
 INS 296 Interdisciplinary Seminar  
 THE 101 Introduction to Theater  
 THE 102 Introduction to Acting

### Ethical Reasoning

HUS 112 Introduction to Human Services  
 HUS 151 Interviewing and Counseling  
 HUS 202 Psychosocial Aspects of Disability  
 PHI 101 Critical Thinking  
 PHI 111 Introduction to Ethics

PSY 114 Child Development  
 PSY 116 Psychology of Group Dynamics

### Diversity

ANT 101 Introduction to Cultural Anthropology  
 ASL 101 American Sign Language I  
 ASL 102 American Sign Language II  
 ECO 201 Introduction to Macroeconomics  
 ECO 202 Introduction to Microeconomics  
 EDU 222 Social Justice & Diversity in the Classroom  
 ENG 112 American Literature I (Pre 1865)  
 ENG 113 American Literature II (Post 1865)  
 ENG 215 Film as Literature  
 ENG 230 Children's Literature  
 GEY 101 Human Geography  
 HIS 131 US History to 1877  
 HIS 132 US History since 1877  
 HIS 151 Western Civilization I  
 HIS 152 Western Civilization II  
 HIS 220 America and the Cold War  
 HUS 201 Multicultural Perspectives in Human Services  
 INS 211 The Asian Tradition  
 JUN 225 Race & Ethnicity in Law Enforcement  
 PHI 151 Introduction to Western Philosophy  
 POS 150 Introduction to American Politics  
 POS 151 American State & Local Government  
 POS 160 Introduction to International Relations  
 POS 205 Introduction to Comparative Politics  
 PSY 111 Developmental Psychology  
 PSY 201 Social Psychology  
 REL 101 Comparative Religion  
 SOC 101 Introduction to Sociology  
 SOC 200 Issues in Diversity  
 SOC 201 Sociology of Aging  
 SOC 210 Crime and Deviance  
 SOC 215 Sociology of Gender  
 SOC 220 Sociology of Family  
 SOC 230 Human Sexuality  
 WST 101 Women's Studies

# Programs of Study

## **General Education Elective Courses by Abbreviation**

### **Communications**

COM 100, 101, 121, 151; ENG 131, 201, 211, 220, 221.

### **Humanities**

Art (ART), American Sign Language (ASL), Communications (COM), English (ENG), English as a Second Language (ESL), French (FRE), Humanities (HUM), Interdisciplinary Studies (INS), Music (MUS), Philosophy (PHI), Religion (REL), Spanish (SPA), Theater (THE), Women's Studies (WST)

### **Social Science**

Anthropology (ANT), Economics (ECO), Geography (GEY), History (HIS), Justice Studies (JUS), Political Science (POS), Psychology (PSY), Sociology (SOC), Social Science (SSC)

### **Math/Science**

Astronomy (AST), Biology (BIO), Chemistry (CHY), Geology (GEO), Mathematics (MAT), Physics (PHY)

Not all programs can be completed in the evenings. Curricula may be modified without notice as adjustments are made in response to business/industry/occupational needs, advisory committee recommendations as well as compliance with the Maine Community College System policies and accreditation standards. Some programs have a selective admissions policy. Please contact the Office of Admissions for information.

A program of study may be discontinued if it fails to meet the standards established by the Maine Community College System Board of Trustees, or if the College has insufficient funds to sustain it. In the event that a program of study is to be discontinued, the College will make reasonable effort to ensure that students degree-seeking in that program have the opportunity to complete the program. To that end, the College will offer the courses needed for graduation in the sequence and semester outlined in this catalog; or the College will accept credits for the courses needed from another accredited institution of higher education provided the student has earned a grade of "C" (not "C-") or better, and when necessary will waive residency requirements.

Many courses have prerequisites and/or co-requisite. It is important to check these requirements prior to registration. A prerequisite is a course or knowledge base that is required prior to taking a course. A co-requisite is a compulsory accompanying course that must be taken along with another. Academic Advisors will assist in the appropriate course selection sequence.

# Accounting (ACC)

## Program Description

The Associate in Applied Science Degree in Accounting will provide individuals with broad exposure to general business activities and practices and an in-depth understanding of fundamental accounting procedures and supporting computerized applications.

Specifically, the program is designed to prepare students for entry level positions or to advance in accounting related career fields. In addition, students who complete the program will have a knowledge and academic base equivalent to the first two years of many four-year degree programs in accounting.

## Career Opportunities

Graduates will be qualified for accounting related occupations such as bookkeepers, accounting and auditing clerks, auditors, adjustment clerks and tax preparers. Additional experience and/or education can lead to supervisory and administrative positions.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Evaluate business transactions and record journal entries that demonstrate knowledge of Generally Accepted Accounting Principles (GAAP).
2. Demonstrate knowledge of current accounting practices and use of accounting terminology.
3. Utilize technology to assess, evaluate, and apply information.
4. Demonstrate proficiency in the preparation, analysis and use of financial statements.
5. Utilize knowledge of the practice of transferring accounting theory into actual practice.

Students must earn a grade of C or higher in ENG 101 College Writing or ENG 105 College Writing Seminar and ENG 220 Business Communication in order to meet the degree requirements of this program.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
ACC 120	Financial Accounting	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT 101*	Business Mathematics	3
BUS 100	Understanding Business	3
BCA ___	Select one of the following:	3
	BCA 241 Spreadsheets	
	BCA 246 Database Management	
Semester II		
ACC 248	Payroll Accounting	3
ACC 122	Managerial Accounting	3
ENG 220	Business Communication	3
PHI 101	Critical Thinking	3
MAT ___*	Select one of the following:	3
	MAT 125 Finite Mathematics	
	MAT 135 Statistics	
Semester III		
ACC 240	Intermediate Accounting I	3
ACC 244	Accounting Software Applications	3
BUS 260	Business Finance	3
ACC 254	Federal Taxation	3
COM ___	Select one of the following:	3
	COM 100 Public Speaking	
	COM 101 Interpersonal Communication	
Semester IV		
ACC 242	Intermediate Accounting II	3
BUS 118	Introduction to Management	3
ACC 258	Nonprofit Accounting	3
ECO 201	Macroeconomics	3
BUS ___	Select one of the following:	3
	BUS 297 Business Program Internship	
	BUS 298 Business Capstone	
<b>Total Credit Hour Requirements</b>		<b>60-61</b>

\*Course placement determined by assessment test scores and/or prior college coursework.

**High school prerequisite(s) for program admission:  
Algebra I**

# Accounting (ACC)

## Accounting 100% Online Suggested Course Sequence

The 100% online accounting degree is intended to be completed in the pre-selected course sequence to the right. All courses may be completed in 8-weeks. Individuals may choose to take 16-week courses instead, though it may delay degree attainment.

## Online Program Priority Enrollment Deadline

The priority enrollment deadline is May 15, which means the application and requirements such as placement scores, transcripts from previously attended schools, tuition deposit must be received, and online orientation completed.

Students must earn a grade of C or higher in ENG 101 College Writing or ENG 105 College Writing Seminar and ENG 220 Business Communication in order to meet the degree requirements of this program.

## Associate in Applied Science Degree Requirements

		<b>Credit Hours</b>
<b>1st Term</b>		
BUS 100	Understanding Business	3
ENG 101	College Writing	3
<b>2nd Term</b>		
BCA 241	Spreadsheets	3
MAT 101	Business Mathematics	3
<b>3rd Term</b>		
ACC 120	Financial Accounting	3
ECO 201	Macroeconomics	3
<b>4th Term</b>		
ACC 122	Managerial Accounting	3
COM 101	Interpersonal Communication	3
<b>5th Term</b>		
ENG 220	Business Communication	3
MAT ____	Select one of the following: MAT 125 Finite Mathematics MAT 135 Statistics	3
<b>6th Term</b>		
BUS 118	Introduction to Management	3
PHI 101	Critical Thinking	3
<b>7th Term</b>		
ACC 240	Intermediate Accounting I	3
BUS 260	Business Finance	3
<b>8th Term</b>		
ACC 252	Intermediate Accounting II	3
ACC 258	Nonprofit Accounting	3
<b>9th Term</b>		
ACC 244	Accounting Software Applications	3
ACC 248	Payroll Accounting	3
<b>10th Term</b>		
ACC 254	Federal Taxation	3
BUS 298	Business Capstone	3
<b>Total Credit Hour Requirements</b>		<b>60</b>

\*Course placement determined by assessment test scores and/or prior college coursework.

# Architectural and Civil Engineering Technology (ACE)

## Program Description

The Associate in Applied Science in Architectural and Civil Engineering Technology prepares graduates for entry within the A/E/C field which supports; architects, landscape architects, land planners, municipal and state engineers, environmental, civil, structural, mechanical, and electrical engineers, interior designers, surveyors, facilities managers, fabricators, designer-builders, and suppliers. Graduates become members of the global infrastructure of design and construction in roles as; architectural and engineering technologists, CAD designers, specifiers, estimators, construction management technologists, contractors, and surveying technicians.

This program prepares graduates in research and design towards document preparation covering design topics in residential and commercial building and site. Courses cover areas in; site civil and landscape, architectural, interiors, structural, mechanical electrical, project management, estimating and scheduling.

## Career Opportunities

Graduates of this program typically accept positions with architectural firms, engineering offices, structural or fabrication departments in industrial plants, contractors, land surveyors, building materials supply firms, and municipal or state engineering offices. Graduates are often afforded advanced standing when electing to further their education at other colleges or universities.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Apply the knowledge, research, techniques, skills and modern tools of the discipline.
2. Apply the knowledge of STEM, conduct tests, analyze and interpret results and integrate with a level of practical creativity towards solving problems.
3. Apply knowledge of CAD, BIM and engineering based software to create and present conditions and solutions within 2D drawings and 3D modeling.
4. Apply knowledge of BIM and the guidelines of sustainability utilizing the principles of LEED, CSI, NAVFAC/AIA standards and best practices.
5. Demonstrate knowledge of professional and ethical responsibilities.
6. Create and present industry standard design, project driven documents, materials and modeling compositions.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
CAD 110	Introduction to CAD	3
ACE 113	Architecture and Design	3
ACE 155	Residential Site Design	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT ___*	Select one of the following:	3
	MAT 105 Geometry and Trigonometry	
	MAT 122 College Algebra	
___ ___	Elective: Humanities or Social Science	3
Semester II		
ACE 110	Construction and Materials	3
ACE 121	Structures I	3
ACE 225	Commercial Site Design	3
PHY 121	Technical Physics I	3
PHY 122	Technical Physics I Lab	1
ENG 201	Technical Writing	3
Semester III		
CAD 262	Intermediate CAD	3
ACE 165	Commercial Building Design	3
ACE 122	Structures II	3
ACE 239	Applied Engineering Science	3
___ ___	Elective: Humanities or Social Science	3
Semester IV		
ACE 268	Trends in Architectural & Civil Engineering	3
ACE 204	Building Systems	3
ACE 274	Project Management	3
ACE ___	Select one of the following:	3
	ACE 297 Internship	
	ACE 298 Thesis - Capstone	
___ ___	Elective: Humanities or Social Science	3
<b>Total Credit Hour Requirements</b>		<b>64-65</b>

\*Course placement determined by assessment test scores and/or prior college coursework.

**High school prerequisite(s) for program admission:  
C or higher in Algebra I or meet the prerequisites  
for MAT 105.**

# Automotive Technology (AUT)

## Program Description

The Associate of Applied Science in Automotive Technology is designed to prepare highly skilled technicians for an ever-expanding and challenging automotive industry. The program is organized and taught in a manner that meets the standards of the National Institute for Automotive Service Excellence (ASE). In 1986 the Automotive Technology program was awarded full Master Certification in all eight specialty areas from the National Institute for Automotive Service Excellence (ASE), 101 Blue Seal Drive, SE, Suite 101, Leesburg, VA 20175 - telephone (703) 669-6650. Continued certification was awarded in 2016.

Students may choose between two options:

In House Campus Concentration option coordinates student learning in the classroom and automotive labs to perform a variety of practical job service. Emphasis is placed on developing competencies with electronic and other test equipment, and the completion of work in accordance with industry standards. OR

Dealer TraX option is a state-of-the-art two-year program alternating classroom and laboratory training with paid, on-the-job experience. Automotive Dealer TraX is a joint effort between regional automotive dealers or major independent repair facilities and Central Maine Community College.

Graduates of either program are awarded an Associate in Applied Science in Automotive Technology degree.

An automotive service technician must have the skills of a mechanic and the knowledge to deal with computer controlled engine systems, computer-managed diagnostics, microelectronics, complex pneumatic systems, composite materials, and hydraulics.

Before agreeing to sponsor a student, a dealer may request a criminal background check to include but not limited to criminal background, drug test and credit history.

**Preregistration Requirements:** Prior to enrolling in AUT 180, students must first obtain a sponsor. Before agreeing to sponsor a student, a repair facility may request a criminal background check to include but not limited to criminal background, drug test and credit history. Furthermore, repair facilities often require that students hold a current and valid driver's license free from "current major" violations, as that term is defined in standard auto insurance policies. Repair facilities also retain the right, in their sole discretion, to accept or deny students based on their findings. Please note that the inability to secure a sponsor could jeopardize an individual's ability to meet all the requirements for this degree. **Prerequisites: ENG 101/105 and MAT 100. Students who do not place into prerequisite courses will be admitted into the in-house program while remedial courses are being completed.**

## Career Opportunities

Students accept positions as general technicians, or as specialists in areas such as front-end alignment, brakes, or automatic transmissions. Automotive dealerships, service stations, companies with large vehicle fleets, and automotive parts supply stores are typical employers of program graduates.

## Other

The College offers a Parts and Services Management advising pathway in the Business, Associate of Applied Science degree.

Upon graduation students accept positions as shop foremen, service advisor, service manager, parts and service manager (service director) or in automobile sales. Other opportunities include parts counter salesperson, parts manager, manufacturer representative and warranty clerk. Job experience within the parts and service field could eventually lead to after-market parts assistant or store manager and automobile dealership general manager owner.

## Program Outcomes

Upon completion the graduate is prepared to:

1. Perform all NATEF (P-1) tasks to diagnose and repair systems associated with automotive chassis components.
2. Perform all NATEF (P-1) tasks to diagnose and repair all assemblies associated with automotive engine and power transmission systems.
3. Perform all NATEF (P-1) tasks to diagnose and repair all components associated with any electrical and electronic control systems.
4. Perform all NATEF (P-1) tasks to diagnose and repair all components associated with any accessory and ergonomic systems.
5. Communicate clearly using written, verbal, and electronic means.
6. Apply safety standards related to the Automotive Industry.
7. Solve mathematical problems related to the automotive field.

# Automotive Technology (AUT)

## Automotive core classes

Semester I		Credit Hours
AUT 100	Introduction to Automotive Technology	1
AUT 110	Brakes	2
AUT 120	Suspension and Alignment	2
AUT 150	Electric Systems I	3
AUT 170	Engine Performance I	3
AUT 200	State Inspection	1
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT ___*	Select one of the following:	
	MAT 100 Intermediate Algebra	3
	MAT 104 Technical Mathematics	

## Select an area of Specialization

In-House Campus Concentration		
Semester II		Credit Hours
AUT 152	Engine Repair I	5
AUT 159	Auto Electronic and HVAC	5
___ ___	Elective: Open	3
___ ___	Elective: Humanities or Social Science	3
Semester III		
AUT 240	Automatic Transmission	6
AUT 244	Advanced Engine Performance	5
ENG ___	Select one of the following:	3
	ENG 201 Technical Writing	
	ENG 220 Business Communication	
___ ___	Elective: Mathematics or Science	3-4
Semester IV		
AUT 252	Manual Transmission & Driveline	5
AUT 276	Advanced Systems Diagnosis	3
AUT 292	Computerized Chassis Controls	3
___ ___	Elective: Humanities or Social Science	3
___ ___	Elective: Humanities or Social Science	3
<b>Total Credit Hour Requirements</b>		<b>68-70</b>

Dealer TraX Concentration		
Semester II		Credit Hours
AUT 180	Field Experience for (AUT 110, 120, 150, 170)	4
AUT 159	Auto Electronic and HVAC	5
ENG ___	Select one of the following:	3
	ENG 201 Technical Writing	
	ENG 220 Business Communication	
___ ___	Elective: Humanities or Social Science	3
Summer Session		
AUT 181	Field Experience for (AUT 159)	2
AUT 130	Introduction to Engine Repair	1
AUT 131	Engine Repair Lab	3
___ ___	Elective: Humanities or Social Science	3
Semester III		
AUT 182	Field Experience for (AUT 130, 131, 241)	4
AUT 241	Automatic/Manual Transmission	5
___ ___	Elective: Open	3
___ ___	Elective: Humanities or Social Science	3
Semester IV		
AUT 184	Field Experience for (AUT 271)	4
AUT 271	Electronic Engine Control	5
___ ___	Elective: Mathematics or Science (PHY 121/122 recommended)	3-4
<b>Total Credit Hour Requirements</b>		<b>68-69</b>

\*Course placement determined by assessment test scores and/or prior college coursework

# Building Construction Technology In-House Track (BCT)

## Program Description

The Associate in Applied Science Degree in Building Construction Technology prepares the student for successful employment. No longer are the simple construction techniques of old acceptable in today's energy conscious marketplace. While never losing sight of ever-changing materials, methods, and technology associated with the construction field, this program focuses on fundamental skills applicable to either residential or commercial construction. Through a combination of classroom study, mock-ups, and live projects, students obtain hands-on experience and become broadly familiar with methods, standards, and codes commonly associated with the construction industry. While concentrating on core communication and construction skills, students progress at an individual rate matching individual growth. Fundamental construction skills are assessed periodically through competency testing giving students multiple opportunities to demonstrate comprehension and proficiency. Assigned projects based on student abilities will allow project time to more closely follow job-site practices. Growth and accomplishments will be archived in a working ePortfolio throughout the program, which will serve as the foundation for an eResume illustrating the strengths, commitments, and focus prospective employers are looking for.

The BCT program offers students the opportunity to earn a Certificate or an Associates in Applied Science degree.

## Career Opportunities

Graduates of this program typically accept employment with residential, light commercial, institutional, or heavy construction contractor; building materials suppliers; manufacturers of prefabricated modular units; or cabinet shops. With additional experience, graduates may move into middle-management positions become self-employed or general contractors. Building inspection, design, and code enforcement are also career possibilities.

## Program Educational Outcomes

Upon completion the graduate is prepared to enter the job market at an entry level position prepared for advancement based on individual proficiency of the following skills:

1. Interpretation of construction documents, print reading, sketches and associated communication skills.
2. Estimate project costs from working drawings and blueprints including MUBEC code requirements.
3. Demonstrate understanding of basic building science.
4. Demonstrate understanding of basic design load path considerations.
5. Use of transits and laser levels applied to construction projects.
6. Meet core competencies including but not limited to: tool safety, construction math, floor/wall/roof layout, fastener/adhesive technology, lumber characteristics and milling.

## Associate in Applied Science Degree Requirements

Semester I	Credit Hours
BCT 101 ** Introduction to Hand and Power Tools Safety	1
BCT 142 Building Concepts I	3
BCT 143 Building Concepts II	3
BCT 126 Construction Site Surveying	2
MAT ___ * Select one of the following:	3
MAT 100 Intermediate Algebra	
MA 104 Technical Mathematics	
ENG ___ * Select one of the following:	
ENG 101 College Writing	3
ENG 105 College Writing Seminar	(4)
OHS 111 OSHA 10-Hour Course in Construction	1
<b>Semester II</b>	
BCT 144 Building Concepts III	3
BCT 145 Building Concepts IV	3
BCT 180 Introduction to Building Science	3
___ ___ Elective: Humanities or Social Science	3
<b>Summer Semester</b>	
BCT ___ Select one of the following:	3
BCT 197 Internship	
BCT 297 Externship in Building Construction	
BCT 298 Capstone in Building Construction	
Elective: Choose From: BCA 120, BUS 101, BUS 110, BUS 145, CAD 110, COM 100 or PHI 111	
<b>Semester III</b>	
BCT 205 Interior Finish I	5
BCT 152 Construction Document Reading & Cost Estimating	3
___ ___ Writing course	3
CRI 212,222, ENG 101,105,125,150,201,211,220,221,SSC 200	
___ ___ Elective: Humanities or Social Science	3
<b>Semester IV</b>	
BCT 128 Basic Strength of Materials	2
BCT 255 Interior Finish II	5
BCT 251 Construction Business & Site Management	2
___ ___ Elective: Humanities or Social Science	3
___ ___ Elective: Mathematics or Science	3-4
<b>Total Credit Hour Requirements</b>	<b>61-63</b>

\*Course placement determined by assessment test scores and/or prior college coursework \*\*Students must successfully complete BCT 101 prior to participation in any other BCT course.



# Building Construction Technology Jobsite Track (BJT)

## Program Description

The Associate of Applied Science in Building Construction Technology Jobsite Track degree provides students with a two-year program alternating classroom and laboratory training with paid, on-the-job experience, leading to an Associate in Applied Science Degree in Building Construction Technology. The Jobsite Track degree is a joint effort of residential and commercial construction companies and CMCC.

The program prepares students with skills required to meet industry needs through hands-on construction training on the jobsite. This program provides students with the tools necessary to improve their competitive capacity through a comprehensive, hands-on curriculum. It provides an opportunity for high school graduates to build on the technical training received through their technology center programs.

## Preregistration Requirements

Prior to enrolling in the Jobsite Track, students must first obtain a construction employer that is then approved by the department chair. Before agreeing to employ a student, a company may request a criminal background check and/or drug test on that student. An employer often requires that students hold a current and valid driver's license free from "current major" violations, as that term is defined in standard auto insurance policies. Employers also retain the right, in their sole discretion, to accept or deny students based on findings. The inability to secure a construction employer could jeopardize an individual's ability to meet degree requirements. Students must place in ENG 101 or 105 and MAT 100. Students who do not will be admitted into the Jobsite Track while taking remedial courses, but will not be placed with an employer until remedial coursework is completed.

## Program Educational Outcomes

Upon completion the graduate is prepared to enter the job market at an entry level position prepared for advancement based on individual proficiency of the following skills:

1. Interpretation of construction documents, print reading, sketches and associated communication skills.
2. Estimate project costs from working drawings and blueprints including MUBEC code requirements.
3. Demonstrate understanding of basic building science.
4. Demonstrate understanding of basic design load path considerations.
5. Use of transits and laser levels applied to construction projects.
6. Meet core competencies including but not limited to: tool safety, construction math, floor/wall/roof layout, fastener/adhesive technology, lumber characteristics and milling.
7. Demonstrate jobsite experience in both soft and trade skill sets including but not limited to: punctuality, preparedness, following directions and project specific construction trade skills.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
BCT 101**	Introduction to Hand and Power Tool Safety	1
BCT 142	Building Concepts I	3
BCT 143	Building Concepts II	3
BCT 126	Construction Site Surveying	2
MAT ___*	Select one of the following:	3
	MAT 100 Intermediate Algebra	
	MAT 104 Technical Mathematics	
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
OHS 111	OSHA 10-Hour Course in Construction	1
<b>Semester II (1st 8 wks.)</b>		
BCT 144	Building Concepts III	3
___ ___	Elective: Humanities or Social Science	3
___ ___	Elective: Humanities or Social Science	3
<b>Semester II (2nd 8 wks.)</b>		
BCT 185	Field Experience I	4
<b>Summer Semester (1st 7 wks.)</b>		
BCT 154	Millwork I	5
<b>Summer Semester (2nd 4 wks.)</b>		
BCT 186	Field Experience II	2
<b>Semester III (1st 8 wks.)</b>		
BCT 285	Field Experience III	4
<b>Semester III (2nd 8wks.)</b>		
BCT 152	Construction Document Reading & Cost Estimating	3
BCT 200	Structural Analysis I	3
___ ___	Writing course	3
	CRJ 212,222, ENG 101,105,125,150,201,211,220,221,SSC 200	
<b>Semester IV (1st 8 wks.)</b>		
BCT 251	Construction Business & Site Management	2
___ ___	Elective: Humanities or Social Science	3
___ ___	Elective: Mathematics or Science	3-4
<b>Semester IV (2nd 8 wks.)</b>		
BCT 286	Field Experience IV	4
<b>Total Credit Hour Requirements</b>		<b>62-63</b>

\*Course placement determined by assessment test scores and/or prior college coursework \*\*Students must successfully complete BCT 101 prior to participation in any other BCT course.

# Building Construction Technology Certificate (BCT)

<b>Certificate Requirements</b>		
<b>Semester I</b>		<b>Credit Hours</b>
BCT 101 **	Introduction to Hand and Power Tool Safety	1
BCT 142	Building Concepts I	3
BCT 143	Building Concepts II	3
BCT 126	Construction Site Surveying	2
MAT ___ *	Select one of the following:	3
	MAT 100 Intermediate Algebra	
	MAT 104 Technical Mathematics	
OHS 111	OSHA 10-Hour Course in Construction	1
<b>Semester II</b>		
BCT 128	Basic Strength of Materials	2
BCT 144	Building Concepts III	3
BCT 145	Building Concepts IV	3
BCT 180	Introduction to Building Science	3
ENG ___ *	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
<b>Total Credit Hour Requirements</b>		<b>27-28</b>

\*Course placement determined by assessment test scores and/or prior college coursework

\*\*Students must successfully complete BCT 101 prior to participation in any other BCT course.

# Business Administration and Management (BUS)

ALSO AVAILABLE  
100% ONLINE

## Program Description

The Business Administration and Management program provides students the opportunity to earn a Certificate, an Associate in Applied Science degree or an Associate in Science degree. The program of study includes activities found in a modern business or industrial organization including accounting, marketing, customer relations and strategic planning.

The program is designed to prepare individuals with a wide variety of management and supervisory skills while providing broad exposure to general business practices. Sales personnel, office administrators, managers and professionals require this mix of general knowledge and specific expertise to successfully compete in the world of business. The program is also designed to provide a strong foundation of skills and advanced technical capability while allowing students to keep their current jobs.

In some instances, particularly for students planning to transfer to a 4-year accredited business school, it is in the student's best interest to be in the Business Transfer program rather than the Business program. Students will experience some business courses while also completing required core courses for their baccalaureate degree. An advising worksheet that outlays the General Studies curriculum for a student whose goal is to transfer to an accredited business school is available in the Learning & Advising Center and from the Business Department.

## Career Opportunities

Graduates will be prepared to work in an array of commercial, retail and professional office situations. Examples of these positions include first line supervisors, general managers, food service and lodging managers, professional sales representatives, bookkeeping and accounting clerks and related administrative, industrial and professional positions. Graduates of this program will be prepared for these occupations with skills and knowledge for careers tailored to meet current job requirements and future career growth.

Graduates are also encouraged to continue their education and pursue a Baccalaureate Degree and/or seek paths toward specialization in one of the many functional areas of business (i.e. personnel, training, purchasing, etc.).

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Utilize effective management and supervisory skills needed for working in the business environment.
2. Organize teams, groups and individuals in business situations.
3. Utilize technology to analyze business problems and construct appropriate solutions.
4. Diagnose marketing and management related issues and plan future actions.
5. Incorporate appropriate business terminology into effective communication (reading, writing and graphics).

# Business Administration and Management (BUS)

## **Associate in Applied Science Degree Requirements**

<b>Semester I</b>		<b>Credit Hours</b>
BCA 120	Introduction to Computer Applications	3
BUS 100	Understanding Business	3
___	Elective: ACC, BCA or BUS	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT 101*	Business Mathematics	3
<b>Semester II</b>		
BCA 241	Spreadsheets	3
BUS ___	Select one of the following:	3
	BUS 120 Employment Law	
	BUS 124 Legal Environment of Business	
BUS 215	Principles of Marketing	3
MAT ___	Select one of the following:	3
	MAT 125 Finite Mathematics	
	MAT 135 Statistics	
ENG 220	Business Communication	3
<b>Semester III</b>		
ACC 120	Financial Accounting	3
BUS 118	Introduction to Management	3
COM 100	Public Speaking	3
ECO 201	Introduction to Macroeconomics	3
___	Elective: Social Science	3
<b>Semester IV</b>		
BUS ___	Select one of the following:	3
	BUS 297 Business Program Externship	
	BUS 298 Business Capstone	
ACC 122	Managerial Accounting	3
___	Elective: ACC, BCA or BUS	3
___	Elective: ACC, BCA or BUS	3
___	Elective: ACC, BCA or BUS	3
<b>Total Credit Hour Requirements</b>		<b>60-61</b>

## **Certificate Requirements**

<b>Semester I</b>		<b>Credit Hours</b>
BCA 120	Introduction to Computer Applications	3
BUS 100	Understanding Business	3
BUS 110	Principles of Supervision	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
BUS ___	Select one of the following:	3
	BUS 120 Employment Law	
	BUS 124 Legal Environment of Business	
<b>Semester II</b>		
BUS 101	Small Business Management	3
BUS 115	Leadership and Interpersonal Relations	3
BUS 150	Effective Customer Relations	3
BCA 241	Spreadsheets	3
MAT 101*	Business Mathematics	3
<b>Total Credit Hour Requirements</b>		<b>27-28</b>

Students must earn a grade of C (not C-) or higher in ENG 101 College Writing or ENG 105 College Writing Seminar and BUS 220 Business Communication in order to meet Certificate or Associate Degree requirements of this program.

\*Course placement determined by assessment test scores and/or prior college coursework

# Business Administration and Management (BUS)

## Online Program Priority Enrollment Deadline

The Business Administration and Management program is available online. The priority enrollment deadline for the online program is May 15, which means the application and requirements such as placement scores, transcripts from previously attended schools, tuition deposit must be received, and online orientation completed.

Students must earn a grade of C (not C-) or higher in ENG 101 College Writing or ENG 105 College Writing Seminar and BUS 220 Business Communication in order to meet Certificate or Associate Degree requirements of this program.

<b>Associate in Applied Science</b>		
<b>1st Term</b>		<b>Credit Hours</b>
BUS 100	Understanding Business	3
BUS 124	Legal Environment of Business	3
<b>2nd Term</b>		
BCA 120	Introduction to Computer Applications	3
BUS 118	Introduction to Management	3
<b>3rd Term</b>		
ENG 101*	College Writing	3
— —	Elective: ACC, BCA or BUS	3
<b>4th Term</b>		
COM 101	Interpersonal Communication	3
MAT 101	Business Mathematics	3
<b>5th Term</b>		
ENG 220	Business Communication	3
BUS 215	Principles of Marketing	3
<b>6th Term</b>		
— —	Elective: ACC, BCA or BUS	3
— —*	Select one of the following:	3
	MAT 125 Finite Mathematics	
	MAT 135 Statistics	
<b>7th Term</b>		
ACC 120	Financial Accounting	3
BCA 241	Spreadsheets	3
<b>8th Term</b>		
ACC 122	Managerial Accounting	3
— —	Elective: ACC, BCA or BUS	3
<b>9th Term</b>		
— —	Elective: ACC, BCA or BUS	3
ECO 201	Introduction to Macroeconomics	3
<b>10th Term</b>		
— —	Elective: Social Science	3
BUS 298	Business Capstone	3
<b>Total Credit Hour Requirements</b>		<b>60</b>

\*Course placement determined by assessment test scores and/or prior college coursework

# Business Administration and Management (BUS) Pathways

## ***Banking and Finance Pathway***

BUS 185      Personal Finance  
 BUS 248      Money, Marketing and Financial Markets  
 BUS 260      Business Finance  
 \_\_\_\_\_      Select one of the following:  
 \_\_\_\_\_      Any BCA or BUS (BUS 286 recommended)

## ***Human Resources Pathway***

BUS 120      Employment Law  
 BUS 190      The Remote Workplace  
 BUS 286      Social Media Marketing  
 \_\_\_\_\_      Select one of the following:  
 \_\_\_\_\_      BUS 185 Personal Finance  
 \_\_\_\_\_      Any BCA or BUS

## ***Entrepreneurship and Small Business Pathway***

BUS 101      Small Business Management  
 BUS 280      Entrepreneurship  
 BUS 286      Social Media Marketing  
 \_\_\_\_\_      Select one of the following:  
 \_\_\_\_\_      ACC 244 Accounting Software Applications  
 \_\_\_\_\_      BUS 185 Personal Finance

## ***Nonprofit Business Administration Pathway***

ACC 258      Nonprofit Accounting  
 BUS 165      Nonprofit Business Management  
 BUS 170      Nonprofit Grant Writing and Revenue  
 BUS 190      The Remote Workplace  
 BUS \_\_\_\_      Select one of the following:  
 \_\_\_\_\_      BUS 185 Personal Finance  
 \_\_\_\_\_      BUS 285 Social Media Marketing

# Business Transfer (BUS)

## Program Description

The Associate in Science in Business Transfer is designed to better meet the needs of students who anticipate transferring to a four-year institution to study business. The A.S. degree is a cost-effective and flexible educational goal that can enhance student career options, while promoting student degree completion and success. Depending on the student's choice of electives, the A.S. degree offers sufficient options for admission into a bachelor degree program in business-related areas such as accounting, business administration, finance, human resources, marketing, public administration, international business and management.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Utilize effective management and supervisory skills needed for working in the business environment.
2. Organize teams, groups and individuals in business situations.
3. Utilize technology to analyze business problems and construct appropriate solutions.
4. Diagnose marketing and management related issues and plan future actions.
5. Incorporate appropriate business terminology into effective communication (reading, writing and graphics).

### *Associate in Science Degree Requirements*

<b>Semester I</b>		<b>Credit Hours</b>
BCA ___	Elective: BCA 120 or higher**	3
BUS 100	Understanding Business	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
ACC 120	Financial Accounting	3
___ ___	Elective: Diversity or Ethical Reasoning	3
<b>Semester II</b>		
ACC 122	Managerial Accounting	3
COM 100	Public Speaking	3
___ ___	Science with Lab: 101 or higher (BIO, CHY, PHY)	4
MAT 135*	Statistics	3
ENG ___	Select one of the following:	3
	ENG 220 Business Communication	
	ENG 201 Technical Writing	
<b>Semester III</b>		
BUS 124	Legal Environment of Business	3
ECO 201	Macroeconomics	3
MAT 122*	College Algebra	3
___ ___	Elective: General Education, ACC, BCA or BUS	3
___ ___	Elective: Humanities	3
<b>Semester IV</b>		
ECO 202	Microeconomics	3
BUS 215	Principles of Marketing	3
___ ___	Elective: General Education, ACC, BCA or BUS	3
___ ___	Elective: General Education, ACC, BCA or BUS	3
___ ___	Elective: General Education, ACC, BCA or BUS	3
<b>Total Credit Hour Requirements</b>		<b>61-62</b>

\* Course placement determined by placement test scores and/or prior college work.

Students should consult four-year colleges for the transferability of courses. Those planning to transfer to colleges accredited by the American Assembly of Collegiate Schools of Business (A.S.C.S.B.) should take general education electives in place of the BCA elective and/or BUS 215.

# Business Transfer - Sports Management Pathway (SBUS)

## Business Transfer - Sports Management Pathway Description

The Sport Management Pathway is designed to meet increasing demands in the sports industry. Easily transfer to a bachelor's degree while still gaining a strong foundation for entry-level careers in the sport management industry.

Take a wide range of classes to better understand the sport management industry. Gain knowledge in sports and health, marketing, accounting, economics, business and more. Finish your degree with a sports management internship for real-world, hands-on experience in the industry. Continue your education in sport management at a four-year college or university. Further your knowledge in the latest marketing and technology techniques. Learn more about the ins and outs of sports marketing, refining a brand, the legal environment of the industry, finance, management, and skills to work with athletes.

### Concentrate on a variety of sport administration functions and environments such as:

- Professional teams
- Collegiate athletic departments
- Sport facilities and event management
- Sport marketing
- Sales, promotion, or advertising
- Sports information, media, or communications
- State and county sports commissions
- Athletic leagues

### Transfer to a bachelor's degree program in:

- Sport Management
- Business Administration
- Finance
- Human Resources
- Marketing
- Public Administration
- International Business and Management
- Entrepreneurship

### Associate in Science Degree Requirements

Semester I		Credit Hours
BCA ___	Elective: BCA 120 or higher**	3
BUS 100	Understanding Business	3
ENG ___*	Select one of the following:	3
	ENG 101 College Writing	
	ENG 105 College Writing Seminar	(4)
ACC 120	Financial Accounting	3
BUS 140	Introduction to Sports Management	3
Semester II		
ACC 122	Managerial Accounting	3
COM 100	Public Speaking	3
___ ___	Science with Lab: 101 or higher (BIO, CHY, PHY)	4
MAT 135*	Statistics	3
ENG ___	Select one of the following:	3
	ENG 220 Business Communication	
	ENG 201 Technical Writing	
Semester III		
BUS 124	Legal Environment of Business	3
ECO 201	Macroeconomics	3
MAT 122*	College Algebra	3
BUS 215	Marketing	3
BUS 145	Facilities Management	3
Semester IV		
ECO 202	Microeconomics	3
___ ___	Elective: Humanities	3
___ ___	Elective: Diversity or Ethical Reasoning	3
BUS 286	Social Media Marketing	3
BUS 297	Business Program Internship	3
<b>Total Credit Hour Requirements</b>		<b>61-62</b>

\* Course placement determined by placement test scores and/or prior college work.

Students should consult four-year colleges for the transferability of courses. Those planning to transfer to colleges accredited by the American Assembly of Collegiate Schools of Business (A.S.C.S.B.) should take general education electives in place of the BCA elective and/or BUS 215.



# Career Studies (CAS)

## Program Description

The Associate in Applied Science in Career Studies is designed to provide a flexible curriculum for students who have unique career goals that cannot be met by other programs of the college. Appropriate students will have significant career experience which exhibits both breadth and depth. This experience may be documented in either standalone or combination of advisor approved "prior learning" documentation which may potentially award students up to 18 credits upon satisfactory assessment. The remaining curriculum will be determined by the student and their advisor. All courses selected should be relevant to the student's career focus which will be determined at the time of enrollment.

## Career Opportunities

Employment and occupational outlook studies reflect the value of postsecondary education to a person's career opportunities and earning potential. Many employers look upon the associate degree as a minimum requirement for skilled occupations. In addition, the associate degree can serve as a platform of accomplishment for pursuing additional educational and career goals.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

- Communicate clearly using written and verbal means.
- Use interpersonal and analytical skills to solve problems that could affect the outcomes of specific projects in the work place.
- Continue to gain knowledge/skills through formal or informal means.
- Realistically analyze career opportunities vs. individual strengths and make sound career path decisions.

<b>Associate in Applied Science Degree Requirements</b>		
<b>Concentration</b>	<b>Credit Hours</b>	
CAS 199	Prior Learning Assessment	18 max
ENG ___ *	Select one of the following: ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
ENG ___	Select one of the following: ENG 150 Introduction to Journalism	3
	ENG 201 Technical Writing	
	ENG 211 Creative Writing	
	ENG 220 Business Communication	
	ENG 221 Advanced Composition & Research	
___ ___	Elective: Humanities or Social Science	9
___ ___	Electives: MAT 100 or higher and/or Science	6-7
Related Courses		
___ ___	Electives	39
Selected from combination of catalog courses and prior learning experience provided that prerequisites are met and Advisor approval is obtained.		
<b>Total Credit Hour Requirements</b>		<b>60-61</b>

\*Course placement determined by assessment test scores and/or prior college coursework

# Computer Technology A.A.S. (CPT)

## Program Description

The Computer Technology program offers two degree options: Associate in Science or the Associate in Applied Science. The Associate in Science degree is designed to articulate with the final two years of undergraduate study at institutions offering the baccalaureate degree while the Associate in Applied Science degree focuses on preparation for entry into the workforce. Both programs are designed to provide individuals with knowledge of computing in the PC environment while developing specific diagnostic, repair, installation, network and programming skills.

This program prepares students for industry certifications such as CompTIA A+ce, ComTIA Net+ce and CompTIA Linux+ce.

## Career Opportunities

The program is designed to develop work skills for the computer technology and related computer fields. Possible jobs include: PC Computer Repair Technicians, PC Software Resource Personnel, Network Administrator, PC Computer Trainers, and PC/Network Sales Personnel. Students will also be prepared for industry certifications such as A+ and NET+.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate an understanding of computing technologies and terminology for industry employment.
2. Accurate and appropriate use of industry terms and representation of materials based on intended audiences.
3. Practice good work habits and attitudes including: responsibility, cooperation, teamwork and ethical behavior.
4. Analyze problems and take corrective action to maintain information technology systems.
5. Continue education through conferences, industry certifications, courses, and/or enrolling in other degree programs.
6. Develop an area of expertise while analyzing career opportunities vs. individual strengths.

Students must earn a grade of C or better in ENG 101 or ENG 105, MAT 102, MAT 115, MAT 122, MAT 125 or MAT 135 and COM 100, COM 101 or COM 121 and all core courses. High school prerequisites for admission into this program: Algebra I

\*Course placement determined by assessment test scores and/or prior college coursework.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
CPT 227	Virtualization	3
COM ____	Select one of the following: COM 100 Public Speaking COM 121 Group Process	3
CPT 147	Introduction to PC Repair/OS	3
CPT 252	Web Development	3
ENG ____*	Select one of the following: ENG 101 College Writing ENG 105 College Writing Seminar	3 (4)
Semester II		
CPT ____	Select one of the following: CPT 127 Introduction to Python CPT 130 Introduction to Visual BASIC CPT 245 Introduction to Java CPT 250 Programming in C	3
CPT 201	Linux	3
CPT 235	Introduction to Networking	3
MAT ____*	Select one of the following: MAT 102 Numbers and Logic MAT 115 Quantitative Reasoning MAT 122 College Algebra MAT 125 Finite Mathematics MAT 135 Statistics	3
____	Elective: Humanities or Social Science	3
Semester III		
CPT 266	Server Administration	3
ENG 201	Technical Writing	3
MAT ____*	Select one of the following: MAT 102 Numbers and Logic MAT 115 Quantitative Reasoning MAT 122 College Algebra MAT 125 Finite Mathematics MAT 135 Statistics	3
____	Elective: CPT	3
____	Elective: CPT	3
Semester IV		
CPT 273	Process Automation & Shell Scripting	3
CPT 298	Capstone	3
____	Elective: CPT	3
____	Elective: Open (CPT recommended)	3
____	Elective: Humanities or Social Science	3
<b>Total Credit Hour Requirements</b>		<b>60-61</b>

# Computer Technology A.S. (CPT)

## Program Description

The Computer Technology program offers two degree options: Associate in Science or the Associate in Applied Science. The Associate in Science degree is designed to articulate with the final two years of undergraduate study at institutions offering the baccalaureate degree while the Associate in Applied Science degree focuses on preparation for entry into the workforce. Both programs are designed to provide individuals with knowledge of computing in the PC environment while developing specific diagnostic, repair, installation, network and programming skills.

This program prepares students for industry certifications such as CompTIA A+ce, ComTIA Net+ce and CompTIA Linux+ce.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate an understanding of computing technologies and terminology for industry employment.
2. Accurate and appropriate use of industry terms and representation of materials based on intended audiences.
3. Practice good work habits and attitudes including: responsibility, cooperation, teamwork and ethical behavior.
4. Analyze problems and take corrective action to maintain information technology systems.
5. Continue their education through conferences, industry certifications, courses, and/or enrolling in a baccalaureate degree program.
6. Develop an area of expertise while analyzing career opportunities vs. individual strengths.

Students must earn a grade of C or better in ENG 101 or ENG 105, MAT 102, MAT 115, MAT 122, MAT 125 or MAT 135 and COM 100 and all core courses. High school prerequisites for admission into this program: Algebra I

<b>Associate in Science Degree Requirements</b>		<b>Credit Hours</b>
<b>Semester I</b>		
CPT 227	Virtualization	3
CPT 147	Introduction to PC Repair/OS	3
ENG ___*	Select on of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT ___*	Select one of the following:	3
	MAT 102 Numbers and Logic	
	MAT 115 Quantitative Reasoning	
	MAT 122 College Algebra	
	MAT 125 Finite Mathematics	
	MAT 135 Statistics	
CPT 201	Linux	3
<b>Semester II</b>		
CPT ___	Select one of the following:	3
	CPT 127 Introduction to Python	
	CPT 130 Introduction to Visual Basic	
	CPT 245 Introduction to Java	
	CPT 250 Programming in C	
CPT 235	Introduction to Networking	3
CHY/PHY	Science with lab	4
ENG 201	Technical Writing	3
___ ___	Elective: CPT	3
<b>Semester III</b>		
COM 100	Public Speaking	3
CPT 266	Server Administration	3
CPT 271	Introduction to Network Security	3
MAT ___*	Select one of the following:	3
	MAT 102 Numbers and Logic	
	MAT 115 Quantitative Reasoning	
	MAT 122 College Algebra	
	MAT 125 Finite Mathematics	
	MAT 135 Statistics	
___ ___	Elective: Humanities	3
<b>Semester IV</b>		
___ ___	Elective: Mathematics or Science	3
___ ___	Elective: Social Science (advisor approved)	3
___ ___	Elective: General Education (advisor approved)	3
PHI 101	Critical Thinking	3
CPT 298	Capstone	3
<b>Total Credit Hour Requirements</b>		<b>61-62</b>

\*Course placement determined by assessment test scores and/or prior college coursework.

# Conservation Law Enforcement (CNL)

## Program Description

The Associate in Applied Science degree in Conservative Law Enforcement provides students with fundamental knowledge needed to pursue careers involving the protection of natural resources, management of wildlife resources and the enforcement of laws governing these resources. The program combines biological principles with law enforcement practice and theory to provide graduates a background in criminal justice, natural resources law, and wildlife and land conservation.

## Career Opportunities

Graduates of the program will be qualified to enter the workforce in natural resources law enforcement occupations, including fish and game warden, national or state park service or bureau of land management ranger, conservation law officer, and a variety of compliance jobs.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate an understanding of the sociological and psychological theories of crime causation and evaluation of human behavior.
2. Demonstrate the ability to apply principles of statutory law and due process within the criminal justice system.
3. Explain foundational principles of fish and wildlife management and conservation protection.
4. Discuss conservation law as it relates to state, constitutional law and federal natural resources law.
5. Identify trends relevant to conservation, environmental, and natural resource issues.

\*Course placement determined by assessment test scores and/or prior college coursework

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
SSC 100	Public Service and Social Sciences Seminar	1
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT ___	Elective: MAT 100 or higher	3
CNL 120	Introduction to Conservation Law	3
CRJ 101	Introduction to Criminal Justice	3
COM 100	Public Speaking	3
Semester II		
CRJ 122	Criminal Law and Report Writing I	3
CNL 150	Principles of Fish and Wildlife Management	3
PHI ___	Elective: Any PHI Course	3
___ ___	Elective: Humanities or Social Science	3
___ ___	Restricted Elective: Any CRJ, JUS, or FRN course	3
Semester III		
BIO 110	Fundamentals of Environmental Science	3
BIO 111	Fundamentals of Environmental Science Lab	1
CNL 240	Conservation Operations	3
CRJ 212	Criminal Investigation and Report Writing II	3
CRJ 231	Death Investigations	3
___ ___	Restricted Elective: Any CRJ, JUS, or FRN course	3
Semester IV		
CRJ 201	Civil Liberties	3
CNL 260	Conservation Operations II	3
CRJ 250	Criminalistics	3
___ ___	Elective: General Education	3
___ ___	Restricted Elective: Any CRJ, JUS, or FRN course	3
<b>Total Credit Hour Requirements</b>		<b>62-63</b>

## Certificate Requirements

Semester I		Credit Hours	Semester II		Credit Hours
SSC 100	Public Service and Social Sciences Seminar	1	CRJ 122	Criminal Law and Report Writing I	3
ENG ___*	Select one of the following:		CNL 150	Principles of Fish and Wildlife Management	3
	ENG 101 College Writing	3	PHI ___	Elective: Any PHI Course	3
	ENG 105 College Writing Seminar	(4)	___ ___	Elective: Humanities or Social Science	3
MAT ___	Elective: MAT 100 or higher	3	___ ___	Restricted Elective: Any CRJ, JUS, or FRN course	3
CNL 120	Introduction to Conservation Law	3			
CRJ 101	Introduction to Criminal Justice	3			
COM 100	Public Speaking	3			

# Criminal Justice (CRJ)

**ALSO AVAILABLE  
100% ONLINE**

## Program Description

The Associate in Applied Science Degree in Criminal Justice is designed with a three-fold purpose: (1) to prepare graduates for entry level positions relevant to law enforcement, (2) to prepare students for upper division coursework at universities and colleges where a bachelor's degree is desired, and (3) to respond to the growing demand of law enforcement employees seeking to upgrade their skills and knowledge base for career advancement with a college degree.

## Career Opportunities

Graduates of the program will be qualified for positions such as police officers, detectives and criminal investigators, correctional officers, forensic science technicians and protective service workers including TSA agents, security systems personnel, homeland security officers, entry level administrative positions, transportation security officers, reserve officer, safety officers, intake worker positions, and jail transport officers.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate an understanding of the sociological and psychological theories of crime causation and evaluation of human behavior.
2. Apply critical thinking and problem solving techniques to the criminal justice environment.
3. Demonstrate the ability to apply principles of statutory law and due process within the criminal justice system.
4. Demonstrate interpersonal, written, and presentation skills required for successful employment in a criminal justice field.
5. Explain how the criminal justice field responds to societal expectations.

## Non-Academic Requirements

All students taking Criminal Justice courses will be subject to a criminal background check. A criminal conviction will not automatically prevent a person from being accepted into the program. The applicant would be denied acceptance if they have a "disqualifying conviction" or committed "disqualifying conduct" as defined by the Maine Criminal Justice Academy. Such conviction / conduct prohibits a person from being certified / licensed as a police officer in the State of Maine.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
SSC 100	Public Service and Social Sciences Seminar	1
CRJ 101	Introduction to Criminal Justice	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT ___*	Elective: MAT 100 or higher	3
CRJ 122	Criminal Law and Report Writing I	3
CRJ 220	Police Operations	3
Semester II		
___ **	Advising Pathway course	3
CRJ 212	Criminal Investigation and Report Writing II	3
PHI ___	Any PHI course	3
BIO 101	Introduction to General Biology	3
BIO 102	Introduction to General Biology Lab	1
___	Elective: ANT, ECO, GEY, HIS, POS, PSY, SOC or SCC	3
Semester III		
COM ___	Select one of the following:	3
	COM 100 Public Speaking	
	COM 101 Interpersonal Communication	
___ **	Advising Pathway course	3
JUS 245	Criminology	3
___	**Advising Pathway course	3
___	Elective: PSY or SOC course	3
Semester IV		
CRJ 201	Civil Liberties	3
___ **	Advising Pathway course	3
___ **	Advising Pathway course	3
___ **	Advising Pathway course	3
___	Select one of the following	3
	CRJ 297 Criminal Justice Internship	
	**Advising Pathway course	
<b>Total Credit Hour Requirements</b>		<b>62-63</b>
** Any CNL/CRJ/FRN/JUS course		

\*Course placement determined by assessment test scores and/or prior college coursework

## Online Program Priority Enrollment Deadline

The priority enrollment deadline is May 15, which means the application and requirements such as placement scores, transcripts from previously attended schools, tuition deposit must be received, and online orientation completed.

# Culinary Arts (CUA)

## Program Description

The Associate in Applied Science degree in Culinary Arts prepares students for careers in culinary arts, foodservice management, catering, institutional food service, and as chefs. Course work covers a broad spectrum: the preparation of basic and specialized foods, baking and pastry arts, nutrition, sanitation, management techniques and functions, cost control, purchasing, and culinary fundamentals.

Students will learn the art of classical French techniques mixed with modern trends. Emphasis is placed on culinary skills as well as soft skills such as professionalism, how to survive in the industry, teamwork, communication and critical thinking skills. Students work in a kitchen laboratory and dining room setting through the course of study.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate the importance of the proper use and handling of kitchen hand tools and equipment used in commercial food establishments.
2. Perform mathematical functions related to food service operations.
3. Demonstrate a general understanding of concepts covered through research, writing and oral presentation.
4. Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
5. Discuss and employ the principles of menu planning and layout.
6. Research and prepare dishes and menus for a variety of modern issues and concerns including specific health and dietary needs.
7. Demonstrate the fundamentals of baking science and preparation.
8. Discuss and demonstrate the overall concepts of purchasing and receiving in the food service industry.
9. Research, design and prepare dishes and menus using classical cooking techniques used in a professional kitchen.

Students must earn a grade of C (not C-) or higher in ENG 101 College Writing or ENG 105 College Writing Seminar in order to meet the degree requirements of this program.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
CUA 100	Introduction to Culinary Arts	2
CUA 105	Fundamentals of Baking	2
CUA 110	Techniques of Cooking	2
CUA 115	Baking Principles and Presentation	2
CUA 121	Food Preparation and Sanitation	3
ENG ___*	Select one of the following:	3
	ENG 101 College Writing	
	ENG 105 College Writing Seminar	(4)
COM ___	Select one of the following:	3
	COM 100 Public Speaking	
	COM 101 Interpersonal Communication	
Semester II		
CUA 150	Introduction to a La Carte	2
CUA 152	Specialty Foods	2
CUA 154	Introduction to Cakes & Recipe Alterations	2
CUA 156	Pastries and Contemporary Desserts	2
CUA 171	Nutrition and Food Quality	3
MAT ___*	MAT 100 or higher	3
___ ___	Elective: Humanities or Social Science	3
Semester III		
CUA 210	Butchery	2
CUA 212	International Cuisine	2
CUA 214	Petit Fours and Artisan Breads	2
CUA 216	Food and Beverage Purchasing	3
___ ___	Elective Mathematics or Science	3-4
___ ___	(MAT 100, 101, 122, 125 or 135)	
___ ___	Writing course	3
	CRJ 212,222, ENG 101,105,125,150,201,211,220,221,SSC 200	
Semester IV		
CUA 250	Modern Cooking	2
CUA 252	Advanced Cakes	2
CUA 254	Advanced La Carte and Service	2
CUA 256	Chocolates Confections	2
CUA 299	Externship	4
___ ___	Elective: Humanities or Social Science	3
<b>Total Credit Hour Requirements</b>		<b>64-66</b>

\*Course placement determined by assessment test scores and/or prior college course work.

# Culinary Arts Certificate (CUA)

## Program Description

The Certificate in Culinary Arts prepares students for employment in a variety of commercial cooking enterprises. The principle focus will be classical French cooking techniques, menu planning and pricing, and how to cook for the customer's diet and allergens. Basic and artisan breads, pies, cake baking and decorating, mousses and plated desserts will be covered. There will be major emphases placed on knowing the equipment used, weights and measures and how to convert them, being able to read a recipe, sanitation, and kitchen safety. Students will be required to participate in several functions for community and college organizations, as well as the fall and spring Open Houses.

Students who graduate with the Certificate have the ability to transfer all their earned credits to the Restaurant Management Associate in Applied Science Degree and the Culinary Arts Associate in Applied Science Degree. **In order to transfer, students must have C (not C-) or better in ENG 101 College Writing or ENG 105 College Writing Seminar.**

Within the Food Prep and Sanitation class, students will have the opportunity to take the National Restaurant Association Educational Foundation's exam for ServSafe Certification. Successfully passing this exam will complete the State of Maine's requirement for being a Certified Food Protection Manager (CFPM).

## Career Opportunities

Graduates can look forward to being employed as cooks, line cooks, prep cooks, assistant bakers and a sous chef in restaurants, schools, hospitals and nursing homes.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate proper uses of hand tools and large kitchen equipment and kitchen safety.
2. Practice the appropriate methods of keeping a kitchen clean and sanitary while providing an environment safe for food.
3. Demonstrate best practices from planning menu to execution to clean up.
4. Explain and present a finished product and display or explain correct information behind a dish.
5. Describe the possible opportunities for professional development and advancement through specific organizations.
6. Demonstrate a general understanding of concepts covered through research, writing and oral presentation.
7. Discuss the proper channels of purchasing and what makes for a reputable supplier and when it is okay to refuse a shipment.
8. Discuss nutritional values associated with menu development to satisfy customer needs or preference.

## Certificate Requirements

Semester I		Credit Hours
CUA 100	Introduction to Culinary Arts	2
CUA 105	Fundamentals of Baking	2
CUA 110	Techniques of Cooking	2
CUA 115	Baking Principles and Preparation	2
CUA 121	Food Preparation and Sanitation	3
COM ____	Select one of the following:	3
	COM 100 Public Speaking	
	COM 101 Interpersonal Communication	
ENG ____*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
Semester II		
CUA 150	Introduction to a La Carte	2
CUA 154	Introduction to Cakes & Recipe Alternations	2
CUA 152	Specialty Foods	2
CUA 156	Pastries and Contemporary Desserts	2
CUA 171	Nutrition and Food Quality	3
MAT ____ *	Select one of the following:	3
	MAT 100 Intermediate Algebra	
	MAT 101 Business Mathematics	
	MAT 122 College Algebra	
	MAT 125 Finite Mathematics	
	MAT 135 Statistics	
____	Elective: Humanities or Social Science	3
<b>Total Credit Hour Requirements</b>		<b>34-35</b>

\*Course placement determined by assessment test scores and/or prior college coursework

# Cybersecurity-Digital Forensics

## Program Description

The Associate in Applied Science Degree in Cybersecurity - Digital Forensics is designed to prepare students to address the ever-increasing needs of businesses in the area of technology security. Students in this program can choose to transfer to a baccalaureate degree program or go directly into the workforce. The skills learned in the core curriculum will give students a strong background in computer technology and networks. The degree concentration will focus on securing, testing, and analyzing information as it is stored, manipulated, and communicated across networks.

The curriculum is designed to prepare students for a multitude of industry standard certifications, for which many of the exams can be taken on campus.

## Career Opportunities

This program will prepare highly-skilled graduates who are ready to work in technology departments in various capacities. These would include PC repair technicians, network security officers and analysts, network administrators, forensic analysts, and computer managers.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate an understanding of computing technologies and terminology for industry employment.
2. Accurate and appropriate use of industry terms and representation of materials based on intended audiences.
3. Utilize ethical means to determine the effectiveness of a network's security posture while recommending appropriate remediation techniques.
4. Analyze, retrieve and report evidentiary data utilizing forensic tools.
5. Continue education through conferences, industry certifications, courses, and/or enrolling in other degree programs.
6. Develop an area of expertise while analyzing career opportunities vs. individual strengths.

Students must earn a grade of C or better in ENG 101 or ENG 105, MAT 102, MAT 115, MAT 122, MAT 125 or MAT 135 and COM 100, COM 101 or COM 121 and all core courses. High school prerequisites for admission into this program: Algebra I

## Non-Academic Requirements

All students enrolled in this degree will be subject to a criminal background check. A criminal conviction will not automatically prevent a person from being accepted into the program.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
CPT 127	Introduction to Python	3
CPT 147	Introduction to PC Repair/OS	3
CPT 201	Introduction to Linux	3
MAT ___ *	Select one of the following:	3
	MAT 102 Numbers and Logics	
	MAT 115 Quantitative Reasoning	
	MAT 122 College Algebra	
	MAT 125 Finite Mathematics	
	MAT 135 Statistics	3
ENG ___ *	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
Semester II		
CPT 235	Introduction to Networking	3
CPT 227	Virtualization	3
ENG 201	Technical Writing	3
COM ___	Select one of the following:	3
	COM 100 Public Speaking	
	COM 101 Interpersonal Communication	
	COM 121 Group Process	
___ ___	Elective: Social Science	3
Semester III		
___ ___	Elective: Open (CPT recommended)	3
CPT 266	Server Administration	3
MAT ___ *	Select one of the following:	3
	MAT 102 Numbers and Logic	
	MAT 115 Quantitative Reasoning	
	MAT 122 College Algebra	
	MAT 125 Finite Mathematics	
	MAT 135 Statistics	
CPT 261	Computer Forensics I	3
CPT 271	Introduction to Network Security	3
Semester IV		
CPT 239	Advanced Networking Concepts	3
CPT 275	Computer Forensics II	3
CPT 281	Penetration Testing	3
CPT 298	Capstone	3
PHI ___	Select one of the following:	3
	PHI 101 Critical Thinking	
	PHI 111 Introduction to Ethics	
<b>Total Credit Hour Requirements</b>		<b>60-61</b>

\*Course placement determined by assessment test scores and/or prior college coursework



# Early Childhood Education (ECE)

## Program Description

The Associate in Applied Science Degree in Early Childhood Education program prepares individuals to be skilled professionals qualified to work in a wide variety of early childhood settings including (but not limited to): child care centers, Head Start, family child care, nursery schools, and programs for children with special needs. The program's curriculum is based upon standards set by the National Association for the Education of Young Children (NAEYC) and it promotes all facets of current best practices in the field.

ECE courses combine the understanding and application of theory to practical experiences working directly with young children, ages newborn through pre-school.

Successful completion of the ECE program requires students to complete field work in licensed and approved facilities. The Department of Health and Human Services, Division of Child Care Licensing, has specific requirements for all paid and unpaid staff (including students).

**Students will be required to have a record of SBI (State Bureau of Identification) and a child protective report on file with Central Maine Community College.**

Field experience sites require background checks that include fingerprinting prior to field placement. Field experience sites retain the right to accept or deny placement of students based on many conditions, including criminal and child protective records. Therefore, criminal or child protective history could jeopardize an individual's ability to successfully meet all the requirements of the program.

Early Childhood Education majors must obtain a minimum grade of C in each Early Childhood Education course and a minimum GPA of 2.0 or better to graduate.

## Program Educational Outcomes

Upon completion the student is prepared to:

1. Recognize and maintain all required health and safety policies and practices.
2. Apply theories of child development to plan inclusive, developmentally appropriate curriculum and environments.
3. Demonstrate positive supportive interactions with young children.
4. Describe the benefits of positive respectful partnerships with diverse families.
5. Demonstrate a commitment to NAEYC's Code of Ethical Conduct and the standards of professional practice.
6. Assess children's ongoing developmental and cultural needs.
7. Articulate a professional philosophy of early childhood education.
8. Work as a part of an early childhood education team.

## *Associate in Applied Science Degree Requirements*

<b>Semester I</b>		<b>Credit Hours</b>
ECE 100	Introduction to Early Care and Education	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
PSY 114	Child Development	3
SOC 220	Sociology of the Family	3
MAT ___*	MAT 100 or higher (excludes MAT 104 or 105)	3
EDU 100	Education Seminar	1
<b>Semester II</b>		
ECE 105	Infant and Toddler Curriculum	3
ECE 147	Infant and Toddler Field Work & Prep	3
ECE 150	Language and Literacy for Young Children	3
PSY 101	Introduction to Psychology	3
COM ___	Select one of the following:	3
	COM 100 Public Speaking	
	COM 101 Interpersonal Communication	
<b>Semester III</b>		
ECE 113	Curriculum and Environments for Young Children	3
ECE 297	Pre-School Field Experience	3
ECE 205	Education of Children with Special Needs	3
___ ___	Science with lab (101 or higher)	4
___ ___	Elective: Open Education or ECE	3
<b>Semester IV</b>		
___ ___	Elective: ECE or EDU	3
ECE 299	Capstone in Early Childhood Education	3
EDU 284	Guidance and Self-Regulation	3
___ ___	Elective: ECE	3
___ ___	Writing course	3
	<small>CRI 212,222, ENG 101,105,125,150,201,211,220,221,SSC 200</small>	
<b>Total Credit Hour Requirements</b>		<b>62-63</b>

\*Course placement determined by assessment test scores and/or prior college coursework

# Education (EDU)

## Program Description

The Associate in Science Degree in Education program prepares students for transfer to baccalaureate degree granting institutions to become education technicians, certified teachers or to provide continuing education to certified teachers in PreK-12 education school settings.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate understanding of how students learn and develop to plan learning opportunities that support a student's physical, cognitive and social/emotional development.
2. Use a variety of instructional strategies to meet the diverse learning needs of student and to encourage critical thinking and problem solving.
3. Describe the principles of extrinsic and intrinsic motivation and uses specific management strategies to create a learning environment that fosters positive social interaction and engagement in meaningful learning experiences.
4. Recognize that students differ in their approaches to learning and create learning opportunities that are modified and adapted to diverse learners.
5. Plan lessons and activities that are based on knowledge of the subject matter, knowledge of the individual students and knowledge of the State and/or National standards.
6. Recognize the appropriate formal and informal assessment strategies to inform curricula decisions, adjust instruction and evaluate learning outcomes that are matched to the physical, cognitive and social/emotional needs of individual students.
7. Reflect on their practices to continually evaluate the effects of planning and decisions made and to seek opportunities to grow professionally.
8. Demonstrate ethical behavior when interacting with students, school colleagues, families and professional agencies to support students' learning and well-being.

## Advising Pathway Courses

ANT 101; ART (all courses); ASL (all courses); AST (all courses); BCA 120, BIO (all courses); CAS 199; CHY (all courses), ECE 100, 150, 203, 204, 208, 296; ECO (all courses); EDU 200 or higher; ENG 112, 113, 121, 125, 211, 221; FRE (all courses); GEO (all courses); GEY 101; GRC 118, 152, 176, 276; HIS (all courses); INS 211, 250, 251; MAT 100, 122, 125, 132, 280, 282, 283; MUS (all courses); PHI 111, 151, 153; PHF 122, 155, 207; PHY 142, 143, 242, 243; POS 150, 151, 160, 205; PSY 114, 201, 202, 204, 210, 212; REL 101; SOC 215, 220, 230; SPA (all courses); THE 101; WST 101.

## Associate in Science Degree Requirements

Semester I		Credit Hours
EDU 101	Introduction to Education	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
___ ___	Elective	3
___ ___	Select one of the following:	3
	MAT 100 Intermediate Algebra	
	MAT 115 Quantitative Reasoning	
	MAT 122 College Algebra	
PSY 101	Introduction to Psychology	3
EDU 100	Education Seminar	1
Semester II		
PSY 111	Development Psychology	3
EDU 150	Pathways to Teacher Certification	3
___ ___	Select one of the following:	3
	ENG 125 Introduction to Literature	
	Elective: Humanities	
MAT 135*	Statistics	3
COM 100	Public Speaking	3
Semester III		
EDU 185	Fundamentals of Educating Students with Special Needs	3
___ ___	Science with lab (101 or higher)	4
___ ___	Elective: Humanities	3
___ ___	Select one of the following:	3
	PSY 114 Child Development	
	Elective: Social Science	
___ ___	Advising Pathway course	3
Semester IV		
ENG 230	Children's Literature	3
___ ___	Advising Pathway course	3
___ ___	Advising Pathway course	3
___ ___	Advising Pathway course	3
___ ___	Advising Pathway course	3
<b>Total Credit Hour Requirements</b>		<b>62-63</b>

\*Course placement determined by assessment test scores and/or prior college coursework

# Electromechanical Technology (ELT)

## Program Description

The Associate in Applied Science Degree in Electromechanical Technology prepares students for careers in electricity and electronic fields that require technicians who are capable of dealing with the challenge of rapid changes in technology. Emphasis is placed on providing a solid theoretical background in electricity and electronics balanced with industrial control technologies.

### This program covers five major content areas of study:

**Electricity and Industrial Controls:** students learn how to read schematic diagrams and follow National Electrical Code standards in connecting devices and motor controls;

**Digital and Analog Electronics:** students become skilled in the use of test instruments, digital and analog circuitry, microprocessors and computers.;

**Process Control and Measurement:** students study pressure, temperature, level, analytical and flow measurement concepts that are implemented to produce feedback control loop systems;

**Robotics and Automation:** students use personal computers to program and control industrial robotic arms and program intelligent controls such as A-C frequency drives and programmable Controllers; and

**Telecommunications:** students study data communication and networking.

Students have the opportunity to earn a Certificate or an Associate in Applied Science degree. The ELT program works with and is approved by the State-of-Maine Electrician's Examination Board to meet examination requirements. It is the responsibility of students to apply for a Helpers license at the start of the ELT program. The state allows graduates of the Electromechanical A.A.S. to sit for the Journeyman exam if they also have 45 hours in the current NEC (ELT-117). It is the intent that students do so within one year after graduation. They must contact our Registrar to send an official transcript to the Electrician's Examining board when applying to sit for the exam. Students have 4000 hours of experience for ELT years; but still need additional hours of experience to apply for a license. After passing the exam, they can apply for a Journeyman in Training license when they have 2000 additional hours of licensed work experience. They can also apply for a Journeyman license after they have 4000 additional hours of licensed work experience.

### Upon graduation, entry-level career opportunities

**include:** electromechanical technicians, electrical/electronic technicians, electricians, engineering assistants, instrument technicians, maintenance technicians, robotic technicians, and

computer technicians. The work is widely diverse from maintenance of equipment and systems in the industrial environment to programming intelligent controllers, and electrical installations.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate oral and written presentation skills.
2. Practice appropriate electrical safety procedures.
3. Employ entry-level skills in the electrical, electronic, and process control fields.
4. Analyze electrical and electronic prints and specifications.
5. Compute operating voltages and currents for electrical and electronic circuits.
6. Select and utilize test equipment to measure electrical quantities and troubleshoot circuits.
7. Design and hook up control systems found in Process Control.
8. Employ personal computer skills to operate technical application software and set up networking.
9. Demonstrate a commitment to life-long learning through formal education, on-the-job, in-service, or through independent participation in other technical/trade resources.

***ELT 100 and 200 labs are Co-requisites with all ELT courses, except ELT 117. Labs are required, scheduled environments that allow students to complete experiments, demonstrations, and projects assigned in ELT courses. The open lab concept requires students to manage their lab time to available equipment and instructor assistance. ELT 117 National Electrical Code I is required to sit for the journeyman in training exam.***

# Electromechanical Technology (ELT)

## Associate in Applied Science Degree Requirements

<b>Semester I</b>		<b>Credit Hours</b>
ELT 101	Electricity I	3
ELT 123	Electrical Controls I	3
ELT 153	Digital Logic	3
MAT ___*	Select one of the following:	3
	MAT 100 Intermediate Algebra	
	MAT 122 College Algebra	
___	Elective: Humanities or Social Science	3
<b>Semester II</b>		
ELT 115	Electricity II	3
ELT 145	Electronic Devices I	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
ELT 201	Communication Electronics	3
MAT ___	Elective: MAT 105 or higher	3
___	Elective: Humanities or Social Science	3
<b>Semester III</b>		
ELT 221	Industrial Controls	3
ELT 231	Process Measurement	3
ELT 245	Electronic Devices II	3
ELT 271	Industrial Robotics	3
	Elective: Mathematics or Science	3-4
<b>Semester IV</b>		
ELT 222	Programmable Controls	3
ELT 232	Process Control	3
ELT 246	Linear Integrated Electronics	3
ELT 276	Automation Systems	2
ENG 201	Technical Writing	3
___	Elective: Humanities or Social Science	3
<b>Total Credit Hour Requirements</b>		<b>65-66</b>

## Certificate Requirements

<b>Semester I</b>		<b>Credit Hours</b>
MAT ___*	Select one of the following:	3
	MAT 100 Intermediate Algebra	
	MAT 122 College Algebra	
BCA 120	Introduction to Computer Applications	3
ELT 101	Electricity I	3
ELT 123	Electrical Controls I	3
ELT 153	Digital Logic	3
<b>Semester II</b>		
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
ELT 115	Electricity II	3
ELT 145	Electronic Devices I	3
ELT 201	Communication Electronics	3
<b>Total Credit Hour Requirements</b>		<b>27</b>

\*Course placement determined by assessment test scores and/or prior college coursework

**High school prerequisite(s) for program admission: Algebra I (Algebra II preferred)**

# Esports Management (ESP)

## Program Description

The Associate in Applied Science Degree in Esports Management will prepare students for positions in the esports industry. The goal is to provide students with the skills necessary to fulfill the growing need for business professionals in Esports. Esports is an organized form of competitive video gaming. Competitions are typically multi-player video games between professional gamers, organized both online and offline. Esports spectators attend or live stream events.

## Career Opportunities

Graduates will be prepared to work in the administration of esports and may pursue a variety of careers which includes: esports manager, event staff supervisor, community manager, event planner, social media specialist, esports team coach, esports financial manager or account supervisor, esports business development manager or assistant director esports.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Apply critical thinking and problem solving techniques in an esports environment.
2. Utilize effective management and supervisory skills to organize teams, groups and individuals in esports and business.
3. Utilize technology to analyze business problems and construct appropriate solutions.
4. Diagnose marketing and management related issues and plan future actions.
5. Demonstrate interpersonal, written, and presentation skills required for successful employment in the esports industry.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
ESP 100	Introduction to Esports Management	3
ENG ___ *	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
BCA 120	Introduction to Computer Applications	3
BUS 118	Introduction to Management	3
MAT 101*	Business Mathematics	3
Semester II		
ESP 150	World of Competitive Gaming	3
GAM 156	Esports Game Technologies	3
BUS 215	Principles of Marketing	3
COM ___	Select one of the following:	
	COM 100 Public Speaking	3
	COM 101 Interpersonal Communication	
ENG 220	Business Communication	3
Semester III		
ESP 225	Aspects of Game Design	3
ESP 228	Esports Event Management	3
ACC 120	Financial Accounting	3
MAT ___*	MAT 100 or higher	3
___ ___	Elective: Social Science	3
Semester IV		
ESP 250	Esports Industry Trends	3
ESP 290	Esports Planning and Strategy	3
ACC 122	Managerial Accounting	3
BUS 286	Social Media Marketing	3
ECO 201	Macroeconomics	3
<b>Total Credit Hour Requirements</b>		<b>60-61</b>

\*Course placement determined by assessment test scores and/or prior college course work.

# Exercise Science (EXS)

## Program Description

The Associate in Science degree in Exercise Science prepares students to transfer to a baccalaureate degree program in exercise science, athletic training, kinesiology, and similar curricula in health, physical education, fitness and recreation. The curriculum includes general education requirements, a strong science and mathematics foundation as well as discipline-related courses.

## Career Opportunities

Graduates of baccalaureate programs find employment in allied health occupations, wellness programs, health management, exercise physiology, exercise science teaching and research, medical exercise rehabilitation programs, and related occupations.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Discuss the physiology and mechanics of human movement related to the major components of physical fitness, health and sports.
2. Demonstrate a strong foundational knowledge of the human body systems and the acute and chronic adaptations on the body through modalities, exercise and lifestyle changes.
3. Assess dietary habits and recommend developmental and maintenance interventions.
4. Recognize, manage and provide preventive practices for basic musculoskeletal injuries through proper understanding of evaluation of movement, range of motion and muscle imbalances of the human body.
5. Discuss and present evidence-based information regarding current exercise physiology principles as it relates to athletes and the general population.

## Associate in Science Degree Requirements

		<b>Credit Hours</b>
<b>Semester I</b>		
PHF 110	Exercise Science, Athletic Training, and Physical Fitness Seminar	1
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
BIO 115	Anatomy and Physiology I	3
BIO 116	Anatomy and Physiology I Lab	1
PSY 101	Introduction to Psychology	3
COM 100	Public Speaking	3
<b>Semester II</b>		
PHF 155	Introduction to Exercise Science	4
BIO 121	Nutrition	3
PHI 111	Introduction to Ethics	3
MAT 135	Statistics	3
BIO 117	Anatomy and Physiology II	3
BIO 118	Anatomy and Physiology II Lab	1
<b>Semester III</b>		
PHF 122	Kinesiology	3
PHF 204	Nutrition for Human Performance	3
MAT 122	College Algebra	3
___ ___	BIO, CHY or PHY Lecture and Lab	4
___ ___	Elective: Humanities	3
<b>Semester IV</b>		
ENG ___	Elective: ENG Writing	3
PHF 207	Introduction to Injury Prevention and Management	3
PHF 208	Exercise Test and Prescription	4
___ ___	BIO, CHY or PHY Lecture and Lab	4
___ ___	Elective: General Education	
<b>Total Credit Hour Requirements</b>		<b>64-65</b>

# Facilities Maintenance & Management (FMM)

## Program Description

The Associate in Applied Science degree in Facilities Maintenance & Management prepares students for employment in building management by providing them the opportunity to learn entry level skills in the installation, operation, maintenance and repair of heating, air conditioning and refrigeration systems. The program is designed to build a foundation of construction, electrical, HVAC/R and plumbing skills through practical application and field experience of the methods, materials, and practices of the industry. Students will develop the skills needed to maintain, service, repair and operate advanced facility systems and computerized maintenance management systems in commercial and industrial institutions such as hospitals, schools, restaurants, community centers and residential office buildings.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate working knowledge of current codes and OSHA standards for facilities.
2. Demonstrate safe and appropriate use of electrical, HVAC/R, plumbing and construction equipment.
3. Troubleshoot, diagnose, maintain and repair basic HVAC/R equipment.
4. Service and repair basic plumbing systems.
5. Perform basic construction repairs.
6. Communicate effectively and work as part of a team using oral and written skills.

## Non-Academic Requirements

Students must be able to lift 50 pounds to shoulder height, crawl in small spaces and climb a ladder and equipment using three points of contact.

<b>Associate in Applied Science Degree Requirements</b>		<b>Credit Hours</b>
<b>Semester I</b>		
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
OHS 115	Construction Health and Safety	3
PHT 140	Print Reading and Interpretation	2
PHT 103	Plumbing Technology I	5
BUS 145	Facilities Management	3
<b>Semester II</b>		
PHT 100	Plumbing Code	3
PHT 125	Plumbing Technology II	5
BCT 180	Introduction to Building Science	3
COM ___	Elective: Communication	3
MAT 100*	Intermediate Algebra	3
<b>Semester III</b>		
ELT 101	Electricity I	3
ELT 123	Electrical Controls I	3
HVT 105	Basic Refrigeration Principles	3
HVT 111	Electricity for HVAC/R	3
___ ___	Elective: Mathematics or Science 100 or higher	3-4
<b>Semester IV</b>		
HVT 152	Heat Pumps	3
HVT 180	HVAC/R Diagnostics and Servicing	4
PHI 111	Introduction to Ethics	3
ENG 201	Technical Writing	3
___ ___	Elective: Social Science	3
<b>Total Credit Hour Requirements</b>		<b>64-66</b>

\*Course placement determined by assessment test scores and/or prior college coursework.

# Ford ASSET (FOA)

## Program Description

The Automotive Student Service Educational Training (ASSET) major is a state of the art two-year program alternating classroom and laboratory training with paid, on-the-job experience, leading to an Associate Degree in Automotive Technology. ASSET is a joint effort of Ford Motor Company, Ford and Lincoln/Mercury dealers, and CMCC. Graduates of this program are awarded the Associate in Applied Science degree.

An automotive service technician must have the skills of a mechanic and the knowledge to deal with computer controlled engine systems, computer-managed diagnostics, microelectronics, complex pneumatic systems, composite materials, and hydraulics. In 2003, the Ford ASSET program received continued full Master Certification in all eight specialty areas from the National Institute for Automotive Service Excellence (ASE), 101 Blue Seal Drive, SE, Suite 101, Leesburg, VA 20175 - telephone - (703) 669-6650.

## Preregistration Requirements

Prior to enrolling in FOA 151, students must first obtain a sponsor. Before agreeing to sponsor a student, a repair facility may request a criminal background check to include but not limited to criminal background, drug test and credit history. Furthermore, repair facilities often require that students hold a current and valid driver's license free from "current major" violations, as that term is defined in standard auto insurance policies. Repair facilities also retain the right, in their sole discretion, to accept or deny students based on their findings. Please note that the inability to secure a sponsor could jeopardize an individual's ability to meet all the requirements for this degree. In order to be placed with a dealer in the FOA program, students must place into ENG 101/105 and MAT 100 or higher. Students who do not place into ENG 101/105 and MAT 100 or higher will be admitted to the FOA program, but will need to complete remedial coursework before being placed with a sponsor.

## Program Outcomes

**NATEF certification** requires that students are able to perform all tasks for outcomes 1-4. Students who desire NATEF certification will be expected to stand, stretch, reach, twist their body and push, pull, lift and carry heavy objects (up to 70 lbs.) such as truck size tire

1. Upon completion the graduate is prepared to:
2. Perform all NATEF (P-1) tasks to diagnose and repair systems associated with automotive chassis components.
3. Perform all NATEF (P-1) tasks to diagnose and repair all assemblies associated with automotive engine and power transmission systems.
4. Perform all NATEF (P-1) tasks to diagnose and repair all components associated with any electrical and electronic control systems.
5. Perform all NATEF (P-1) tasks to diagnose and repair all components associated with any accessory and ergonomic systems.
6. Communicate clearly using written, verbal, and electronic means.
7. Apply safety standards related to the Automotive Industry.
728. Solve mathematical problems related to the Automotive field.

## **Associate in Applied Science Degree Requirements**

<b>Semester I</b>	<b>Credit Hours</b>
ENG ___*	Select one of the following:
	ENG 101 College Writing 3
	ENG 105 College Writing Seminar (4)
FOA 100	Dealer Practices 2
FOA 151	Field Experience 5
FOA 152	Auto Electrical Systems 3
MAT ___*	Select one of the following: 3
	MAT 100 Intermediate Algebra
	MAT 104 Technical Mathematics
<b>Semester II</b>	
ENG ___	Select one of the following: 3
	ENG 201 Technical Writing
	ENG 220 Business Communication
FOA 190	Brakes, Steering, Suspension and Drivelines 5
___ ___	Elective: Humanities or Social Science 3
FOA 191	Field Experience 5
<b>Summer Session</b>	
FOA 130	Engine Repair/Climate Control 4
FOA 131	Field Experience 2
___ ___	Elective 3
<b>Semester III</b>	
FOA 232	Field Experience 4
FOA 270	Computer Controlled Systems, Engine Performance, Fuels and Emissions 5
___ ___	Elective: Mathematics or Science 3
___ ___	Elective: Humanities or Social Science 3
<b>Semester IV</b>	
FOA 240	Automatic/Manual Transmissions 5
FOA 271	Field Experience 5
___ ___	Elective: Humanities or Social Science 3-4
<b>Total Credit Hour Requirements 69-70</b>	

\*Course placement determined by assessment test scores and/or prior college coursework



# Forensic Science (FRN)

## Program Description

The Associate in Applied Science degree in Forensic Science prepares students for employment in the area of crime scene investigation and/or to upgrade to a position within the industry. Upon completion of the degree students will be able to photograph crime scene evidence, collect, examine, compare and identify fingerprints, collect blood, trace and fiber evidence, cast shoeprint impressions and assist in identifying deceased individuals. The program will prepare students for career paths in criminal justice including detective, deputy sheriff, criminal Investigator, crime scene photographer or crime scene technician.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Explain the fundamental concepts of chemistry and biology as these relate to forensic investigations.
2. Demonstrate competency in the collection, processing, analyses, and evaluation of evidence.
3. Demonstrate competency in the principles of crime scene investigation, including the recognition, collection, identification, preservation, and documentation of physical evidence.
4. Identify the role of forensic investigator and physical evidence within the criminal justice system.
5. Demonstrate the ability to document and orally describe crime scenes, physical evidence, and scientific processes.
6. Identify and examine current and emerging concepts and practices within the forensic investigation field.

## Non-Academic Requirements

All students taking Criminal Justice courses will be subject to a criminal background check. A criminal conviction will not automatically prevent a person from being accepted into the program. The applicant would be denied acceptance if they have a "disqualifying conviction" or committed "disqualifying conduct" as defined by the Maine Criminal Justice Academy. Such conviction/conduct prohibits a person from being certified/licensed as a police officer in the State of Maine.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
CRJ 101	Introduction to Criminal Justice	3
CRJ 122	Criminal Law	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT 122	College Algebra	3
CHY 121	General Chemistry I	3
CHY 122	General Chemistry I Lab	1
SSC 100	Public Service and Social Sciences Seminar	1
Semester II		
CRJ 212	Criminal Investigation and Report Writing II	3
CRJ 250	Criminalistics	3
CHY 123	General Chemistry II	3
CHY 124	General Chemistry II Lab	1
___ ___	Elective: Open	3
COM 100	Public Speaking	3
Semester III		
CRJ 231	Death Investigations	3
CRJ 201	Civil Liberties	3
BIO 131	Biology I	3
BIO 132	Biology I Lab	1
MAT 135*	Statistics	3
PHI ___	Any PHI course	3
Semester IV		
CRJ 275	Crime Scene Management	3
CRJ 227	Crime Scene Photography	3
BIO 133	Biology II	3
BIO 134	Biology II Lab	1
___ ___	Elective: Humanities or Social Science	3
<b>Total Credit Hour Requirements</b>		<b>62-63</b>

\*Course placement determined by assessment test scores and/or prior college coursework

**ALSO AVAILABLE  
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# General Studies (GEN)

## Program Description

The Associate in Arts Degree in General Studies is designed for individuals who have yet to declare a major and are interested in exploring different programs, who are completing program prerequisites, or who are interested in the flexibility to create a customized degree program for which no other major exists. A general education core of courses in the program offers students the opportunity to develop skills in Communication, the Humanities, the Social Sciences, Mathematics and Science.

Twenty-seven additional credit hours selected from an advising pathway allows for the acquisition of further knowledge to enhance workplace skills, and/or to provide a broad spectrum of educational experiences to further develop academic, occupational, or personal aspirations.

In addition, this program may prepare students who plan to transfer to a four-year college or university in pursuit of a bachelor's degree. In order to ensure optimal transfer of credits to upper division programs, students should work collaboratively with their academic advisor and the Director of Placement and Transfer Services to plan a course of study that meets their goals. To facilitate the transfer of courses, students should identify, as soon as possible, the upper division program and institution in which they plan to enroll.

## Program Educational Outcomes

Upon completion graduate is prepared to:

1. Communicate clearly and effectively employ written and oral skills.
2. Access, analyze, summarize and interpret a variety of reading materials.
3. Think critically and link concepts across a variety of disciplines.
4. Conceptualize society as being culturally diverse within a global community.
5. Evaluate personal values, interests and education/career goals.

## Online Program Priority Enrollment Deadline

The priority enrollment deadline is May 15, which means the application and requirements such as placement scores, transcripts from previously attended schools, tuition deposit must be received, and online orientation completed.

### Associate in Arts Degree Requirements

General Education		Credit Hours
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
___ ___	Writing course	3
MAT 100*	Intermediate Algebra or higher	3-4
___ ___	Natural Science with a lab	4
___ ___	Creative Arts elective	3
___ ___	Social Science electives	6
___ ___	Humanities electives	6
___ ___	Diversity elective	3
___ ___	Ethical Reasoning elective	3
	(See pages 37-38 for approved list)	
		<b>34-36 credits</b>
LER 100	First Year Semester	1
	Advising Pathway (w/advisor endorsement)	25-27
	<b>Total Credit Hour Requirements</b>	<b>62-64</b>

\*Course placement determined by assessment test scores and/or prior college coursework.

# Graphic Communications (GRC)

## Program Description

The Associate in Applied Science Degree in Graphic Communications provides students with broad exposure to graphic design and digital imaging technologies while preparing them for a variety of employment opportunities. Students receive instruction in the topics of art theory, typography, graphic design, photographic composition, image editing, color theory, web page development, and file preparation. Students also gain hands-on experience in studio photography, wide format printing, screen printing, vinyl cutting, and digital printing and finishing. Applications studied include Adobe Illustrator, InDesign, Photoshop, Dreamweaver and other software.

## Career Opportunities

Graduates of this program pursue a variety of careers including those in design and layout, desktop publishing, digital imaging, screen printing, and digital photography. Employment may be found at both small and large commercial printers, copy centers, and media companies. The program's offerings also prepare graduates for self-employment options and for continued education at four-year institutions.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate basic skill competency using industry standard software applications.
2. Demonstrate basic skill competency operating GRC peripherals and equipment.
3. Create a portfolio which will be updated throughout the student's enrollment in the GRC program.
4. Demonstrate the ability to work collaboratively and to participate in critique sessions where the student's work and the work of others will be examined and edited.
5. Demonstrate the ability to apply principles and elements of design as projects progress from the ideas stage to a finished project.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
ENG ___*	Select one of the following:	3
	ENG 101 College Writing	
	ENG 105 College Writing Seminar	(4)
MAT ___*	MAT 100 or higher	3
GRC 103	Digital Page Layout I	3
GRC 176	Photoshop I	3
GRC 102	Graphic Design I	3
Semester II		
GRC 106	Vector Illustration I	3
GRC 119	Web Media I	3
GRC 107	Digital Systems & Equipment I	3
COM ___	Select one of the following:	3
	COM 100 Public Speaking	
	COM 101 Interpersonal Communication	
ENG 201	ENG 201 Technical Writing	3
Semester III		
___ ___	Elective Mathematics or Science	3
___ ___	Elective: GRC (choose from below)	3
___ ___	Elective: GRC (choose from below)	3
___ ___	Elective: GRC (choose from below)	3
___ ___	Elective: Humanities or Social Science	3
Semester IV		
GRC 298	Production Experience	3
___ ___	Elective: GRC (choose from below)	3
___ ___	Elective: GRC (choose from below)	3
___ ___	Elective: GRC (choose from below)	3
___ ___	Elective: Humanites or Social Science	3
<b>Total Credit Hour Requirements</b>		<b>60-61</b>

\*Course placement determined by assessment test scores and/or prior college coursework

## Graphic Communications Electives

ART 101	Intro to 2-D Design	GRC 220	Web Media II	GRC 297	Internship Experience
ART 103	Drawing I	GRC 249	Digital Photo Editing	BUS 101	Small Business Management
GRC 118	Intro to Digital Photography	GRC 250	Graphic Design II	BUS 215	Principles of Marketing
GRC 152	Portfolio Design & Development	GRC 252	Advanced Screen Printing	CPT 252	Web Development
GRC 153	Intro to Screen Printing	GRC 254	Digital Imaging & Wrap Installation	CPT 253	Advanced Web Development
GRC 204	Vector Illustration II	GRC 276	Photoshop II		
GRC 210	Digital Page Layout II	GRC 296	Special Topics		

# Heating, Ventilation, Air Conditioning & Refrigeration (HVT)

## Program Description

The Associate in Applied Science Degree in Heating, Ventilation, Air Conditioning and Refrigeration Technology will prepare students for entry-level employment in the installation, operation, maintenance, and repair of heating, air conditioning and refrigeration systems. The program includes courses in practical field experience.

Upon successful completion of the A.A.S. program, graduates are eligible to acquire the State of Maine Journeyman 1 & 2 Oils - up to 15 GPH licensure and eligible to acquire the CETP certification necessary for Maine licensure as propane and natural gas technicians.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Explain the basic theory of the subject matter or HVAC/R system for the course of instruction based on industry standards.
2. Employ a systematic approach to troubleshooting a HVAC/R system malfunction and prepare an effective repair solution in residential and light commercial applications.
3. Analyze component failures to determine the root cause of the component failure.
4. Verify if the path of repair was correct by testing and/or completing a work order/report.
5. Demonstrate the correct usage of tools and supplies required to service and maintain systems.
6. Obtain EPA 608 Universal Certification.

## Non-Academic Requirements

Students must be able to lift 50 pounds to shoulder height, crawl in small spaces and climb a ladder and equipment using three points of contact.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT 104*	Technical Mathematics	3
HVT 105	Basic Refrigeration Principles	3
HVT 111	Electricity for HVAC/R	3
PHT 140	Print Reading and Interpretation	2
OHS 115	Construction Health & Safety	3
Semester II		
HVT 152	Heat Pumps	3
HVT 180	HVAC/R Diagnostics and Servicing	4
HVT 120	Residential Load Calculations	2
___	Elective: General Education	3
COM _	Elective: Communication	3
Semester III		
PHT 207	Heat I	4
PHT 209	Propane and Natural Gas I	4
PHT 225	Maine Oil/Solid Fuel Code	1
HVT 255	Commercial Refrigeration	2
___	Elective: Mathematics or Science 100 or higher	3-4
Semester IV		
HVT 252	HVAC/R System Design	3
PHT 259	Propane and Natural Gas II	4
PHI 111	Introduction to Ethics	3
ENG _	Select one of the following:	3
	ENG 201 Technical Writing	
	ENG 220 Business Communication	
___	Select one of the following:	3
	HVT 297 Externship	
	PHT 135 Electricity, Pumps and Hydraulics	
<b>Total Credit Hour Requirements</b>		<b>62-64</b>

\*Course placement determined by assessment test scores and/or prior college course work.

# Heating, Ventilation, Air Conditioning & Refrigeration Certificate (HVT)

## Program Description

Upon successful completion of the Heating, Ventilation, Air Conditioning and Refrigeration Technology Certificate program, graduates are eligible to obtain EPA 608 Universal Certification. This certification is required for technicians handling refrigerants.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Explain the basic theory of the subject matter or HVAC/R system for the course of instruction based on industry standards.
2. Analyze a scenario based upon an HVAC/R equipment system failure.
3. Employ a systematic approach to troubleshooting a HVAC/R system malfunction and prepare an effective repair solution to residential applications.
4. Obtain EPA 608 Universal Certification.

## Non-Academic Requirements

Students must be able to lift 50 pounds to shoulder height, crawl in small spaces and climb a ladder and equipment using three points of contact.

## Certificate Requirements

Semester I		Credit Hours
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT 104*	Technical Mathematics	3
HVT 105	Basic Refrigeration Principles	3
HVT 111	Electricity for HVAC/R	3
PHT 140	Print Reading and Interpretation	2
OHS 115	Construction Health & Safety	3
Semester II		
HVT 152	Heat Pumps	3
HVT 180	HVAC/R Diagnostics and Servicing	4
HVT 120	Residential Load Calculations	2
___	Elective: General Education	3
COM ___	Elective: Communication	3
<b>Total Credit Hour Requirements</b>		<b>32-33</b>

\*Course placement determined by assessment test scores and/or prior college course work.

**ALSO AVAILABLE  
100% ONLINE**

# Human Services (HUS)

## Program Description

The Associate in Applied Science Degree in Human Services will prepare graduates for entry-level positions in areas of substance abuse, mental health, corrections, developmental disabilities, child and adolescent services, and gerontology. Upon completion of the eight courses identified by double asterisk, students are eligible for certification as a MHRT/C technician (Mental Health Rehabilitation Technician/Community).

## Career Opportunities

Graduates can be employed in the following capacities: activity therapist associate, addictions counselor, crisis counselor, human development associate, mental health associate, rehabilitation worker, family worker, activity director/associate, and volunteer coordinator. The facilities that employ individuals in these capacities, include: community mental health centers, programs for the elderly, hospitals, social service and mental health programs. Graduates may also be employed in facilities and programs for the developmentally disabled, substance abuse special programs, youth services, and child care programs.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Utilize knowledge of the basic counseling skills necessary to establish collaborative relationships with clients and their families.
2. Demonstrate knowledge of formal and informal support systems available in the community.
3. Analyze problems and use appropriate methods in collaboration with other team members in the treatment of individual, family, group and community human service problems.
4. Demonstrate awareness of the challenges faced by clients with regard to human-rights issues, financial problems, administrative/legal hurdles and other issues/concerns.
5. Assume ethical responsibility and abide by the standards governing the field of Human Services.
6. Establish and maintain continuing education as a function of growth and maintenance of professional competence.

In addition to the general admissions requirements of the College, applicants to this program must have successfully completed the following prior to registration in the first practicum course:

- Professional liability insurance is required.
- Students must purchase their own health/accident insurance.

## MHRT/C Mental Health Rehabilitation Technician/ Community certification

The A.A.S. program is approved whereby a student can obtain provisional or full MHRT/C certification while also earning a college degree. MHRT/C certification enables some early job placement in the human service field. For full MHRT/C certification, a student must complete all of the courses with double asterisk\*\*.

Human Services Practicum: All Human Services students are required to complete a practicum in a social service agency. Students may be required to have a record of SBI (State Bureau of Identification) on file with the practicum site. If required, it is the student's responsibility to provide this directly to the site. Practicum sites retain the right to accept or deny placement of students based on many conditions, including criminal and child protective records. Therefore, criminal or child protective history could jeopardize an individual's ability to successfully meet all the requirements of the program.

Note: A grade of "C" or better in all Human Services courses, a cumulative GPA of 2.0 or better, completion of 30 hours of the program and approval of the Department Chair is required before enrollment in the Human Services Practicum course.

## Online Program Priority Enrollment Deadline

The priority enrollment deadline is May 15, which means the application and requirements such as placement scores, transcripts from previously attended schools, tuition deposit must be received, and online orientation completed.

# Human Services (HUS)

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
HUS 100	Seminar in Human Services	1
HUS 112**	Introduction to Human Services	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT ___*	Elective: Mathematics (MAT 135 recommended)	3
HUS 153**	Substance Abuse	3
PSY 101	Introduction to Psychology	3
Semester II		
HUS 151**	Interviewing and Counseling	3
HUS 201**	Multicultural Perspectives in Human Services	3
HUS 202**	Psychosocial Aspects of Disability	3
HUS 155**	Case Management	3
HUS 208	Mindfulness & Self-Care	3
Semester III		
___ _	Elective: Science with lab	4
PSY 212**	Abuse, Trauma and Recovery	3
HUS 241	Human Services Practicum I	4
HUS 204**	Vocational Rehabilitation	3
Semester IV		
___ _	Elective: Writing select one of the following:	3
	ENG 125 Introduction to Literature	
	ENG 150 Introduction to Journalism	
	ENG 201 Technical Writing	
	ENG 211 Creative Writing	
	ENG 220 Business Communication	
	ENG 221 Advanced Composition and Research	
	SSC 200 Research Methods for Social Sciences	
___ _	Elective: HUS (choose from list)	3
___ _	Elective: HUS (choose from list)	3
___ _	Elective: Open	3
SOC 201	Sociology of Aging	3
<b>Total Credit Hour Requirements</b>		<b>60-61</b>

## Certificate Requirements

Semester I		Credit Hours
HUS 100	Seminar Human Services	1
HUS 112	Introduction to Human Services	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT ___*	Elective: Mathematics (MAT 135 recommended)	3
HUS 153	Substance Abuse	3
PSY 101	Introduction to Psychology	3
Semester II		
HUS 151	Interviewing and Counseling	3
HUS 201	Multicultural Perspectives in Human Services	3
HUS 202	Psychosocial Aspects of Disability	3
HUS 155	Case Management	3
HUS 208	Mindfulness & Self-Care	3
<b>Total Credit Hour Requirements</b>		<b>31-32</b>

### HUMAN SERVICES ELECTIVES

HUS 101	Critical Thinking and the Addictions Professional
HUS 158	Behavioral Health Professional Certification
HUS 160	Addiction and the Family
HUS 161	Addiction Over the Lifespan
HUS 205	Crisis Intervention
HUS 250	Ethics & Issues in Human Services
HUS 251	Human Services Practicum II
HUS 266	Grief, Loss and Bereavement
HUS 296	Special Topics in Human Services

\*Course placement determined by assessment test scores and/or prior college course work.

# Justice Studies (JUS)

## Program Description

The Associate in Science degree in Justice Studies is an interdisciplinary program designed to prepare students for transfer to a four-year institution. The program provides foundational learning in criminal justice and related social sciences and serves as a foundation for studies in several areas, including social services, advocacy, community development, law, and corrections.

This program expands upon the strengths of the existing A.A.S in Criminal Justice and is designed to meet the following goals: (1) provide students the opportunity for in-depth study in preparation for continued undergraduate studies; (2) utilize the interdisciplinary contributions of sociology, law and psychology that are relevant to justice studies; (3) examine how these contributions have shaped public policies, including those of the criminal justice system; (4) begin to explore the potential for transformative justice.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate an understanding of the sociological and psychological theories of crime causation and evaluation of human behavior.
2. Apply critical thinking to multiple academic disciplines for ethical analysis of societal issues and conducting community research.
3. Demonstrate the ability to apply principles of statutory law and due process within the justice system.
4. Demonstrate interpersonal, written, and presentation skills required for successful employment in a justice-related field.
5. Explain how the criminal justice field responds to societal expectations.

## Online Program Priority Enrollment Deadline

The Justice Studies program is available online. The priority enrollment deadline for the online program is May 15, which means the application and requirements such as placement scores, transcripts from previously attended schools, tuition deposit must be received, and online orientation completed.

## Non-Academic Requirements

Students in the Justice Studies program will be subject to a criminal background check. A criminal conviction will not automatically prevent a person from acceptance into the program. The applicant would be denied acceptance if a she or he has a disqualifying criminal conviction or pending criminal charges. Such conviction or conduct prohibits a person from being certified or licensed as a police officer in the State of Maine.

## Associate in Science Degree Requirements

Semester I		Credit Hours
CRJ 101	Introduction to Criminal Justice	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
COM ___	Elective: COM 100 or higher	3
MAT ___*	Elective: MAT 100 or higher	3
SSC 100	Public Service and Social Sciences Seminar	1
___ ___	Restricted elective: ANT/ECO/POS/PSY/SOC	3
Semester II		
___ ___	Science with lab	4
PHI ___	Elective: PHI 101 or higher	3
HUM ___	Philosophy (101 or higher)	3
	Elective: Humanities	3
SSC 200	Research Methods for Social Sciences	3
JUS 210	The Juvenile Justice System	3
Semester III		
JUS 204	Victimology	3
JUS 205	Crisis Intervention for Justice Studies	3
___ **	Advising Pathway course	3
___ ___	Elective: General Education	3
___ ___	Elective: Mathematics or Science (100 or higher)	3(4)
Semester IV		
JUS 232	Criminal Psychology	3
JUS 252	Offender Rehabilitation	3
JUS 245	Criminology	3
___ **	Advising Pathway course	3
MAT ___*	Elective: MAT 122 or higher	3
<b>Total Credit Hour Requirements</b>		<b>61-63</b>
** Any CNL/CRJ/FRN/JUS course		

\*Course placement determined by assessment test scores and/or prior college coursework.



# Liberal Studies (LIB)

ALSO AVAILABLE  
100% ONLINE

## Program Description

The Associate in Arts Degree in Liberal Studies is designed primarily for individuals who plan to transfer to a four-year college or university in pursuit of a bachelor's degree. A core of courses in the program offers students the opportunity to develop skills in Communication, the Humanities, the Social Sciences, Mathematics and Science. Courses taken as electives afford individuals an opportunity to explore a variety of academic disciplines.

In order to ensure optimal transfer of credits to upper division programs, students should work collaboratively with their academic advisor and the Director of Placement and Transfer Services to plan a course of study that meets their goals. To facilitate the transfer of courses, students should identify, as soon as possible, the upper division program and institution in which they plan to enroll.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Communicate clearly and effectively in a variety of contexts.
2. Access, evaluate and utilize a variety of information resources.
3. Articulate and utilize fundamental mathematical concepts.
4. Explain basic general scientific laws, theories, and concepts in either the biological or physical sciences.
5. Apply critical thinking skills and link concepts across a variety of disciplines.
6. Critically examine the values, rituals and beliefs of cultures that are separated in time or space from one's own.

## Admission Requirements

In addition to the general admissions requirements of the College, applicants to this program must have successfully completed the following:

**High school prerequisite(s) for program admission: ENG 101 or ENG 105 and MAT 100 prerequisites.**

## Associate in Arts Degree Requirements

		Credit Hours
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
ENG 125	Introduction to Literature	3
COM ___	Select one of the following:	3
	COM 100 Public Speaking	
	COM 101 Interpersonal Communication	
	COM 121 Group Process	
MAT ___*	MAT 100 or higher	3
___ ___	Natural Science with a lab	4
___ ___	Elective: Creative Arts	3
___ ___	Elective: Social Science	6
___ ___	Elective: Humanities	3
___ ___	Elective: Diversity	3
___ ___	Elective: Ethical Reasoning	3

(See page 43 for approved list)

## General Education Electives 27

(w/ advisor endorsement)

Note: A maximum of six credit hours may be taken outside of a General Education area.

## Total Credit Hour Requirements 61-62

## Economic and Public Policy Pathway

MAT 135*	Statistics
ECO 201	Introduction to Macroeconomics
SOC 101	Introduction to Sociology
COM 100	Public Speaking
ECO 202	Introduction to Microeconomics
PHI 111	Introduction to Ethics
POS 150	Introduction to Public Policy
SSC 200	Research Methods for Social Science

\*Course placement determined by assessment test scores and/or prior college course work.

# Liberal Studies - Pathways (LIB)

## English Pathway

- MAT\_\_\*      Select one of the following:  
 MAT 115 Quantitative Reasoning  
 MAT 135 Statistics
- PHI 111      Introduction to Ethics
- COM 100      Public Speaking
- ENG 221      Advanced Composition and Research
- ENG 112      American Literature I
- ENG\_\_      Select **one** of the following:  
 ENG 121 The Short Story  
 ENG 123 Introduction to Mystery Literature  
 ENG 215 Film as Literature  
 ENG 230 Children's Literature
- ENG/EDU\_\_      Select **two** of the following:  
 ENG 131 Style and Syntax of American English  
 EDU 101 Introduction to Education  
 EDU 150 Pathways to Teacher Certification  
 EDU 185 Fundamentals of Educating Students with Special Needs  
 EDU 222 Social Justice and Diversity in the Classroom
- ENG 113      American Literature II
- ENG 294      Special Topics Course

## Political Science Pathway

- MAT 135      Select one of the following:  
 MAT 115 Quantitative Reasoning  
 MAT 135 Statistics
- POS 150      Introduction to American Politics
- COM 100      Public Speaking
- POS 151      American State and Local Government
- ENG 125      Introduction to Literature
- PHI 111      Introduction to Ethics
- POS 152      Introduction to Public Policy
- POS 160      Introduction to International Relations
- POS 205      Introduction to Comparative Politics
- POS 296      Special Topics in Political Sciences

## History Pathway

- MAT\_\_\*      Select one of the following:  
 MAT 115 Quantitative Reasoning  
 MAT 135 Statistics
- HIS 131      American History to 1887
- COM 100      Public Speaking
- HIS 132      American History Since 1887
- ENG 125      Introduction to Literature
- PHI 111      Introduction to Ethics
- HIS \_\_      Select **one** of the following:  
 HIS 151 Western Civilization I  
 INS 250 Western Thought and Culture I
- HIS 220      American and the Cold War
- HIS \_\_      Select **one** of the following:  
 HIS 152 Western Civilization II  
 INS 251 Western Thought and Culture II
- HIS \_\_      Select **one** of the following:  
 HIS 201 Maine History  
 HIS 210 Washburns of Livermore, Maine

## Philosophy Pathway

- MAT\_\_\*      Select one of the following:  
 MAT 115 Quantitative Reasoning  
 MAT 135 Statistics
- PHI 111      Introduction to Ethics
- COM 100      Public Speaking
- ENG 125      Introduction to Literature
- PHI 101      Critical Thinking
- REL 101      Comparative Religion
- PHI 151      Introduction to Western Philosophy
- MEA 165      Medical Ethics and the Law
- PHI 153      Introduction to Eastern Philosophy
- General Education Electives:  
 ANT 101 Introduction to Cultural Anthropology  
 GEY 101 Human Geography  
 JUS 225 Race and Ethnicity in Law Enforcement  
 POS 160 Introduction to International Relations  
 WST 101 Women's Studies

# Life Sciences (LIF)

## Program Description

The Associate in Science Degree in Life Sciences is designed to provide students with a broad, general survey of scientifically accumulated knowledge. Students completing this degree could enter the workforce as scientific technicians or transfer into science, technology, engineering and math (STEM) majors at baccalaureate institutions with a primary focus on biological and life sciences. The A.S. in Life Science degree provides appropriate course sequencing for efficient transfer, reinforces and deepens core learning across the curriculum, and supports and strengthens the STEM infrastructure of the College.

## Career Opportunities

Graduates can find employment as scientific technicians and in other entry-level positions in science/laboratories. Program graduates may want to consider transferring to obtain an advanced degree with potential employment as: pharmacists, biomedical engineers, biochemists, environmental scientists, biologists, etc.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

- Demonstrate knowledge of the major chemical and biological topics in Life Sciences.
- Effectively communicate scientific ideas, assumptions, observations and results in oral and written formats.
- Demonstrate critical thinking and problem-solving skills by applying scientific principles.
- Use appropriate laboratory procedures to generate and analyze quantitative and qualitative data to form conclusions.
- Demonstrate the safe and proper use of scientific instrumentation, measuring devices, chemical reagents, media and tools to collect relevant and quality data.
- Understand the relationship of the Life Sciences to other areas of study and be able to make informed ethical choices.

## Admission Requirements

In addition to the general admissions requirements of the College, applicants to this program must be ready to enroll in ENG 101 or ENG 105 and MAT 122.

<b>Associate in Science Degree Requirements</b>		<b>Credit Hours</b>
<b>Communication</b>		
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
ENG ___	Select one of the following:	3
	ENG 125 Introduction to Literature Composition & Research	
	ENG 150 Introduction to Journalism	
	ENG 201 Technical Writing	
	ENG 220 Business Communication	
	ENG 221 Advanced Composition and Research	
COM 100	Public Speaking	3
<b>Mathematics and Sciences</b>		
MAT ___*	MAT 122 or higher	9-10
___ ___	BIO/CHY/PHY Lecture	21
___ ___	BIO/CHY/PHY Lab	7-9
___ ___*	Elective: Mathematics or Science	3-4
<b>Humanities and Social Science</b>		
PHI 111	Introduction to Ethics	3
___ ___	Elective: HumanitiesW	3
___ ___	Elective: Social Science	3
___ ___	Elective: Open	3
<b>Total Credit Hour Requirements</b>		<b>61-66</b>

\*Course placement determined by assessment test scores and/or prior college course work.

# Medical Assistant (MEA)

## Program Description

The Associate in Applied Science in Medical Assistant prepares graduates for entry-level employment in a physician's office or those capacities in which medical administrative and/or basic clinical and laboratory training are required. The program curriculum will provide studies in Anatomy and Physiology, Communications, Medical Administrative Procedures, Medical Law and Ethics, and Medical Assistant Clinical Procedures. Also, a 240-hour Externship will be required in semester IV.

A grade of "C" or better in all MEA, MET, BIO, MAT, BUS courses and BCA 120, a cumulative GPA of 2.0 or better, completion of the 1st and 2nd semester courses and approval of the Department Chair is required before enrollment in the Medical Assistant Externship.

## Career Opportunities

Jobs for which graduates are expected to be qualified include: medical office assistant, clinical medical assistant, in a single or group practice of physicians, hospital, or public health facility, and other capacities requiring medical assisting and office management skills. In addition, students who obtain national certification as a Registered Medical Assistant (RMA), can glean additional employment opportunities.

## Program Educational Outcomes

Upon completion of the graduate is prepared to:

1. Evaluate and perform medical office administrative procedures using and integrating medical terminology to include records management coding and claim filing.
2. Demonstrate understanding of the principles of Medical Law & Ethics including those related to privacy, scope-of-practice, communication, patient rights and the medical record.
3. Collect, process and analyze biological specimens.
4. Apply principles of safety, sterilization and disinfecting in all aspects of patient/office procedures.
5. Demonstrate professional conduct and interpersonal communication skills with patients, health care professionals and the public.
6. Demonstrate knowledge of clinical procedures and pharmacology administration in patient care in a medical practice.
7. Collaborate with other healthcare professionals in patient preparation or procedures.

## Admission Requirements

In addition to the general admissions requirements of the College, applicants to this program must have had the following: Biology with lab; student must meet ENG 101 or ENG 105, and MAT 100 prerequisites.

## Pre-registration Requirements

Prior to enrollment in the MEA course, applicants of this program must have had the following:

- A physical exam performed by a qualified health care professional
- Proof of the following immunizations or titers:
  - Professional liability insurance is required.
  - All students are advised to purchase their own Health/Accident Insurance
  - CPR certification prior to the beginning of the fourth semester
- Mandatory background screening is required prior to participation in externship.

Students must provide own transportation to and from the externship sites. All MEA majors must follow the prescribed course sequence.

# Medical Assistant (MEA)

<b>Associate in Applied Science Degree Requirements</b>		
<b>Semester I</b>		<b>Credit Hours</b>
BUS 150	Effective Customer Relations	3
BCA 120	Introduction to Computer Applications	3
BIO ____	Select one of the following: BIO 101/102 Introduction to General Biology **BIO 115/116 Anatomy & Physiology I	4
MAT 101*	Business Mathematics	3
MET 111	Medical Terminology I	3
MCO 100	Medical Assistant Seminar	1
<b>Semester II</b>		
BIO ____	Select one of the following: BIO 105 Essentials of Anatomy and Physiology **BIO 117/118 Anatomy and Physiology II	3 (4)
ENG ____*	Select one of the following: ENG 101 College Writing ENG 105 College Writing Seminar	3 (4)
COM 100	Public Speaking	3
MEA 165	Medical Ethics and Law	3
<b>Semester III</b>		
MEA 205	Medical Office Administration & Electronic Health Records	3
MEA 222	Medical Clinical Procedures I Lecture	2
MEA 221	Medical Clinical Procedures I Lab	3
MEA 240	Essentials of Pharmacology for Medical Assistants	3
PSY 101	Introduction to Psychology	3
____	Elective: Humanities or Social Science	3
<b>Semester IV</b>		
MEA 210	Insurance Coding/Claims Processing	3
MEA 230	Advanced Medical Clinical Procedures II Lecture	3
MEA 231	Advanced Medical Clinical Procedures II Lab	2
MEA 266	Medical Assistant Externship (240 hours)	6
____	Writing course CRJ 212,222, ENG 101,105,125,150,201,211,220,221,SSC 200	3
<b>Total Credit Hour Requirements</b>		<b>63-64</b>

\*Course placement determined by assessment test scores and/or prior college course work.

\*\*The BIO 115-118 series is the recommended choice for transfer to a bachelor degree program. Please note course prerequisites.

**ALSO AVAILABLE  
100% ONLINE**

# Medical Coding and Electronic Health Records (MCO)

## Program Description

The Associate in Applied Science Degree in Medical Coding and Electronic Health Records is designed to provide students with the appropriate skill set to enter the medical coding profession. Graduates of this program are prepared for entry-level coding positions through coursework in medical terminology, health records management, coding classification systems and reimbursement methods. The program prepares students for upper division coursework at universities and colleges where a bachelor's degree is desired. The program is also designed to respond to the growing demand of medical coding employees seeking to upgrade their skills and knowledge base for career advancement with the attainment of a college degree.

After graduation, the student may take the American Health Information Management Association's (AHIMA) Certified Coding Associate (CCA) exam or the American Academy of Professional Coders (AAPC) Certified Professional Coder (CPC) exam, which are the two industry leaders in medical coding certification. Graduates may also take AHIMA's Clinical Coding Specialist (CCS) examination, however, 2 years of full-time coding experience is recommended before taking the CCS examination. Once certified, graduates can pursue employment opportunities in hospitals, other healthcare facilities, physician's offices, clinics, medical billing companies, health insurance companies, software companies, legal and consulting firms.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Apply industry standard coding guidelines published by the American Medical Association (AMA), World Health Organization (WHO) and American Hospital Association (AHA) to patient medical records using electronic health records and encoder software.
2. Describe official coding guidelines and accurately apply them to all inpatient and outpatient settings.
3. Apply medical terminology and accurately identify and describe anatomical directions, body planes, and major anatomical structures, functions and pathopharmacology as they relate to the human body.
4. Accurately assign CPT, ICD-CM, ICD-PCS and HCPCS coding guidelines to diagnoses, procedures and medical records for services as part of the health insurance reimbursement process.
5. Describe the purpose and impact of the Healthcare Insurance Portability and Accountability Act (HIPAA) and apply policies and procedures to insure compliance with regulations and standards.
6. Identify reimbursement methodologies for major types of government and commercial health plans, including Medicare, Medicaid, Health Maintenance Organization (HMO), Preferred Provider Organization (PPO) and Point-of-Service (PSO) plan.
7. Explain the purpose of medical coding and discuss how applicable laws and regulatory compliance issues impact the healthcare work place.
8. Explain the essentials of healthcare statistics and how the data collection process, maintenance of data, and organizational reporting impact healthcare resource utilization decisions.

## Online Program Priority Enrollment Deadline

The priority enrollment deadline is May 15, which means the application and requirements such as placement scores, transcripts from previously attended schools, tuition deposit must be received, and online orientation completed.

# Medical Coding and Electronic Health Records (MCO)

<b>Associate in Applied Science Degree Requirements</b>		
<b>Semester I</b>		<b>Credit Hours</b>
BIO ____	Select one of the following: BIO 101/102 Introduction to General Biology BIO 115/116 Anatomy and Physiology I	4
MET 111	Medical Terminology	3
MCO 111	Health Information Management	4
ENG ____*	Select one of the following: ENG 101 College Writing ENG 105 College Writing Seminar	3 (4)
MCO 100	Medical Coding Seminar	1
<b>Semester II</b>		
BIO ____	Select one of the following: BIO 105 Essentials of Anatomy & Physiology BIO 117/118 Anatomy and Physiology II	3 (4)
MCO 121	ICD CM Coding	3
MCO 125	CPT & HCPCS Coding	3
MCO 150	Medical Specialties & Pathophysiology	4
MAT 101	Business Mathematics	3
<b>Semester III</b>		
MCO 215	Reimbursement Methodology	3
PSY 101	Introduction to Psychology	3
MEA 165	Medical Ethics and Law	3
MCO 136	Intermediate CPT & HCPCS Coding	3
ENG 220	Business Communication	3
<b>Semester IV</b>		
____	Elective: Humanities or Social Science	3
COM 101	Interpersonal Communication	3
MCO 116	Health Care Statistics	2
MCO 134	ICD PCS Coding	3
MCO 299	Practicum	3
<b>Total Credit Hour Requirements</b>		<b>60-62</b>

\*Course placement determined by assessment test scores and/or prior college course work. \*\*The BIO 115-118 series is the recommended sequence for students interested in continuing their professional preparation in the field of Health Information Technology.

**ALSO AVAILABLE  
100% ONLINE**

# Medical Coding and Electronic Health Records Certificate (MCOCO)

## Program Description

The Certificate in Medical Coding and Electronic Health Records is designed to provide students with entry-level coding skills to enter the medical coding profession. Graduates of this program are trained to perform specialized data entry, coding classification and record keeping procedures related to medical diagnostic, treatment, insurance billing and medical record documentation. The courses in the certificate program are directly transferable into Central Maine Community College's Associate in Applied Science Degree in Medical Coding and Electronic Health Records.

After completion, the student may take the American Health Information Management Association's (AHIMA) Certified Coding Associate (CCA) exam or the American Academy of Professional Coders (AAPC) Certified Professional Coder (CPC) exam, which are the two industry leaders in medical coding certification. Once certified, graduates can pursue employment opportunities in hospitals, other healthcare facilities, physician's offices, clinics, medical billing companies, health insurance companies, software companies, legal and consulting firms.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Describe official coding guidelines and accurately apply them to all inpatient and outpatient settings.
2. Accurately assign CPT, ICD-CM, and HCPCS coding guidelines to diagnoses, procedures and medical records for services as part of the health insurance reimbursement process.
3. Apply medical terminology and accurately identify and describe anatomical directions, body planes, and major anatomical structures, functions and pathopharmacology as they relate to the human body.
4. Explain the purpose of medical coding.
5. Describe the purpose and impact of the Healthcare Insurance Portability and Accountability Act (HIPAA)

## Online Certificate Priority Enrollment Deadline

The priority enrollment deadline is May 15, which means the application and requirements such as placement scores, transcripts from previously attended schools, tuition deposit must be received, and online orientation completed.

## Certification Requirements

Semester I		Credit Hours
BIO ____	Select one of the following: BIO 101/102 Introduction to General Biology and Introduction to General Biology Lab **BIO 115/116 Anatomy & Physiology I	4
MET 111	Medical Terminology	3
MCO 111	Health Information Management	4
ENG ____*	Select one of the following: ENG 101 College Writing ENG 105 College Writing Seminar	3 (4)
MCO 100	Medical Coding Seminar	1
Semester II		
BIO ____	Select one of the following: BIO 105 Essentials of Anatomy & Physiology **BIO 117/118 Anatomy & Physiology II	3 (4)
MCO 121	ICD CM Coding	3
MCO 125	CPT & HCPCS Coding	3
MCO 150	Medical Specialties & Pathophysiology	4
MAT 101	Business Mathematics	3
<b>Total Credit Hour Requirements</b>		<b>28-30</b>

\*Course placement determined by assessment test scores and/or prior college course work.

\*\*The BIO 115-118 series is the recommended sequence (but not required) for students interested in continuing their professional preparation in the field of Health Information Technology.



# Network Security Advanced Certificate

## Program Description

The Advanced Certificate in Network Security prepares students to manage information technology systems with an emphasis on data loss prevention concepts, computer forensics, network defense, encryption and computer investigation.

## Career Opportunities

This Advanced Certificate will afford students advanced skills to attract employers in the areas listed above. The students will have a multitude of job options in the technology field including Network Administration, Network Security, Server Administration, Penetration Testing, and Computer Forensics.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Address fundamental loss prevention.
2. Prepare and implement a security program.
3. Identify methods used to protect and access online information resources.

## Non-Academic Requirements

All students taking the advanced certificate will be subject to a criminal background check. A criminal conviction will not automatically prevent a person from being accepted into the program.

## Prerequisites

Students must have earned an A.A.S. degree in Network Security/Computer Forensics (CNS).

### Advanced Certificate Requirements

		Credit Hours
CPT 283	OS Hardening	3
CPT 286	Security Analysis	3
CPT 287	Database Security	3
CPT 288	Incident Handling & Response	3
CPT 289	Mobile Device Handling	3
CPT 290	Introduction to Cyber Security	3
<b>Total Credit</b>		<b>18</b>

# Nursing (NUR)

## Program Description

The Associate in Science Degree in Nursing prepares the student to become a registered nurse. Graduates are eligible to sit for National Counsel Licensing Exam for licensure as a Registered Professional Nurse. The Nursing Program is approved by the Maine State Board of Nursing 161 Capitol Street, 158 State House Station, Augusta ME 04222-0158 and accredited by the Accreditation Commission for Education in Nursing (ACEN, 3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326; telephone 404-975-5000 ( <http://acenursing.org/> ).

All applicants should note that “The Maine State Board of Nursing may refuse to grant a license on the basis of criminal history record information relating to convictions denominated in Title 5, Chapter 341 subsection 5301 of the Maine Revised Statutes Annotated”.

The curriculum blends general education courses with nursing courses to provide a sound theoretical and experiential background for nursing practice. Students complete faculty-led clinical rotations at healthcare affiliates throughout the nursing component of the program. These healthcare affiliates typically require background checks to determine if students have disqualifying criminal convictions, pending criminal charges and/or certain other experience. Students who cannot satisfy such a review cannot be placed clinically and will be unable to complete the program.

Nursing majors must follow the course sequences and should note that a minimum grade of C (with a satisfactory clinical grade) in each nursing course is required in order to progress from one nursing course to another. Students must adhere to the nursing program attendance requirements or it may result in dismissal from the program. Students may be allowed to repeat one nursing course by petitioning full faculty and dependent on full faculty vote and available space within course. Completion of all Nursing courses with a grade of C or better and a minimum GPA of 2.00 is required to graduate.

An LPN may seek an upgrade to an Associate Degree in Nursing. Admission criteria to the program must be met. Credit may be given for NUR 112 and NUR 121 based on licensure and work experience. Applicant must satisfy Semester I and II co-requisites. LPN's may be required to repeat/take NUR 121 prior to second year courses.

## Career Opportunities

Graduates are prepared to work in structured health care settings such as hospitals and extended care facilities and pursue careers in medical/surgical, obstetrical, pediatric, geriatric, or psychiatric nursing. Graduates earning an associate degree may transfer into a Bachelor of Science in Nursing program.

## Program Educational Outcomes

1. The graduate is accountable for their own actions, serves as a positive role model, assumes ethical responsibility as member of the profession of nursing and practices within the Nurse Practice Act.
2. The graduate will use effective therapeutic and interpersonal communication skills in their practice of nursing.
3. The graduate will holistically evaluate patient needs through the collection, analysis and synthesis of data for the provision of patient care.
4. The graduate will generate safe and effective clinical judgments using critical thinking skills when providing care to individuals, families and groups of patients with complex health needs in a variety of settings.
5. The graduate will integrate all previous learning experiences to provide holistic caring interventions to patients of all ages with multiple complex needs.
6. The graduate will evaluate the effectiveness of teaching/ learning strategies and the achievement of patient learning outcomes for patients with complex needs.
7. The graduate will collaborate with the healthcare team members in a variety of settings.
8. The graduate will assume responsibility as a manager of care for a group of patients by establishing priorities for nursing care, use of resources, and through delegating aspects of nursing care to other health care workers.
9. The graduate will continue their education either formally through organized upper division classes, in-service education or independently utilizing nursing research and other professional resources.
10. The graduate evaluates current strategies and clinical processes to make practice decisions for quality outcomes for patients and healthcare systems.

# Nursing (NUR)

## Selective Admission Requirements

- Completion of a background check.
- Demonstrate above average proficiency in reading and mathematics as evidenced by the standardized admissions test (TEAS).
- Submit Visual Acuity exam results two months prior to the start of the first nursing course. Necessary: Visual acuity with corrective lenses to identify cyanosis, absence of respiratory movement in patients; and to read very fine, small print on medication containers, physician's orders, monitors and equipment calibrations.
- Three months prior to the start of the first nursing course, the applicant must submit proof to the Nursing Program of the following:
  - **MMR: Measles, Mumps, Rubella**  
An official record of an immune titer must be provided for each
  - **HBV: Hepatitis B: 3 Doses**  
An official record of an immune titer must be provided following completion of the series.
  - **TD: Adult Tetanus and Pertussis (TDaP)**  
An official record of immunization within the past 10 years must be provided.
  - **PPD: Purified Protein Derivative (TB)**  
Annual testing is required. If applicant has not been tested within the past year, initial testing must consist of 2 tests not more than three weeks apart. Applicants with a history of a positive skin test should submit evidence of a yearly evaluation by a health care provider.
  - **Varicella (Chicken Pox)**  
An official record of an immune titer must be provided.
- **Prerequisites(s) for program admission for applicants applying directly from high school:**  
Algebra I, Anatomy and Physiology with lab, Biology with laboratory, GPA of 3.0 or equivalent completed application process and results of the TEAS Exam by May 20th each year for competitive review process.
- In addition, other yearly tests and/or immunizations may be required.
- Submit other medical or educational documentation as requested by the Nursing Department.

## Nursing Specific Application Information

Complete the application process by priority deadline of the anticipated enrollment year. However, the college anticipates seats will fill rapidly. It is the applicant's responsibility to submit the required documentation. Once an applicant's file is deemed complete, the applicant is invited to an informal meeting with the Department Chairperson for the purpose of reviewing the program and selecting the appropriate course of study. Upon admission to the program, the student is assigned a nursing faculty advisor.

## Admissions and Registration Condition

Due to compliance with the standards of the Accreditation Commission for Education in Nursing and the Maine State Board of Nursing, prospective nursing students should be aware that admission and program changes may occur.

## Non-Academic Requirements for the Nursing Major

- Be certified in cardiopulmonary resuscitation (CPR - health care provider level) prior to the start of the first nursing course. This certification must be current throughout the program.
- Purchase the college professional liability insurance prior to the start of the first nursing course.
- Nursing majors must purchase uniforms before entry into the nursing courses.
- Clinical learning experiences take place in a variety of settings and geographic locations. Nursing majors must therefore provide their own transportation to and from the clinical settings.

# Nursing (NUR)

## Associate in Science Degree Requirements

Arts and Sciences (General Education) courses supportive to the Nursing major must be taken prior to, or concurrent with nursing courses as outlined in the curriculum design. Nursing courses must be taken in the sequence listed. Students must achieve a minimum grade of C in all nursing (NUR) courses and a satisfactory clinical grade in each nursing course in order to progress from one nursing course to another.

<b>Semester I</b>		<b>Credit Hours</b>
BIO 115	Anatomy and Physiology I	3
BIO 116	Anatomy and Physiology I Lab	1
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
NUR 112	Foundations of Nursing/Nursing Care of Adults	9
NUR 115	Medication Preparation, Administration, and Dosage Calculations	1

### Special Requirement

NUR 116 Role Transition (3 credits) or NUR 121 Nursing Across the Lifespan II (10 credits) may be required of Licensed Practical Nursing prior to second year nursing courses.

<b>Semester II</b>		
BIO 117	Anatomy and Physiology II	3
BIO 118	Anatomy and Physiology II Lab	1
NUR 121	Nursing Across the Life Span I	10
PSY 101	Introduction to Psychology	3

<b>Semester III</b>		
BIO 211	Microbiology	3
BIO 212	Microbiology Lab	1
NUR 212	Nursing Across the Life Span II	9
PSY 111	Developmental Psychology	3

<b>Semester IV</b>		
NUR 213	Nursing Across the Life Span III	9
COM 100	Public Speaking	3
___ ___	Elective: Humanities	3
MAT ___	MAT 100 Intermediate Algebra or higher (excluding MAT 101, 102, 104 and 105)	3

**Total Credit Hour Requirements** **68**

\*Course placement determined by assessment test scores and/or prior college coursework.

# Physical Fitness Specialist (PHF)

## Program Description

The Associate in Applied Science Degree in Physical Fitness Specialist is designed to meet the rising demands in the growth of health and wellness field and to help students pursue opportunities in the job market of the medical industry. Students will be required to sit for the American College of Sports Medicine (ACSM) exam upon completion of the degree.

## Career Opportunities

Graduates from this program will be able to develop two individual pathways:

- Enter the work force as a Personal Fitness Specialist in a variety of settings working with individuals on health, wellness, and independent fitness programs;
- Transfer into a bachelor degree program in the Life/Exercise Sciences such as physical education, athletic training, community health education, Community health education, strength and conditioning and other exercise science disciplines.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Discuss the physiology and mechanics of human movement related to the major components of physical fitness, health and sports.
2. Demonstrate a strong foundational knowledge of the human body systems and the acute and chronic adaptations on the body through modalities, exercise and lifestyle changes.
3. Define the psychological principles critical to health/wellness behavior changes.
4. Describe, discuss, compare/contrast and demonstrate the role of the Physical Fitness Specialist as a member of the healthcare team in modern healthcare.
5. Assess dietary habits and recommend developmental and maintenance interventions.
6. Develop safe and effective recommendations and provide lifestyle changes to support clients or teams through needs inventory, goals and specific objectives.
7. Recognize, manage and provide preventive practices for basic musculoskeletal injuries through proper understanding of evaluation of movement, range of motion and muscle imbalances of the human body.
8. Demonstrate ACSM and CSCS professional standards in the field of exercise science and client care.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
ENG ___ *	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
BIO ___	Select one of the following:	4
	BIO 101/102 Intro to General Biology	
	**BIO 115/116 Anatomy & Physiology I Lecture	
PSY 101	Introduction to Psychology	3
COM 100	Public Speaking	3
PHF 110	Exercise Science, Athletic Training & Physical Fitness Seminar	1
Semester II		
BIO ___	Select one of the following:	
	BIO 105 Essentials of Anatomy & Physiology	3
	**BIO 117/118 Anatomy & Physiology II	(4)
BIO 121	Nutrition	3
MAT ___ *	Select one of the following:	3
	MAT 100 Intermediate Algebra*	
	MAT 101 Business Math	
PHF 155	Introduction to Exercise Science	4
PHF 150	Methods of Life Style Coaching	3
Semester III		
PHF 122	Kinesiology	3
___ ___	Elective: PSY/SOC	3
PHF 204	Nutrition to Improve Human Performance	3
PHF 207	Introduction to Injury Prevention & Management	3
PHF 197	Field Experience	2
Semester IV		
PHI 111	Introduction to Ethics	3
PHF 251	Methods of Teaching Group Exercise	3
PHF 208	Exercise Test and Prescription	4
ENG ___	Select one of the following:	3
	ENG 220 Business Communication	
	ENG 201 Technical Writing	
PHF 299	Practicum	4
<b>Total Credit Hour Requirements</b>		<b>61-62</b>

## Special Admission Requirements

In addition to meeting the general admission requirements of the College, applicants to this program must be in exceptionally good health due to the physical requirements of the program. Criminal background checks and/or liability insurance may be required before the practicum experience and/or may be required by a potential employer.

# Plumbing & Heating Technology (PHT)

## Program Description

The Associate in Applied Science Degree in Plumbing & Heating Technology will prepare students for a career in the plumbing and heating industry with skills to assist with the installation and repair of systems in residential and commercial settings. Students will gain knowledge of state codes and requirements.

Graduates are eligible to acquire the State of Maine Journeyman 1 & 2 Oils - up to 15 GPH licensure and eligible to acquire State of Maine licensure as a propane and natural gas technician.

## Career Opportunities

Graduates are qualified for employment with heating contractors, utility companies and fuel oil companies, in maintenance positions or as sales personnel. Additional experience may provide graduates with opportunities as managers, supervisors, or operators of their own business.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Describe basic tools used for standard residential and light-commercial plumbing and heating projects.
2. Identify and explain plumbing and heating methods, calculations, materials and systems.
3. Identify the local, state and national codes required for compliance in the design, installation and repair of plumbing and heating systems.
4. Differentiate the installation procedures for various types of heating systems.
5. Describe the methods for completing plumbing heating service work, performing calculations and safe work practices.
6. Diagnose and repair plumbing and heating systems.

## Non-Academic Requirements

Students must be able to lift 50 pounds to shoulder height, crawl in small spaces and climb a ladder and equipment using three points of contact.

Students will be subject to a criminal background check. A criminal conviction will not automatically prevent a person from acceptance into the program. The applicant may be denied acceptance if a she or he has a disqualifying conviction as defined by the Maine Plumbers' Examining Board. Such a conviction prohibits a person from obtaining licensure as a plumber in the State of Maine.

## Associate in Applied Science Degree Requirements

Semester I		Credit Hours
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT 104*	Technical Mathematics	3
PHT 103	Plumbing Technology I	5
OHS 115	Construction Health & Safety	3
PHT 135	Electricity, Pumps and Hydraulics	3
Semester II		
PHT 100	Plumbing Code	3
PHT 125	Plumbing Technology II	5
PHT 140	Print Reading Interpretation	2
COM ___	Elective: Communication	3
___ ___	Elective: General Education	3
Semester III		
PHT 207	Heating I	4
PHT 209	Propane and Natural Gas I	4
PHT 225	Maine Oil/Solid Fuel Code	1
ENG ___	Select one of the following:	3
	ENG 201 Technical Writing	
	ENG 220 Business Communication	
___ ___	Elective: Mathematics or Science 100 or higher	3-4
Semester IV		
PHT 257	Heating II	4
PHT 259	Propane and Natural Gas II	4
PHI 111	Introduction to Ethics	3
PHT 297	Externship	3
<b>Total Credit Hour Requirements</b>		<b>62-64</b>

\*Course placement determined by assessment test scores and/or prior college course work.

# Plumbing Certificate (PHT)

## Program Description

The Certificate in Plumbing will prepare students to sit for the journeyman-in-training licensing exam through the Maine Plumbers' Examining Board. The Maine Plumber's Examining Board may issue a journeyman-in-training license to a person who provides satisfactory evidence of completion of a plumbing course consisting of one year or two semesters at a board-approved technical college or community college.

## Career Opportunities

Graduates are qualified for employment with heating contractors, utility companies and fuel oil companies, in maintenance positions or as sales personnel. Additional experience may provide graduates with opportunities as managers, supervisors, or operators of their own business.

Graduates of the certificate 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 graduates can work under the supervision of a journeyman or master plumber.

## Program Educational Outcomes

Upon completion graduate is prepared to:

1. Describe basic tools used for standard residential and light-commercial plumbing projects
2. Identify and explain plumbing methods, calculations, materials and systems
3. Demonstrate interpretation of safety rules, state codes and regulations relevant to the industry
4. Explain the components and assembly techniques required for standard pipe and water supply systems
5. Diagnose and repair plumbing systems

## Non-Academic Requirements

Students must be able to lift 50 pounds to shoulder height, crawl in small spaces and climb a ladder and equipment using three points of contact.

Students will be subject to a criminal background check. A criminal conviction will not automatically prevent a person from acceptance into the program. The applicant would be denied acceptance if a she or he has a disqualifying conviction as defined by the Maine Plumbers' Examining Board. Such a conviction prohibits a person from obtaining licensure as a plumber in the State of Maine.

## Certificate Requirements

Semester I		Credit Hours
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT 104*	Technical Mathematics	3
PHT 103	Plumbing Technology I	5
PHT 135	Electricity, Pumps and Hydronics	3
OHS 115	Construction Health & Safety	3
Semester II		
PHT 125	Plumbing Technology II	5
PHT 140	Print Reading Interpretation	2
PHT 100	Plumbing Code	3
COM ___	Elective: Communication	3
___ ___	Elective: General Education	3
<b>Total Credit Hour Requirements</b>		<b>33-34</b>

\*Course placement determined by assessment test scores and/or prior college course work.

# Police Operations Advanced Certificate

## Program Description

The Police Operations Advanced Certificate is intended to provide upper-level law enforcement skills and preparatory training for students entering the field of law enforcement. Students will enhance their skills and understanding of police practice, building upon the foundation set forth in a previously completed degree in Criminal Justice or related field.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate acceptable tolerance of stressful situations and apply stress reduction techniques.
2. Demonstrate working knowledge of Maine law enforcement agencies and related organizations.
3. Exhibit knowledge of police operations and procedures.
4. Demonstrate effective defensive tactics and de-escalation techniques.
5. Demonstrate knowledge of criminal court proceedings and relevant case law.

## Admission Criteria

The Advanced Certificate in Police Operations is a selective admission program. Admission prerequisites are: an earned (or expected) associate degree or higher with a cumulative GPA of 2.5 on a 4.0 scale in criminal justice or related field as determined by the Department Chair; a criminal background check, physical screening, and oral board interview with departmental faculty. Screenings and interviews are based on those required to meet the minimum standards of entrance into the MCJA. Completed applications, including fees and transcripts, will be accepted until April 1st each year.

## Non-Academic Requirements

All students taking criminal justice courses will be subject to a criminal background check. A criminal conviction will not automatically prevent a person from being accepted into the program. The applicant would be denied acceptance if they have a "disqualifying conviction" or committed "disqualifying conduct" as defined by the Maine Criminal Justice Academy. Such conviction or conduct prohibits a person from being certified or licensed as a police officer in the State of Maine.

## Advanced Certificate Requirements

Semester I		Credit Hours
CRJ 290	Defensive Tactics I	3
CRJ 291	Fitness Training for Law Enforcement	6
CRJ 292	Advanced Police Operations	6
Semester II		
CRJ 280	Effective De-escalation	6
CRJ 295	Defensive Tactics II	3
CRJ 294	Field Practical	6
<b>Total Credit Hour Requirements</b>		<b>30</b>



# Precision Machining Technology (PMT)

## Program Description

The Associate in Applied Science Degree in Precision Machining Technology offers a broad training experience that prepares individuals for employment in the precision manufacturing industry. Students learn to operate a variety of conventional machine tools, computer numerical control (CNC) machines, read and analyze engineering drawings and use precision measuring and inspection instruments. The new computer automated manufacturing (CAM) lab uses Mastercam software to program the CNC equipment. Students develop the skills required for employment in this highly technical field.

Currently there are two PMT program options: Associate in Applied Science and Certificate.

## Career Opportunities

Graduates of the Precision Machining Program are employed as machinists, CNC machinists, tool and die makers, process quality control technicians, quality control inspectors, machine assemblers, machine tool designers, CNC programmers or field service representatives.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Demonstrate entry level skills.
2. Interpret engineering drawings utilizing current standards set by ANSI.
3. Produce a part that meets print specifications.
4. Apply occupational health and safety standards.

### Certificate Requirements

#### Semester I Credit Hours

ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT 104*	Technical Mathematics	3
PMT 103	Print Reading and Sketching	3
PMT 111	Introduction to Lathes	2
PMT 112	Introduction to Manual Milling	2
PMT 118	Introduction to CNC Milling	2
PMT 119	Introduction to CNC Lathes	2

#### Semester II

ENG 201	Technical Writing	3
MAT ___*	MAT 100 or higher	3
PMT 121	Introduction to Threading Processes	2
PMT 122	Work Holding Methods for Milling	2
PMT 124	Applied Computer Numerical Control	2
PMT 125	CNC Turning Methods	2
OHS 102	OHS for General Industry	1

### Associate in Applied Science Degree Requirements

Semester I		Credit Hours
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT 104*	Technical Mathematics	3
PMT 103	Print Reading and Sketching	3
PMT 111	Introduction to Lathes	2
PMT 112	Introduction to Manual Milling	2
PMT 118	Introduction to CNC Milling	2
PMT 119	Introduction to CNC Lathes	2

#### Semester II

ENG 201	Technical Writing	3
MAT ___*	MAT 100 or higher	3
PMT 121	Introduction to Threading Processes	2
PMT 122	Work Holding Methods for Milling	2
PMT 124	Applied Computer Numerical Control	2
PMT 125	CNC Turning Methods	2
OHS 102	OHS for General Industry	1

#### Semester III

PMT 209	Geometric Dimensioning and Tolerancing	3
PMT 240	2-D Cam Programming	2
PMT 211	Advanced Threading Processes	2
PMT 212	Circular CNC Milling Processes	2
PMT 214	Advanced Computer Numerical Control	2
PMT 228	Metallurgy	1
— —	Elective: Humanities or Social Science	3

#### Semester IV

PMT 217	Introduction to Toolmaking	2
PMT 221	Advanced CNC Turning Processes	2
PMT 229	Advanced CNC Part II	2
PMT 230	Introduction to CMM's	2
— —	Elective: Humanities or Social Science	3
— —	Elective: Humanities or Social Science	3

**Total Credit Hour Requirements 61-62**

\*Course placement determined by assessment test scores and/or prior college course work.

# Precision Machining Technology Advanced Certificate

## Program Description

The Advanced Certificate in Precision Machining Technology offers advanced machining theories and applications required to set-up and run multi-axis computer numeric control (CNC) equipment. Programming, set-up, and operations of 4 axis vertical and horizontal milling centers, 5 axis vertical milling centers, and live tooling lathes will be covered. Students will be exposed to the advanced inspection methods that are required to inspect parts made on these machines. The certificate will prepare students for advanced level positions in the machining field related to multi-axis CNC equipment.

## Program Educational Outcomes

Upon completion the student is prepared to:

1. Program 3-D, 4 and 5-axis, horizontal and vertical, and live tooling equipment.
2. Read and interpret blueprints.
3. Describe and demonstrate inspection process.
4. Manage tool selection based on job variables.
5. Prepare cutting tool calculations from manufacturer's book recommendations.
6. Set up and operate CNC and live tooling machines.
7. Describe function of a coordinate measuring machine.
8. Inspect, adjust and complete a machine-job package.

## Program Admission Requirements

Students must have an A.A.S. or higher degree in machining or equivalent professional credentials as approved by the academic dean.

### **Advanced Precision Machining (PMT-X) Certificate Requirements**

<b>Semester I</b>		<b>Credit Hours</b>
PMT 276	Advanced Cam Programming	2
PMT 270	Intro to Solid Modeling	3
PMT 281	3-D Surface Milling	3
<b>Semester II</b>		
PMT 282	Multi Axis Cam Programming	2
PMT 285	4 and 5 Axis CNC Milling	3
PMT 279	Multi Axis CNC Lathes	3
<b>Total Credit Hour Requirements</b>		<b>16</b>

# Restaurant Management (REM)

## Program Description

The Associate in Applied Science Degree in Restaurant Management is for those who have an interest in pursuing a career in the restaurant management industry. Graduates will be prepared for managerial, supervisory or ownership positions which require skills in culinary arts and business practices. This program focuses on food service and lodging management. Full time students should be able to complete the program in four semesters.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Research, design, and prepare dishes and menus using cooking and baking techniques used in a professional kitchen.
2. Apply knowledge of safety and sanitation laws and regulations.
3. Evaluate operational procedures of a small to medium size restaurant.
4. Understand the legal environment and regulations of the food service industry.
5. Analyze the financial performance of a small to medium sized restaurant.
6. Research and prepare dishes and menus for specific dietary needs and concerns.

Students must earn a grade of C (not C-) or higher in ENG 101 College Writing or ENG 105 College Writing Seminar in order to meet the Degree requirements of this program.

## Associate in Applied Science Degree Requirements

<b>Semester I</b>		<b>Credit Hours</b>
CUA 100	Introduction to Culinary Arts	2
CUA 110	Techniques of Cooking	2
CUA 105	Fundamentals of Baking	2
CUA 115	Baking Principles and Presentation	2
CUA 121	Food Preparation	3
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
___ ___	Elective: Humanities or Social Science	3
<b>Semester II</b>		
CUA 150	Introduction to a La Carte	2
CUA 152	Specialty Foods	2
CUA 171	Nutrition and Food Quality	3
MAT 101*	Business Mathematics	3
CUA 154	Introduction to Cakes & Recipe Alternations	2
CUA 156	Pastries and Contemporary Desserts	2
<b>Semester III</b>		
ACC 208	Accounting Concepts	3
BCA 120	Introduction to Computer Applications	3
BUS 110	Principles of Supervision	3
COM ___	Select one of the following:	3
	COM 100 Public Speaking	
	COM 101 Interpersonal Communication	
MAT ___*	MAT 100 or higher	3
<b>Semester IV</b>		
BUS 150	Effective Customer Relations	3
BUS 270	Hospitality Management	3
ENG 220	Business Communication	3
___ ___	Elective: Humanities or Social Science	3
CUA 297	Internship	3
<b>Total Credit Hour Requirements</b>		<b>61-62</b>

\*Course placement determined by assessment test scores and/or prior college course work.

# Social Sciences (SSC)

## Program Description

The Associate in Arts degree in Social Sciences is an interdisciplinary program that examines the study of human behavior in a broad spectrum of understandings, insights, and appreciations. The program combines approaches from psychology, sociology, natural science, cultural and organizational studies to provide a foundation for transfer to a four-year institution.

## Program Educational Outcomes

Upon completion the graduate is prepared to:

1. Understand, predict and effectively address the behavior of individuals and groups.
2. Apply Social Sciences concepts to real-world situations.
3. Develop strategies for communication effectiveness and demonstrate the strategies in oral and written contexts.
4. Understand how diverse cultural backgrounds impact workplace and communities.
5. Conduct applied research.

## Certificate Requirements

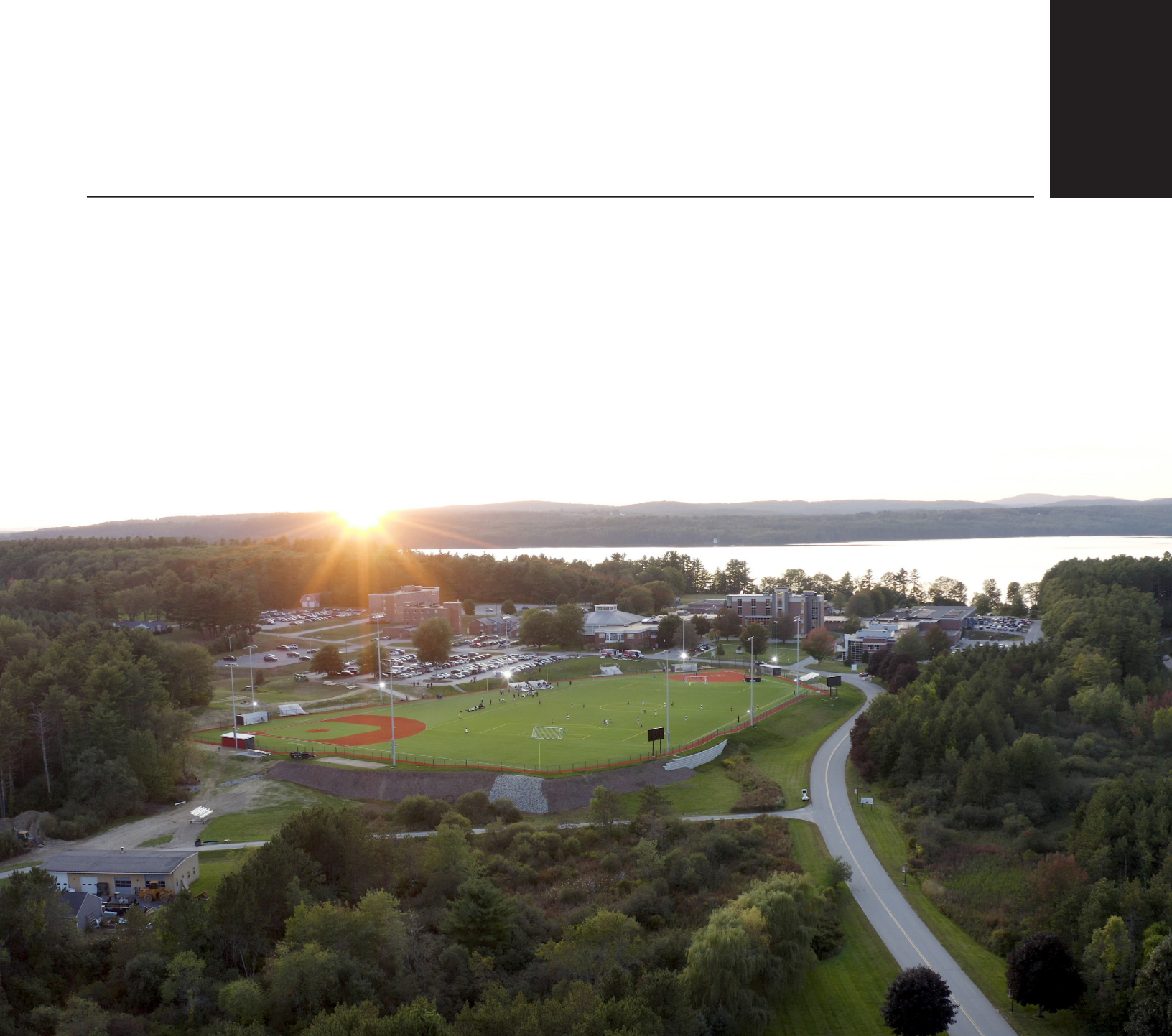
Semester I		Credit Hours
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT ___*	MAT 115 or higher	3
SOC 101	Introduction to Sociology	3
PSY 101	Introduction to Psychology	3
COM 100	Public Speaking	3
SSC 100	Public Service and Social Sciences Seminar	1

Semester II		Credit Hours
POS 152	Introduction to Public Policy	3
PHI 111	Introduction to Ethics	3
SOC 200	Issues in Diversity	3
ANT ___	Select one of the following:	3
	ANT 100 Introduction to Anthropology	
	ANT 101 Introduction to Cultural Anthropology	
	ANT 200 Forensic Anthropology	
___ ___	Restricted elective: REL/ASL/WST/INS	3

## Associate in Arts Degree Requirements

Semester I		Credit Hours
ENG ___*	Select one of the following:	
	ENG 101 College Writing	3
	ENG 105 College Writing Seminar	(4)
MAT ___*	MAT 115 or higher	3
SOC 101	Introduction to Sociology	3
PSY 101	Introduction to Psychology	3
COM 100	Public Speaking	3
SSC 100	Public Service and Social Sciences Seminar	1
Semester II		
POS 152	Introduction to Public Policy	3
PHI 111	Introduction to Ethics	3
SOC 200	Issues in Diversity	3
ANT ___	Select one of the following:	3
	ANT 100 Introduction to Anthropology	
	ANT 101 Introduction to Cultural Anthropology	
	ANT 200 Forensic Anthropology	
___ ___	Restricted elective: REL/ASL/WST/INS	3
Semester III		
SSC 200	Research Methods for Social Sciences	3
___ ___	Restricted elective: SOC/PSY	6
ENG ___	ENG 125 or higher	3
___ ___	Elective: Science with lab	4
Semester IV		
___ ___	Restricted elective: JUS/POS/PSY/SOC	6
___ ___	Elective: open	6
SSC 298	Service Learning Capstone	3
<b>Total Credit Hour Requirements</b>		<b>62-63</b>

\*Course placement determined by assessment test scores and/or prior college course work.



# Course Description Codes

The course listings that follow include 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.

## Explanation of Course Description Codes

***(The clock hour distributions contained in this catalog are based on a "typical" 15 week semester. 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).***

Lecture Credits	Lab Credits <i>(double hours for same credit as lecture)</i>	Shop Credits <i>(triple hours for same credit as lecture)</i>
3.75 hours in class (+ approx. 7.5 hrs. hmwk) = .25 credit	7.5 hours in lab (+3.75 of homework) = .25 credit	11.25 hours in shop for .25 credit
7.5 hours in class (+ approx. 15 hrs. homework) = .5 credit	15 hours in lab (+ 7.5 hours of homework) = .5 credit	22.5 hours in shop for .5 credit
15 hours in class (+ approx. 30 hrs. homework) = 1 credit	30 hours in Lab (+15 hours of homework)= 1 credit	45 hours in shop for 1 credit
30 hours in class (+ approx. 60 hrs. homework) = 2 credits	60 hours in lab (+30 hours of homework)= 2 credits	90 hours in shop for 2 credits
45 hrs in class (+ approx. 90 hrs. homework) = 3 credits	90 hrs in lab (+45 hours of homework) = 3 credits	135 hours in shop for 3 credits
60 hrs in class (+ approx. 120 hrs. homework) = 4 credits	120 hrs in lab (+60 hours of homework) = 4 credits	180 hours in shop for 4 credits
75 hrs in class (+ approx. 150 hrs. homework) = 5 credits	150 hrs in lab (+75 hrs of homework) = 5 credits	225 hours in shop for 5 credits

**Lecture Hours:** the number of hours per week a particular course meets in an instructor directed classroom situation.

**Lab or Studio Hours:** 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.

**Shop or Clinical or Field Experience or Practicum Internship or Externship Hours:** the number of hours per week a particular course meets and where students are in a practical, occupational or applied learning situation.

**Credit Hours:** the number of credit hours awarded to the student who successfully completes a course.

**Definition of Units of Credit:** Central Maine Community College follows the New England Commission of Higher Educations' definition of the credit hour:

Federal regulation defines a credit hour as an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutional established equivalence that reasonably approximates not less than –

(1) One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or

(2) At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practical, studio work, and other academic work leading to the award of credit hours.

**Prerequisite:** any course work that must be completed before the student is eligible to register for a course.

**Co-requisite:** any course which must be taken during the same semester.

# Course Descriptions

## Accounting (ACC)

### ACC 208 Accounting Concepts

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is a one-semester course for non-accounting majors. It is designed to give students a basic foundation in financial accounting and the language of business. Key topics include the correct classification and recording of accounting transactions, preparation of basic financial statements, and analysis and interpretation of financial data. Students will use computer software in and out of class for some problem solving. Note: This course cannot be taken for credit for Accounting majors.

### ACC 120 Financial Accounting

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is a beginning accounting course that introduces the student to basic financial statements and the double-entry accounting system. The course includes methods and procedures such as merchandising operations, internal control and cash, accounting systems, accounts and notes receivable, accounting for merchandise inventory, and long-term assets and depreciation methods, liabilities, owner's equity, and financial statement analysis.

### ACC 122 Managerial Accounting

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Building on fundamentals learned in Financial Accounting, this course introduces a business-management approach to the development and use of accounting information to support managerial decision-making in both manufacturing and service organizations. Major topics include cost behavior, cost analysis, pricing, profit planning, and budgeting and control measures. *Prerequisite:* ACC 120.

### ACC 210 Principles of Accounting I

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is a beginning accounting course that introduces the student to basic financial statements and the double entry accounting system. The course includes methods and procedures such as merchandising operations, internal control and cash, accounting systems, accounts and notes receivable, accounting for merchandise inventory, and long-term assets and depreciation methods.

### ACC 212 Principles of Accounting II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is a continuation of ACC 210. Topics covered will include partnerships, corporations, long-term liabilities, investments, cash flow and financial statement analysis. *Prerequisite:* ACC 210 with a grade of C or higher.

### ACC 240 Intermediate Accounting I

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course begins with a comprehensive review of accounting principles, including the conceptual framework of accounting as prescribed by the Financial Standards Board (FASB) and Generally Accepted Accounting Principles (GAAP). Other topics include concepts of future and present value, theory underlying revenue recognition practices, internal control procedures for cash, basic alternative inventory valuation methods, as well as recording of investment securities. *Prerequisite:* ACC 122 with a grade of C or higher.

### ACC 242 Intermediate Accounting II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course continues the intensive study of financial accounting including the valuation of long-term liabilities and accounting for income taxes, leases, and pensions. Other topics are forming a corporation, recording various types of

dividends, computing earnings per share, as well as the preparation of the statement of cash flows. Application of accounting principles in recording, reporting, and disclosing accounting changes and prior period adjustments are also included. *Prerequisite:* ACC 240 with a grade of C or higher.

### ACC 244 Accounting Software Applications

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course utilizes an integrated accounting software package to demonstrate the application of accounting theory. This course includes evaluation of common software characteristics and features and emphasizes the importance of internal controls for computerized accounting systems. The student will become proficient in setting up new company files, creating charts of accounts for different business types, managing general ledger, accounts payable, accounts receivable, payroll, inventory, job costing, importing and exporting of files, fixed assets and depreciation, and other advanced topics. *Prerequisite:* ACC 120.

### ACC 248 Payroll Accounting

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to introduce students to the concepts and processes of payroll administration. Topics include the legal issues surrounding payroll, salaries/wages and overtime, payroll withholdings and payroll taxes, and journalizing and analyzing payroll transactions. Students will also learn extensively about national automated payroll system providers such as ADP, PayChex and Ceridian.

### ACC 254 Federal Taxation

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course examines taxation for individuals, including Schedule C, which is filed for sole proprietorship businesses.

# Course Descriptions

Topics include filing requirements, gross income, exclusions, deductions, exemptions, tax credits, and tax research. A general overview of tax consequences for different forms of business entities such as corporations, partnerships, limited liability companies, and S-Corporations are included. Students will use tax software to complete tax returns. *Prerequisite: ACC 120.*

## ACC 258 Nonprofit Accounting

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course teaches students the specialized accounting principles applicable to federal, state, and local governments and other nonprofit organizations, with an emphasis on fund accounting principles used in the recording of assets, liabilities, equity, revenues, and expenditures. It also covers the analysis and interpretation of financial statements for governmental and nonprofit entities. *Prerequisite: ACC 120.*

## ACC 296 Special Topics in Accounting

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The students in this course will analyze and focus on a selected topic in accounting, offered at various times throughout the year. Since the topic covered in this class differs from year to year, students should seek further information from the instructor before registering regarding the particular topic that will be analyzed.

## American Sign Language (ASL)

### ASL 101 American Sign Language I

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces students to American Sign Language (ASL), including an examination of the cultural values and rules of behavior of the Deaf community in the United States. In developing conversational competence in ASL, the course covers the following: sign

vocabulary, finger spelling, manual numbering system, basic sentence patterns of ASL, correct use of idioms, receptive and expressive language activities; and Deaf/deaf culture in North America. *Prerequisite: Fluency in English strongly recommended.*

### ASL 102 American Sign Language II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course continues the study and practice of basic skills initiated in ASL 101. Emphasizes comprehending, signing, developing receptive skills, and using the glossing system for written ASL. Interactive and extracurricular activities increase understanding of ASL and the deaf culture. *Prerequisite: ASL 101 or equivalent.*

## Architectural and Civil Engineering Technology (ACE)

### ACE 110 Construction and Materials

3 Credits (1 Hr. Lecture 2 Lab 0 Shop)\*15 wks.

5 hrs./wk. (1 hr. lecture 4 hrs. lab)

Students will study two story commercial building design, steel masonry veneer, rainscreen construction with expanded discussion on code requirements, ADA open plan space design, integration of related building systems, assemblies and components and discussion on the various materials being employed are discussed. AutoCAD Architecture and REVIT basics are introduced, the course expands on the use of Excel spreadsheets. *Prerequisite: ACE 113.*

### ACE 113 Architecture and Design

3 Credits (1 Lecture 2 Lab 0 Shop)  
5 Hrs./Wk. (1 Hr. Lecture 4 Hrs. Lab) \*15 wks.

Students will research design and construction processes, materials, and methods to design a commercial wood frame building and its components.

The student will be introduced to basic

drafting and presentation techniques utilized by the A/E industry utilizing CAD within a "hands-on" approach for CAD training for the creation of construction documents. *Prerequisites: Knowledge of basic computer skills. Co-requisite: CAD 110.*

### ACE 121 Structures I

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The student is introduced to the strength of materials by determining internal stresses of basic structural members and the computation of reactions and bending moments of beams and girders. Emphasis is on the design and selection of statically determinate structures of timber. *Prerequisite: ACE 113 Co-requisite: PHY 121 and 122.*

### ACE 122 Structures II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is a continuation of ACE 121. The student is introduced to structural steel design, determining internal stresses from bending moments. Emphasis is on the design and selection of statically determinate structural steel members. *Prerequisites: ACE 121.*

### ACE 155 Residential Site Design

3 Credits (1 Lecture 2 Lab 0 Shop)  
5 Hrs./Wk. (1 Hrs. Lecture 4 Hrs. Lab) \*15 wks.

This is an introduction to residential site design and single lot residential sites with associated access and roads and traveled ways. Students will integrate theory of architecture with functional, environmental and regulatory constraints towards the development of design parameters in creating various residential sites. Students will expand their use of CAD related software and creation of models and methods of presentation to create subject related industry standard documents. *Co-requisite: CAD 110.*



# Course Descriptions

## ACE 165 Commercial Building Design

3 Credits (1 Lecture, 2 Lab, 0 Shop)

5 hrs/week (1 hr lecture, 4 hrs lab) \* 15 wks.

Students will design a commercial building and its related site utilizing REVIT, CAD and BIM related software. The design will include but not be limited to the various stages of the design process from pre-design to construction documentation. Research of materials, methods, assemblies, advanced detailing and annotation within industry standard construction documents will be covered. Students will expand their use of software to create models and methods of presentation including subject related industry standard documents. *Prerequisites: ACE 110.*

## ACE 204 Building Systems

3 Credits (1 Lecture 2 Lab 0 Shop)

5 Hrs./Wk.(1 Hrs. Lecture 4 Hrs. Lab)\*15 wks.

This course introduces plumbing, heating, air conditioning and electrical systems for building applications. Students will design and layout basic building systems for sample residential and commercial building applications. The course will introduce the student to the design drawing process through CAD/BIM related software.

*Prerequisite: ACE 239.*

## ACE 225 Commercial Site Design

3 Credits (1 Lecture, 2 Lab, 0 Shop)

5 hours (1 hr Lecture, 4 hr Lab) \*15 wks.

This is a continuation of ACE 155 Residential Site Design expanding into commercial site design as it relates to residential and commercial subdivisions and single lot commercial sites with associated roads and traveled ways. There will be expanded focus on design principles with functional, environmental and regulatory constraints towards the development of design parameters in creating various commercial sites. Students will expand their use of CAD

related software with the introduction of civil site design software and the creation of models and methods of presentation of subject related industry standard documents. *Prerequisites: ACE 155.*

## ACE 239 Applied Engineering Science

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture)\*15 wks.

Students will be introduced to applied physics through its application in designing a building and its site mechanical systems and its impact on the environment and how to integrate physics related elements for green and sustainable architecture. Students will research, evaluate and prepare applied physics based building systems calculations for coordination with their related building systems CAD design in ACE 204, for the: plumbing, heating, ventilation, air conditioning and fire protection systems. Additionally, students will integrate sustainable design initiatives with an emphasis on sustainability and impact on the environment. *Prerequisite: ACE 110.*

## ACE 268 Trends in Architectural & Civil Engineering

3 Credits (3 Lecture, 0 Lab, 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will introduce the student to special topics related to current Architectural and Civil Engineering Technology (ACE) industry trends. Industry trends may include: planning, design, presentation, techniques, materials and methods, administration practices, and emerging software and equipment technologies.

## ACE 274 Project Management

3 Credits (1 Lecture 2 Lab 0 Shop)

5 Hrs./Wk. (1 Hr. Lecture 4 Hrs. Lab) \*15 wks.

Students are introduced to construction project management and its array of disciplines consisting of methods of management, scheduling, safety, contracting, documentation, construction

operations and preliminary estimating. Students participate in teamwork project utilizing CPM scheduling, and construction field observations. *Prerequisite: ACE 165, ACE 225, and MAT 105 or higher.*

## ACE 297 Internship

3 Credits (3 Lecture 0 Lab 0 Shop)

6 Hrs./Wk. \*15 wks.

This is a senior standing course for the assessment of prior learning and lifelong learning objectives. Field experience is application of knowledge and analysis in professional settings. *Prerequisite: Senior standing for semester IV, department chair permission.*

## ACE 298 Thesis - Capstone

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture)\*15 wks.

This is a senior standing course for the assessment of prior learning and lifelong learning objectives. Students will develop a complete design of an Architectural and or Civil engineering related project that embodies prior course learning, integration of related systems, disciplines and concepts and elements of self-directed study. Students will present the final design which shall include, but not be limited to: research, conceptual to final design concepts and their integration with related systems and disciplines, typical construction related drawings, sample boards, renderings and architectural models. Students will be required to present before a select group of design professionals, faculty and fellow classmates. *Prerequisite: Senior standing for semester IV*

## Anthropology (ANT)

### ANT 100 Introduction to Anthropology

3 Credits (3 Lecture 0 Lab ) Shop)

3 Hrs./Wk. (3 Hr. Lecture) \*15 wks.

This course introduces students to the field of anthropology. Subdisciplines such as cultural anthropology, linguistic anthropology, archaeology and biological

# Course Descriptions

(physical) anthropology will be discussed. Utilizing a broad, holistic approach, this course will explore the interconnections and interdependence of all aspects of the human experience.

## **ANT 101 Introduction to Cultural Anthropology**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hr. Lecture) \*15 wks.

This course introduces students to fundamental practices, research methods, theories and finding in Cultural Anthropology. Anthropology, as a Social Science, is concerned with learning about people in distinct cultures. Cultural Anthropology builds research and theory through interviews, observation and data gathering that generate new knowledge about a cultural group's values and behavior. Students will construct and practice participant observation, key informant selecting and interviewing techniques to explore local "cultures".

## **ANT 200 Forensic Anthropology**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hr. Lecture) \*15 wks.

This course introduces students to the field of forensic anthropology. Sub-disciplines, such as forensic osteology, forensic archeology and forensic taphonomy will be discussed. How forensic anthropology is utilized in the field of criminal justice, law enforcement and criminalistics will be explored.

## **ANT 296 Special Topics in Anthropology**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hr. Lecture) \*15 wks.

Students in this course will analyze selected topics focused on Anthropology.

## **Art (ART)**

### **ART 101 Introduction to 2-D Design**

3 Credits (1 Lecture 2 Studio 0 Shop)  
5 Hrs./Wk. (1 Hr. Lecture 4 Hrs. Studio)  
\*15 wks.

This introductory course deals with the

basics of design on a two dimensional surface: line, shape, space, color, texture, form and value. Emphasis is placed on general design concepts and vocabulary, conceptual thinking, design process, application, and observational skills. This course is divided into a series of projects in several media, dealing with specific design principles and elements, and employs workshops and outside assignments to help students create and evaluate those projects. No previous art experience necessary.

### **ART 102 Principles of 3-D Design**

3 Credits (1 Lecture 2 Studio 0 Shop)  
5 Hrs./Wk. (1 Hr. Lecture 4 Hrs. Studio)  
\*15 wks.

This course will expand the knowledge gained in ART 101 (2-D Design) and will emphasize theoretical and practical problem solving experience relating to the elements of art and the principles of design in the context of 3-D form creation. The course employs lecture, in class workshops, and outside assignments to help students create and evaluate a variety of problem solving 3-D projects that involve mass, volume, closed and open form, plane, texture, multiples, and site-specific installation.

### **ART 103 Drawing I**

3 Credits (1 Lecture 2 Studio 0 Shop)  
5 Hrs./Wk. (1 Hr. Lecture 4 Hrs Studio)  
\*15 wks.

Drawing from nature, still life and the model with an emphasis on accurate observation and recording. The role of drawing in visual communication and creative exploration will also be emphasized.

### **ART 110 Art History, Renaissance to Contemporary**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hr. Lecture) \*15 wks.

This course offers an overview of major artists, artistic movements, periods, techniques, and styles in Europe and North America. Students will participate in the course as art historians and learn

to recognize key styles, themes, and issues. Students will also explore how the arts are influenced by and relate to the social, historical, cultural, and political events. Additionally, students will develop their analytical thinking and writing skills. The material will be presented through slides, lectures, discussions, and readings. *Prerequisite: Meet prerequisites for or have completed ENG 101 or Department Chair approval.*

### **ART 125 Twentieth Century American Crafts**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hr. Lecture) \*15 wks.

This survey course follows the growth of American crafts from the late 1800's to the present. Emphasis is placed on the relationship between period stylistic trends in craft, the arts, architecture and larger societal influences. The overall world historical context and its relationship to and influence on American craft will be explored. The course is organized around a series of slide lectures and class discussions. The research paper will allow the student to explore areas of personal interest within the bounds of American craft.

### **ART 150 Approaches to Art**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hr. Lecture) \*15 wks.

The overall purpose of this course is to provide the student with a basic understanding of the visual arts. The course deals with the nature of art, the evaluation of art, and the principles, processes, and materials of art. Specifically, we examine the formal elements of design and look at a wide variety of both two and three dimensional art to learn about the process and tools involved in art creation.

## **Astronomy (AST)**

### **AST 101 Astronomy Lecture**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

# Course Descriptions

This course will cover the fundamentals of astronomy. Topics covered will include the solar system and Earth's place in it, stars, galaxies, and concepts of the universe. Also covered will be telescopes, spacecraft, and other tools used to acquire knowledge of distant objects. There is no math prerequisite, however math concepts will be used in describing models, and students will be expected to solve problems using arithmetic and simple algebra concepts. *Co-requisite: AST 102.*

## AST 102 Astronomy Lab

1 Credit (0 Lecture 1 Lab 0 Shop)

2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

This course is a hands-on tour of the visible universe through computer simulated and experimental exploration. Students will encounter objects located in the solar system, stars filling the Milky Way, and objects located much further away in the far reaches of space. Students will be expected to solve problems using arithmetic and simple algebra concepts. *Co-requisite: AST 101.*

## Automotive Technology (AUT)

*Automotive Technology core includes AUT 100, 110, AUT 120, AUT 150, AUT 170 and AUT 200.*

## AUT 100 Introduction to Automotive Technology

1 Credit (.25 Lecture 0 Lab .75 shop)

19 Hrs./Wk. (2 Hr. Lecture 17 Hrs. Shop) \*2 wks.

This is the first course of instruction for Automotive Technology students. The course deals with shop safety, tools and procedures related to automotive technology. Safety and health in the workplace along with a look at personal lifestyle will be discussed. Hand tools, power tools, torch operation, battery boosting and charging will be covered.

## AUT 110 Brakes I

2 Credits (1 Lecture 1 Lab 0 Shop)

7.5 Hrs./Wk. (2.5 Hr. Lecture, 5 Hrs.

Lab)\*6 wks.

Class may be offered as a six week course doubling the time in lecture and lab.

This course teaches the theory of hydraulics, mechanical advantage and all types of brake systems with practical instructions in testing and servicing car and light truck brakes. Laws from the Maine State Inspection Manual pertaining to brakes are presented. *Prerequisite: AUT 100.*

## AUT 120 Suspension and Alignment

2 Credits (1 Lecture 1 Lab 0 Shop)

3 Hrs./Wk. (1 Hr. Lecture 2 Hrs. Lab)\*15 wks. or 7.5 Hrs./Wk. (2.5 Lecture 5 Hrs. Lab) \* 6 wks.

Class may be offered as a six week course increasing the time in lecture and lab.

This course teaches the theory and operation of the suspension systems of modern vehicles with practical experiences in analyzing problems and replacement of worn parts. Included will be the study of front and rear wheel alignment and wheel balance. *Prerequisite: AUT 100.*

## AUT 130 Engine Repair I

1 Credit (1 Lecture 0 Lab 0 Shop)

2.15 Hrs./Wk. (2.15 Hrs. Lecture) \* 7 wks.

This course teaches the basic construction of modern automotive engines. The theory, operation, identification and location of all engine system components will be studied. *Prerequisite: AUT Core.*

## AUT 131 Engine Repair Lab

3 Credits (0 Lecture 0 Lab 3 Shop)

17 Hrs./Wk. (17 Hrs. Shop)\*8 wks.

This lab will provide the opportunity for students to diagnosis and repair all engine system components. The systems will include but not be limited: cylinder heads, valve train, engine block, crankcase, cooling passages and lubrication. The repair section of this unit will require students to remove, disassemble, reassemble and reinstall a

functional engine. *Co-requisite: AUT 130. Prerequisite: AUT Core.*

## AUT 150 Electrical Systems I

3 Credits (2 Lecture 1 Lab 0 Shop)

5 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab) \*15 wks. or 10 Hrs./Wk. (5 Hrs. Lecture 5 Hrs. Lab)\*6 wks.

Class may be offered as a six week course increasing the time in lecture and lab.

This course is the first in the electrical series covering the theory and fundamentals of electricity. The principles and procedures for servicing batteries, starters and charging systems using standard test equipment will be covered. A comprehensive study of these systems will be performed with testing both on and off the vehicle. *Prerequisite: AUT or FOA majors only.*

## AUT 152 Engine Repair I

5 Credits (1.5 Lecture 0 Lab 3.5 Shop)

22.5 Hrs./Wk. (2.5 Hrs. Lecture 0 Hrs. Lab 20 hours Shop) 8 wks.

This course teaches the basic construction of modern automotive engines. The theory, operation, identification, and location of all engine system components will be studied. *Prerequisites: AUT Core, ENG 101 or ENG 105 and MAT 100.*

## AUT 159 Auto Electronic and HVAC

5 Credits (3 Lecture 0 Lab 2 Shop)

19 Hrs./Wk. ( 6 Hrs. Lecture 13 Hrs. Shop) \*8 wks.

This course teaches the theory of operation, diagnosis and repair of the electronic control systems for accessory and body control components. The systems will include, but not be limited to: electronic feedback systems, heat/cooling ventilation, interior accessories, and body electrical. This course introduces the principles of refrigeration and heat transfer. Modern test and recovery equipment will be used to diagnose and service automotive air conditioning systems. *Prerequisite: AUT Core.*

# Course Descriptions

## AUT 160 Air Conditioning

1 Credit (.5 Lecture .5 Lab 0 Shop)  
1.5 Hrs./Wk. (.5 Hrs. Lecture 1 Hr. Lab)  
\*15 wks.

This course introduces the principles of refrigeration and heat transfer. Modern test and recovery equipment will be used to diagnose and service automotive air conditioning systems. *Prerequisite:* AUT Core.

## AUT 170 Engine Performance I

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs Lecture 2 Hrs Lab) \*15 wks. or  
10 Hrs./Wk. (5 Hrs. Lecture 5 Hrs. Lab) \*6 wks.

Class may be offered as a six week course increasing the time in lecture and lab.

This course will cover electronic control systems and computer functions as they relate to drivability, diagnosis and repair of cooling, ignition, fuel and emission components. *Prerequisite:* AUT 100.

## AUT 180 Field Experience

4 Credits (0 Lecture 0 Lab 4 Shop)  
22.5 Hrs./Wk. (22.5 Hrs. Shop) \*8 wks.

In AUT 180 the student works in the service department of a sponsoring automotive dealership or independent repair facility. This hands-on training, under the direction and supervision of an experienced technician, reinforces the subjects learned in the first semester automotive core curriculum. *Prerequisite:* AUT Core.

## AUT 181 Field Experience

2 Credits (0 Lecture 0 Lab 2 Shop)  
18 Hrs./Wk. (18 Hrs. Shop) \*5 wks.

Students work in the service department of a sponsoring automotive dealership or independent repair facility. This hands on training, under the direction and supervision of an experienced technician, reinforces the subjects learned in the first semester automotive core curriculum. *Prerequisites:* Department chair approval and a minimum 2.0 GPA with AUT 159.

## AUT 182 Field Experience

4 Credits (0 Lecture 0 Lab 4 Shop)  
22.50 Hrs./Wk. (22.5 Hrs. Shop) \*8 wks.

Students work in the service department of a sponsoring automotive dealership or independent repair facility. This hands-on training, under the direction and supervision of an experienced technician, reinforces the subjects learned in the first semester automotive core curriculum. *Prerequisites:* Department chair approval and a minimum 2.0 GPA with AUT 130, 131, and 241.

## AUT 184 Field Experience

4 Credits (0 Lecture 0 Lab 4 Shop)  
22.5 Hrs./Wk. (22.5 Hrs. Shop) \*8 wks.

Student work in the service department of a sponsoring automotive dealership or independent repair facility. This hands-on training, under the direction and supervision of an experienced technician, reinforces the subjects learned in the first semester automotive core curriculum. *Prerequisites:* Department chair approval and a minimum 2.0 GPA with AUT 271.

## AUT 200 State Inspection

1 Credit (.5 Lecture 0 Lab .5 Shop)  
15 Hrs./Wk. (3.75 Hrs. Lecture 11.25 Hr. Lab) \*2 wks. or 30 Hrs./Wk. (7.5 Hrs. Lecture 22.50 Hrs. Lab) \*1 week

Class may be offered as a one week course increasing the time in lecture and lab. This course will interpret the Maine State Inspection manual. Testing and measuring equipment will be used to do a practice inspection on a motor vehicle.

## AUT 240 Automatic Transmission

6 Credits (3 Lecture 0 Lab 3 Shop)  
22.5 Hrs./Wk. (5.5 Hrs. Lecture 17 Hrs. Shop) \*8 wks.

This course teaches theory and practice devoted to all types of automatic transmissions/trans axles and their adjustment, troubleshooting and overhaul. Removal, disassembly, repair, assembly of pumps, converters, gear train, shafts,

bushings, case friction and reaction units, hydraulic and electronic shift control will be covered. *Prerequisite:* AUT 159.

## AUT 241 Automatic/Manual Transmission

5 Credits (3 Lecture 0 Lab 2 Shop)  
17 Hrs./Wk. (6 Hrs. Lecture 11 Hrs. Shop) \*8 wks.

This course will cover transmission theory and power flow from the engine to the drive axle. Removal, disassembly, repair, assembly of pumps, converters, gear train, shafts, bushings, case friction and reaction units, hydraulic and electronic shift control will be covered. Diagnosis and repair of clutch, transmission, trans axle, drive shaft, ring/pinion, axle shaft, differential case, and four-wheel drive components will be included. *Prerequisites:* AUT 130 and 131 or AUT 152.

## AUT 244 Advanced Engine Performance

5 Credits (3 Lecture 0 Lab 2 Shop)  
17 Hrs./Wk. (6 Hrs. Lecture 0 Hrs. Lab 11 Hrs Shop) \*8 weeks

This course deals with engine performance principles as related to electronic feedback systems for fuel control, spark management, emissions controls and related systems. Strategy based diagnosis will be emphasized using electronic diagnostic equipment. The student will troubleshoot OBDII drivability faults as they relate to modern emission controlled engines and related systems. Diagnosis leading to tests and repairs to trade standards of time and accuracy. *Prerequisite:* AUT 170.

## AUT 252 Manual Transmission & Driveline

5 Credits (3 Lecture 0 Lab 2 Shop)  
17 Hrs./Wk. (6 Hrs Lecture 0 Hrs. Lab 11 Hrs. Shop) \*8 weeks

This course will cover transmission theory and power flow from the engine to the drive axle. Including noise and vibration diagnosis and repair, diagnosis and repair

# Course Descriptions

of clutch, transmission, transaxle, drive shaft, ring/pinion, axle shaft, differential case, and four-wheel drive components.

*Prerequisites:* AUT Core; ENG 101 or ENG 105; and MAT 100.

## **AUT 271 Electronic Engine Control**

5 Credits (3 Lecture, 0 Lab, 2 Shop)

17 Hrs./Wk. (6 Hrs. Lecture 11 Hrs. Shop) \*8 wks.

This course will cover all electronic components found in today's automobile. It also deals with engine performance principles as related to electronic feedback systems for fuel control, spark management, emission controls and related systems. Strategy based diagnosis will be emphasized using electronic diagnostic equipment. The student will troubleshoot OBDII drivability faults as they relate to modern emission controlled engines and related systems. Diagnosis will lead to tests and repairs within the trade standards of time and accuracy.  
*Prerequisite:* AUT 159.

## **AUT 276 Advanced Systems Diagnosis**

3 Credits (2 Lecture; 0 Lab 1 Shop)

19 Hrs./Wk. (7.5 Hrs. Lecture 0 Hrs. Lab 11.5 Hrs. Shop) 4 wks.

This course will cover alternative powertrains including diesel, propane, natural gas, hydrogen, hybrid, and electric vehicles. Diagnosis of these systems as well as all computerized vehicle systems including vehicle communication networks.  
*Prerequisite:* AUT 244.

## **AUT 292 Computerized Chassis Controls**

3 Credits (1 Lecture 1 Lab 1 Shop)

22.5 Hrs./Wk. (3.75 Hrs. Lecture 7.5 Hrs. Lab 11.25 Hrs. Shop) 4 wks.

This course will involve a comprehensive study of electronic and computerized brake, traction, suspension, steering, and alignment systems of modern vehicles. A guide to practical experiences in analyzing problems and replacement of

faulty sensors and associated components will provide students with theory and procedures necessary to diagnose faults.  
*Prerequisites:* AUT Core, ENG 101 or ENG 105 and MAT 100.

## **AUT 296 Independent Study**

*Variable Credit*

This provision allows for a performance contract between student and Department instructor(s) to reach mutually agreed upon goals. Credit earned and grade dependent upon quality and efficiency of performance. (Credit hours are variable at a formula of 45 hours of student effort equaling 1 credit hour.) *Prerequisite:* Department Chair approval.

## **Biology (BIO)**

### **BIO 101 Introduction to General Biology**

3 Credits (3 Lecture 0 Lab 0 Clinical)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

An introduction to the chemical and physical nature of biological processes intended for students who do not plan to major in biological science. Cell structure, metabolism, reproduction, inheritance, and evolution are examined in lecture and laboratory using a wide variety of plants and animals as examples and experimental models.

### **BIO 102 Introduction to General Biology**

1 Credit (0 Lecture 1 Lab 0 Clinical)  
2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

Laboratory experiments designed to support the topics covered in BIO 101.  
*Co-requisite:* BIO 101.

### **BIO 104 Health and Wellness**

3 Credits (3 Lecture 0 Lab 0 Clinical)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

An introduction to the lifestyle skills that lead to better health. Course will include an overview of concepts involving the many aspects of health. Topics that will

be covered include lifestyle choices and health, physical fitness, nutrition, weight management, stress management and emotional health, healthy aging, addictions, environmental health and complementary and alternative medicine. Students will participate in various activities including journaling and behavior assessments to help develop personalized lifestyle plans to improve overall health.

### **BIO 105 Essentials of Human Anatomy and Physiology**

3 Credits (3 Lecture 0 Lab 0 Clinical)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This one semester course is designed to provide the student with rudimentary knowledge of human anatomy and physiology. This is a non-laboratory course that will cover the chemical basis of life, basic cell and tissue structure and all of the organ systems of the human body. Note: This course does not satisfy the requirements for programs such as nursing, clinical lab science, or radiological technology. *Prerequisite:* BIO 101/102 with a grade C or higher.

### **BIO 110 Fundamentals of Environmental Science**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to provide students with a sound foundation in basic principles and unifying concepts of Environmental Science. Topic selection is based on major themes of modern environmental sciences: humans and sustainability; science and ecological principles; sustaining biodiversity and natural resources; and sustaining environmental quality and human societies. This course will study the interaction and relationship between humans and the environment. Students will gain an awareness of the importance of Earth's systems in sustaining our daily lives, plus the scientific foundation and tools needed to apply critical thought to contemporary environmental issues. The course is intended for both science and non-science majors. *Co-requisite:* BIO 111.

# Course Descriptions

## BIO 111 Fundamentals of Environmental Science

1 Credit (0 Lecture 1 Lab 0 Clinical)  
2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

The laboratory provides students with experiential learning to support concepts and principles introduced in the lecture.  
Co-requisite: BIO 110.

## BIO 115 Anatomy and Physiology I

3 Credits (3 Lecture 0 Lab 0 Clinical)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to provide the student with in-depth theory of human anatomy and physiology. This is the first part of a two-semester course and will cover organization of the body, the chemical basis of life, support and movement, as well as the nervous system and integumentary system. *Prerequisites:* Students must meet the prerequisites for both ENG 101 and MAT 100, or permission from the instructor. *Co-requisite:* BIO 116.

## BIO 116 Anatomy and Physiology I

1 Credit (0 Lecture 1 Lab 0 Clinical)  
2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

Laboratory experiments designed to support the topics covered in BIO 115.  
Co-requisite: BIO 115.

## BIO 117 Anatomy and Physiology II

3 Credits (3 Lecture 0 Lab 0 Clinical)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to provide the student with in depth theory of human anatomy and physiology. This is the second part of a two-semester course and will cover the body systems that provide special sensation, transport, respiration, digestion, reproduction, excretion and selected topics in nutrition, metabolism, blood, lymphatic, immune system, fluid and electrolyte balance and pregnancy. *Prerequisites:* BIO 115 (C or better) and BIO 116 (C or better) or permission from instructor. *Co-requisite:* BIO 118.

## BIO 118 Anatomy and Physiology II

1 Credit (0 Lecture 1 Lab 0 Clinical)  
2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

Laboratory experiments designed to support the topics covered in BIO 117.  
Co-requisite: BIO 117.

## BIO 121 Nutrition

3 Credits (3 Lecture 0 Lab 0 Clinical)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces the basics of nutrition with an emphasis on incorporating practical nutritional information into everyday life. Topics include basic nutrition, nutrition related to disease prevention and weight management, and nutrition throughout the life cycle. *Prerequisites:* BIO 101/102 or BIO 115/116 with a grade C or higher.

## BIO 131 Biology I Lecture

3 Credits (3 Lecture 0 Lab 0 Clinical)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

BIO 131 is the first course in a sequence intended for students that plan to major in biological science. BIO 131/132 focuses on cell and molecular biology in prokaryotes, plants, and animals. Changes through time and modern biology will be presented in this course. Topics will include structure and function of cells, proteins, and DNA. Biological chemistry of metabolism and photosynthesis as well as Mendelian genetics with an evolutionary perspective will be discussed. *Prerequisites:* Must meet the prerequisites for both ENG 101 or ENG 105 and MAT 100. *Co-requisite:* BIO 132 laboratory.

## BIO 132 Biology I Lab

1 Credit (0 Lecture 1 Lab 0 Clinical)  
2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

This laboratory course is the first laboratory course in a sequence intended for students that plan to major in the biological sciences. In this course students will ask questions regarding: basic biochemistry, molecular activity, cellular

metabolism, Mendelian genetics and gene expression. Students will develop skills in basic statistics and scientific writing to report their experimental results. They will use the scientific method to problem solve in a biological lab setting. Laboratory safety and procedures will be introduced along with microscopy, spectrophotometry and DNA skills. *Prerequisites:* Must meet the prerequisites for both ENG 101 or ENG 105 and MAT 100. BIO 132 includes laboratory experiments designed to support the topics covered in BIO 131. *Co-requisite:* BIO 131.

## BIO 133 Biology II Lecture

3 Credits (3 Lecture 0 Lab 0 Clinical)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

BIO 133 is the second course in a sequence intended for students that plan to major in biological sciences. This course focuses on the biology of organisms at structural levels above the molecular and cellular levels. Topics include principles of evolution, biodiversity and ecology. *Prerequisites:* BIO 131/132 with a C or better. *Co-requisite:* BIO 134.

## BIO 134 Biology II Lab

1 Credit (0 Lecture 1 Lab 0 Clinical)  
2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

The laboratory provides students with experiential learning to support concepts and principles introduced in BIO 133. *Prerequisites:* BIO 131/132 with a C or better. *Co-requisite:* BIO 133.

## BIO 211 Microbiology

3 Credits (3 Lecture 0 Lab 0 Clinical)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to give the student an introduction into the world of microbiology. Students will explore the morphology and physiology of bacteria, viruses, fungi and other cellular parasites, as students study the roles in disease and immunology. *Prerequisites:* A grade of C or better in one of the following Life Science course sequences: BIO 115/116 and BIO 117/118 OR BIO 131/132 and BIO 133/134. *Co-requisite:* BIO 212.

# Course Descriptions

## BIO 212 Microbiology

1 Credit (0 Lecture 1 Lab 0 Clinical)  
2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

Laboratory experiments designed to support the topics covered in BIO 211.  
Co-requisite: BIO 211.

## BIO 222 Genetics

3 Credits (3 Lecture 0 Lab 0 Clinical)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This introductory course is designed to explore the fundamental concepts of genetics. The first part of the course focuses on the basic principles of classical (Mendelian) genetics; including the nature of hereditary factors and the mechanisms by which they are transmitted and expressed. The latter part of the course covers modern discoveries and techniques that have a foundation in molecular biology. Prerequisites: BIO 101/102 or BIO 115/116 or BIO 131/132 with a grade of C or higher.

## BIO 223 Genetics Lab

1 Credits (0 Lecture 1 Lab 0 Clinical)  
2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

Genetics laboratory will complement genetics lecture BIO 222 with a series of actual and simulated genetic crosses that will demonstrate principles of Mendelian inheritance and labs that cover key DNA and molecular techniques. Analysis of genetic outcomes and application of results to general principles will be emphasized. You will work on improving your scientific writing skills by maintaining a lab notebook and constructing lab reports. Prerequisite: BIO 101/102 or BIO 115/116 or BIO 105 or BIO 131/132 with a C or better. Co-requisite: BIO 222. Student may take Lecture without Lab but may NOT take Lab without Lecture.

## BIO 231 Pathophysiology

3 Credits (3 Lecture 0 Lab 0 Clinical)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This pathophysiology course will continue to build on the foundations acquired in

Anatomy and Physiology I and II, providing an understanding of the mechanisms of disease, manifestations, and treatments of common health problems. The student is introduced to concepts of altered health states across the lifespan. It is designed to meet the needs of students preparing for careers in health care. Pre-requisite: BIO 117/118 with a C or better.

## Building Construction Technology (BCT)

### BCT 101 Introduction to Hand and Power Tool Safety

1 Credit (.25 Lecture 0 Lab .75 Shop)  
19 Hrs./Wk. (2 Hr. Lecture 17 Hrs. Shop) \*2 wks.

This course introduces students to safety procedures used for hand and stationary power tools. Students will demonstrate their understanding by constructing a saw horse from a provided drawing.

### BCT 126 Construction Site Surveying

2 Credits (1 Lecture 1 Lab 0 shop)  
3 Hrs./Wk. (1 Hr. Lecture 2 Hrs. Lab) \*15 wks.

Students are introduced to preliminary site development using basic zoning, code, and deed descriptions as they relate to a site plan. Construction site surveying is introduced through the demonstrated use of surveying transits, builder's level, and associated equipment applied directly to Residential Construction.

### BCT 128 Basic Strength of Materials

2 Credits (2 Lecture 0 Lab 0 Shop)  
2 Hrs./Wk. (2 Hrs. Lecture) \*15 wks.

This course is intended to give students a basic understanding of the forces and uniform loads taken into account in designing and building Residential Structures.

### BCT 142 Building Concepts I

3 Credits (1.5 Lecture 0 Lab 1.5 Shop)  
16 Hrs./Wk. (4 Hrs. Lecture, 12 Hrs. Shop) \*5.5 wks.

This is the first in a series of courses designed to teach the student the fundamental principles Residential and Light Commercial construction are based upon. Theory of basic concepts such as straight, level, plumb, and square are covered in the classroom as well as through practical hands-on projects. Basic foundation and floor framing theory and techniques will be addressed. Co-requisite: BCT 101 or department chair approval.

### BCT 143 Building Concepts II

3 Credits (1 Lecture 0 Lab 2 Shop)  
14 Hrs./Wk. (2 Hrs. Lecture 12 Hrs. Shop) \*7.5 wks.

This course builds upon BCT 142 Building Concepts I. While reinforcing the basic fundamentals learned, the depth and scope of these basic concepts will be expanded. Through construction projects and mock-ups, students will demonstrate new learning based on basic construction fundamentals while being introduced to basic project management principles. Prerequisite: BCT 142 or department chair approval.

### BCT 144 Building Concepts III

3 Credits (1 Lecture 0 Lab 2 Shop)  
14 Hrs./Wk. (2 Hrs. Lecture 12 Hrs. Shop) \*7.5 wks.

This course builds upon BCT 143 Building Concepts II. Fundamental building concepts learned the first semester will be reinforced through classroom lecture, mock-ups, and live projects. Individual placement on live projects will be determined by competency test results. Student advancement, responsibilities, and pace will be determined by successfully demonstrating higher levels of accomplishment assessed through competency testing. Fundamental concepts of fenestration, building envelope, and basic building science will be addressed. Prerequisite: BCT 143 or department chair approval.

### BCT 145 Building Concepts IV

3 Credits (1 Lecture 0 Lab 2 Shop)  
14 Hrs./Wk. (2 Hrs. Lecture 12 Hrs. Shop) \*7.5 wks.

# Course Descriptions

This course builds upon BCT 144 Building Concepts III. Students will continue to strengthen previous learning and develop new skills through continued course work, mock-ups, and live projects. Project management fundamentals will be stressed through active participation in design, scheduling, material ordering, and problem solving. Students will be challenged through competency testing at advanced levels upon successfully demonstrating core competencies. Coverage of fundamental concepts of fenestration, building envelope, and basic building science will continue from previous course. *Prerequisite: BCT 144 or department chair approval.*

## **BCT 152 Construction Document Reading & Cost Estimating**

*3 Credits (3 Lecture 0 Lab 0 Shop)*

*3 Hrs./Wk. (3 Hr. Lecture 0 Hrs. Shop)\*15 wks.*

Students will be introduced to documents related to residential construction, including Construction Drawings, Specifications, Schedules, and Contracts. The vocabulary of lines will be emphasized, including object lines, extension lines, dimension lines, and hidden lines along with the basic use of a scale rule. Students will generate a competitive Cost Analysis of a residential home from a set of construction plans, using Microsoft Excel spreadsheet software as a primary tool. Material and labor will be calculated based on standard estimating procedures and building practices specific to this region. A Bid Summary will be prepared taking into account materials, labor, sub-contractor costs, overhead, and profit. Students will be exposed to minimum legal and contractual requirements in the State of Maine, the Maine Uniform Building and Energy Code (MUBEC), DigSafe, and OSHA. *Prerequisite: BCT 145 or department chair approval.*

## **BCT 154 Millwork I**

*5 Credits (2 Lecture 0 Lab 3 Shop)*

*23.5 Hrs./Wk. (4.25 Hrs. Lecture 19.25 Hrs. Shop) \*7 wks.*

In this course students will learn about the major finish components of a residential home. Through a combination of mock-up and live work, students will experience the proper

millwork and instruction of interior finish such as: door / window installation, casing, profiled baseboard, crown moldings, basic cabinets, and finish stair construction. *Prerequisite: Participation in BCT Jobsite Track program and department chair approval.*

## **BCT 180 Introduction to Building Science**

*3 Credits (3 Lecture 0 Lab 0 Shop)*

*3 Hrs./Wk. (3 Hrs Lecture) \*15 wks.*

Introduction to Building Science is designed to demonstrate how residential buildings obey the basic laws of physics, including moisture movement and air flow, differential pressures, heat transfer through conduction, convection, and radiation. It will show how failure to account for these laws of physics can result in structural problems and building failure, poor indoor air quality or "Sick Building Syndrome", and high heating and cooling costs. Students will be exposed to the sciences involved in Foundations, Building Shells, Insulations methods, Roof types, HVAC systems, Domestic Water systems, Passive and Active Solar, Photovoltaics, and Interior Finish choices. Compliance with the Maine Uniform Building and Energy Code as well as the Building Performance Institute certification process will be discussed.

## **BCT 185 Field Experience I**

*4 Credits (0 Lecture 0 Lab 4 Externship)*

*Projected externship hours 280 minimum \*8 wks.*

In this course, the student works on the job site / shop of a sponsoring construction company. This hands-on training, under the direction and supervision of an experienced supervisor, reinforces the subjects learned in the first semester BCT core curriculum.

*Prerequisites: department chair approval and a minimum 2.0 GPA with BCT 101, 126, 142, 143.*

## **BCT 186 Field Experience II**

*2 Credits (0 Lecture 0 Lab 2 Externship)*

*Projected externship hours 160 minimum \*4 wks.*

In this course, the student works on the job

site / shop of a sponsoring construction company. This hands-on training, under the direction and supervision of an experienced supervisor, reinforces the subjects learned in the first semester BCT core curriculum and previous Field Experience. *Prerequisites: department chair approval and a minimum 2.0 GPA with BCT 154 and previous BCT Field Experience I, construction company or independent contractor sponsor and valid driver's license required.*

## **BCT 197 Internship**

*3 Credits \*15 wks.*

Total hour commitment varies from 135 to 280 hours based on the nature of the project /experience. This number will be determined by Department Chair prior to course registration. The internship option gives a student the opportunity to apply prior learning working in the BCT department. For example, a first-year student might learn timber framing and as an intern during her/his second year lead some first-year students in the construction of a new frame. Scheduling to meet minimum contact hours and fulfill course requirements will be agreed to between student and instructor. All projects and participation subject to department chair approval. *Prerequisite: BCT 145.*

## **BCT 200 Structural Analysis I**

*3 Credits (3 Lecture 0 Lab 0 Shop)*

*6 Hrs./Wk. (6 Hr. Lecture)\*7.5 wks.*

This course will demonstrate the effect improper building practices have on the structural integrity of a home and teach students to recognize structural load path transfer from roof to footing. Building course outcomes around these two focal points will give students the knowledge and understanding to make critical construction decisions allowing them to apply best building practices. We are an unlicensed trade in the State of Maine. While many building practices are obviously correct or obviously deficient, this course will illustrate the differences and consequences of improper building practices. Students will immediately apply this knowledge in their remaining field experiences. *Prerequisite: Enrolled in Jobsite Track program or department chair Approval.*



# Course Descriptions

## BCT 205 Interior Finish I

5 Credits (2 Lecture 0 Lab 3 Shop)  
11 Hrs./Wk. (2 Hr. Lecture 9 Hrs. Shop)  
\*15 wks.

In this course students will learn about the major finish components of a residential home. Through a combination of mock-up and live work, students will experience the proper millwork and instruction of interior finish such as: door / window installation, extension jambs, casing, profiled baseboard, crown moldings, drywall preparation and installation, router use, and basic scribing / coping techniques. *Prerequisite: BCT 145 or department chair approval.*

## BCT 251 Construction Business & Site Management

2 Credits (2 Lecture 0 Lab 0 Shop)  
2 Hrs./Wk. (2 Hr. Lecture)\*15 wks.

The focus of this course is on construction specific business practices, legal issues, project scheduling, job supervision, and site management. This course would benefit any graduate attempting to start their own contracting business. Employers also feel an employee's value is enhanced with greater awareness of how their business operates, legal consequences of an individual or client's actions, and how schedule is impacted by variables the job supervisor has to deal with on a daily basis. Understanding a job supervisors role changes an employee's perspective about how and why their boss makes the decisions he/ she does. This understanding makes them more valuable to an employer. *Prerequisite: BCT 144 or department chair approval.*

## BCT 255 Interior Finish II

5 Credits (2 Lecture 0 Lab 3 Shop)  
11 Hrs./Wk. (2 Hr. Lecture 9 Hrs. Shop)  
\*15 wks.

In this course, students will continue to learn about the major finish components of a residential home. Through a combination of mock-up and live work, students will experience the proper millwork and instruction of interior finish such as: cabinet construction, kitchen cabinet and countertop installation, and finish stair construction including open mitered skirt and post to

post balustrade. *Prerequisite: BCT 205 or department chair approval.*

## BCT 285 Field Experience III

4 Credits (0 Lecture 0 Lab 4 Externship)  
Projected externship hours 280 minimum \*8 wks.

In this course, the student works on the job site / shop of a sponsoring construction company. This hands-on training, under the direction and supervision of an experienced supervisor, reinforces the subjects learned in the first semester BCT core curriculum and previous Field Experience. *Prerequisites: department chair approval and a minimum 2.0 GPA in BCT 186, company or independent contractor sponsor and valid driver's license required.*

## BCT 286 Field Experience IV

4 Credits (0 Lecture 0 Lab 4 Externship)  
Projected externship hours 280 minimum \*8 wks.

In this course, the student works on the job site / shop of a sponsoring construction company. This hands-on training, under the direction and supervision of an experienced supervisor, reinforces the subjects learned in the first semester BCT core curriculum and previous Field Experience. *Prerequisites: Department Chair approval and a minimum 2.0 GPA in BCT 285, construction company or independent contractor sponsor and valid driver's license required.*

## BCT 296 Special Topics in Building Construction

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Students taking this course will explore selected topics in Building Construction Technology that are relevant at the time of delivery. This course will not address subject matter currently offered within other BCT courses. Since the topics will change from year to year, students should check with the instructor to obtain more in-depth information on the topic offered for that given time period.

## BCT 297 Externship in Building Construction

3 credits \*15 Weeks

*(Total hour commitment varies from 135 hrs to 280 hrs based on the nature of the project / experience. This number will be determined by Department Chair prior to course registration.)*

The externship option gives a student the opportunity to apply prior learning in a professional setting off campus. Students may propose an externship site or choose from a list of established externship partners, but regardless all placements require Department Chair approval. Students will be responsible for scheduling/ transportation to fulfill required number of contact hours and completion of course requirements. *All externships subject to department chair approval. Prerequisite: BCT 145.*

## BCT 298 Capstone in Building Construction

3 credits \*15 weeks

*(Total hour commitment varies from 135 hrs to 280 hrs based on the nature of the project/experience. This number will be determined by department chair prior to course registration.)*

The capstone option gives a student the opportunity to demonstrate comprehensive learning in the major through the completion of an approved project. The experience must include aspects of design, estimation, and skill proficiency germane to the project that illustrate both comprehension and development of program skills. For example, building an exterior deck from conceptual stage to finished product. Scheduling to meet minimum contact hours and fulfill course requirements will be agreed to between student and instructor prior to the course start. *All projects and participation subject to Department Chair approval. Prerequisite: BCT 145.*

# Course Descriptions

## Business Administration and Management (BUS)

### BUS 100 Understanding Business

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The purpose of this course is to introduce students to the nature and structure of business in the United States. The scope of the course will include an overview of the functional areas (i.e. finance, marketing, etc.) as well as the terms and concepts used in modern organization.

### BUS 101 Small Business Management

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The purpose of this course is to introduce students to the principles involved in working through, and understanding human resources. It is designed to enhance the leadership and administrative skills of existing and potential first line managers, supervisors and small business owners.

### BUS 110 Principles of Supervision

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The purpose of this course is to introduce students to the principles involved in working through, and understanding human resources. It is designed to enhance the leadership and administrative skills of existing and potential first line managers, supervisors and small business owners.

### BUS 115 Leadership and Interpersonal Relations

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to introduce students to the concept of leadership, various leadership styles and the cause and effect relationships in using the styles. Student successfully completing this course will learn that leadership is a set of practices that can be mastered. Participants will "experience" leadership activities by developing appropriate interpersonal skills through role playing and other activities.

### BUS 118 Introduction to Management

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks

This course focuses on building critical skills for managers to work effectively in organizations. How effective managers plan, organize, and lead organizations is analyzed. Topics include motivation, change, politics, diversity, and decision making.

### BUS 120 Employment Law

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Employment Law (State of Maine and Federal) covers a broad range of subject areas and its impact develops well before the advertising and recruiting of personnel. The purpose of this course is to promote an understanding of acceptable and unacceptable employment practices for hiring and supervising employees.

### BUS 124 Legal Environment of Business

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course exposes students to the United States legal environment in which companies, large and small, operate. Students will explore such topics as: The legal system, alternative dispute resolution, business ethics, constitutional law, torts, product liability, intellectual property, contracts, business organizations, the regulatory process, antitrust, consumer and environmental issues, and criminal law.

### BUS 140 Introduction to Sports Management

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will discuss sports management and the scope of opportunities the sports industry presents. It will discuss major challenges confronting various segments (collegiate, professional, and international) of the industry. The course will also explore the historical, psychological, sociological,

and philosophical foundations of sports management, organizational concepts and their application to sports management. Event planning and facility management will also be introduced.

### BUS 145 Facilities Management

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will explore the world of Facilities Management. The student will gain an understanding as to the complexity involved in the overall programming, operation, maintenance, promoting and managing various types of facilities. The course will include the theory behind planning and managing a facility as well as numerous case studies allowing the student to apply the theory presented in the beginning of the course.

### BUS 150 Effective Customer Relations

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

A sound and loyal customer base is one of an organization's most important assets. This course details the origin of positive customer relations and discusses the tools, attitudes and training required to support a comprehensive program.

### BUS 155 Business Retail and Merchandising Management

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Considered a major component of economic activity, retailing surrounds and impacts us on a daily basis. This course is designed to provide an understanding of the principles involved in a successful retail operation and recognize the dramatic change the activity is undergoing - from "bricks and mortar" to E-Commerce. Additionally, 25% of the course will concern itself with merchandising tools, techniques, and strategies. Note: if a student is interested in a specific field of retailing (i.e. auto parts and service etc.) their assignments will be directed accordingly.

# Course Descriptions

## **BUS 160 Introduction to Sales and Sales Management**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The course begins with an introduction to personal selling techniques, and the advantages of personal selling over other forms of promotion. Relationship or consultative selling will be emphasized as the most modern approach to sales. The principle tasks of sales management will be explored with an emphasis on how sales managers and sales people can most effectively work together.

## **BUS 165 Nonprofit Business Administration**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is an introduction to nonprofit management, with emphasis on practical application. The course provides an overview of management skills required by leaders of nonprofit organizations. Organization purpose and mission, marketing and communication techniques, fundraising and grant management, financial management, and the role of the governing board in the nonprofit organization will also be explored.

## **BUS 170 Nonprofit Grant Writing and Revenue**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is an introduction to the skills necessary to develop and write competitive funding proposals. The course will address the concept of generating revenue for organizations which requires an understanding of income streams, content knowledge, organizational ability, timelines, and utilizing opportunities to the advantage of the organization. Students will learn effective grant writing and revenue generation skills essential to acquiring competitive funding from government agencies, private foundations, and donors.

## **BUS 180 Managing Office Procedures: Optimizing Task Resources**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The efficient and economical operation of a contemporary office requires knowledge and skills in a wide variety of functional areas. This course will examine, in detail, the basic operational aspects of managing an office including shipping and receiving of materials, record and data storage, managing calendars, efficient inter-office communications and staff training and development.

## **BUS 185 Personal Finance**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces the financial planning process and provides direction in making a personal financial plan. Topics include preparation of budgets, the time value of money, evaluation of credit decisions (credit cards, loans, and mortgages), investments, taxes, insurance, retirement and estate planning.

## **BUS 190 The Remote Workplace**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course emphasizes skills and strategies essential for working remotely and managing remote teams. Students will explore the types of work best suited for remote work, the challenges and benefits of working remotely, and reasons for long-standing resistance by employers to allow remote work.

## **BUS 215 Principles of Marketing**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The course begins by dissecting the elements of the marketing mix - product, price, promotion and place and ends with the completion of a marketing plan for a product chosen by each student. Topics include segmentation, distribution, consumer behavior, etc. Different aspects of marketing-product vs. service, wholesale vs.

retail, direct and industrial marketing, will also be explored.

## **BUS 218 Human Resource Management**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Recruitment, selection, training, human resource planning, compensation management, Equal Employment Opportunity (EEO), performance evaluation, discipline, and employee health and safety topics are covered in the course. Students are introduced to the role of the human resource executive and staff in corporate management as well as their role in the planning for the organization.

## **BUS 220 Managing People and Organizations**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

When employees work in organizations, managerial effectiveness is enhanced when the dynamics of human behavior in group situations are understood. This course will apply the principles developed by behavioral scientists to the human resource component of the business organization.

## **BUS 248 Money, Banking and Financial Markets**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course provides an overview of commercial banking operations, the supply and demand of money, and the U.S. Federal Reserve system. Topics covered include the monetary system, goals and limitations of monetary policy, financial institutions and their markets and role in a global economy.

## **BUS 255 Electronic Commerce**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This is a computer-based and case study course. It is designed to introduce students to various aspects of Electronic Commerce. E-Commerce is doing business

# Course Descriptions

electronically. It will include business strategies for selling and marketing on the Web, online auctions, virtual communities, legal, ethical and tax issues, supply-chain management, payment systems, security, and web server and e-commerce hardware and software. Real company cases include Amazon.com, Harley-Davidson, Nissan.com, and Oxfam. Included in class sessions will be "hands on" access to the Web.

## **BUS 260 Business Finance**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to investigate the mechanisms of business finance including financial analysis, capital management, budgeting and commercial financing.

## **BUS 270 Hospitality Management**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to provide Culinary Arts students and others, having a career interest in Hospitality Management with an understanding of how the industry functions, including its policies and procedures. The focus will be on Food Service and Lodging Management, although other aspects of the industry will be covered.

## **BUS 280 Entrepreneurship**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course explores the fundamental competencies and mindset required to become a successful entrepreneur. Topics include the qualities and characteristics of an entrepreneurial profile, financial competencies needed by the entrepreneur, and the steps necessary for development of a business plan.

## **BUS 286 Social Media Marketing**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will explore the foundations and principles of social media marketing and its role in branding and growing a business. The basic concepts of social media marketing and advanced approaches will

be discussed. Students will examine the relevance and importance of using social media tactics to market a business. This course highlights the usefulness of social media for businesses as a vehicle for facilitating customer communication and interactions. *Prerequisite: BUS 215.*

## **BUS 297 Business Program Internship**

3 Credits. Hours to be determined by internship contract.

Internships provide experiential learning opportunities that integrate knowledge and theory learned in the classroom with practical application and skills development in a professional setting. Internships give students the opportunity to gain valuable applied experience and make connections in professional fields they are considering for career paths; and give employers the opportunity to guide and evaluate talent. The approval process must be complete by August 1 for the fall semester and December 1 for the spring semester.

## **BUS 298 Business Capstone**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This is a senior standing course for the assessment of prior learning and lifelong learning objectives. Students will be placed in small groups to act as the senior management team of a simulated company. They will work with a computer simulation model that will give real life problems that embodies prior course learning, integration of team management, the disciplines and concepts of Accounting, Marketing, Management, and Finance. Students will be required to present before a select group of business professionals, faculty and fellow classmates. *Prerequisites: ACC 210, BCA 120, BUS 100, 110, 12x, 215, COM 10X, ENG 101 or 105, ENG 220 and MAT 101.*

## **Business and Computer Applications (BCA)**

### **BCA 120 Introduction to Computer Applications**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This is an introductory computer course that is structured to familiarize the student with usage of computers as a tool for business and industry. Taking a hands-on approach, students will become skilled in the use of Windows XP and Microsoft Office. These competencies include the operation of word processing, spreadsheets, database and presentation software. All learning will be in a lab environment where students will directly apply instructions using individual computers. *Prerequisite: Students should be familiar with basic mouse and keyboard operation prior to registration.*

### **BCA 152 Integrated Software Applications**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This is a course in the use of 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 120.*

### **BCA 241 Spreadsheets**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is intended to instruct beginning and entry level students in the fundamentals of spreadsheet operations using Microsoft Excel. It will expose them to basic spreadsheet concepts as well as many of the more sophisticated functions which enhance spreadsheet utilization, improve functionality and increase a wide variety

# Course Descriptions

of applications for spreadsheet analysis.  
*Prerequisite: Basic keyboarding skills and knowledge of PC operations.*

## BCA 246 Database Management

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is intended to introduce skills and build proficiency in database management using Microsoft Access. It is designed to develop competencies in various database processing functions. Students will become proficient in setting up databases, managing data, querying, creating forms and reports, using report enhancements and manipulating data.  
*Prerequisites: BCA 120 or 152.*

## Career Studies (CAS)

### CAS 199 Prior Learning Assessment

Variable credit (max 18 hours)

This listing reflects the College's recognition of appropriate and significant prior learning and its credit relationship to degree requirements. Knowledge and skills (not chronological experience) acquired prior to matriculation must be systematically identified and documented. Please refer to the College catalog under "Academic Credit for Prior Learning" for additional guidelines. Credit awards vary and are considered for posting at the discretion of the College. *Prerequisite: Significant occupational training and experience.*

## Chemistry (CHY)

### CHY 101 Introduction to Chemistry

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is an introduction to general, organic and biological chemistry. Topics will include: atoms, chemical bonds, chemical reactions, acid-base chemistry, basic organic chemistry, functional groups, chirality, carbohydrates, lipids and proteins.  
*Prerequisite: High School Algebra I, or MAT 050 with a grade of C or higher.*  
*Corequisite: CHY 102.*

### CHY 102 Introduction to Chemistry Lab

1 Credit (0 Lecture 1 Lab 0 Shop)  
2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

The laboratory provides students with experiential learning to support concepts and principles introduced in the lecture.  
*Co-requisite: CHY 101.*

### CHY 121 General Chemistry I

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is the first of a two-semester course that prepares students for further study in chemistry or other sciences or engineering. Students are introduced to the study of matter, atomic theory, energy, chemical reactions and calculations involved with them. The electronic structure of atoms is used to provide insight into periodic properties, chemical bonding and molecular structure. The study of molecular orbital theory and gases conclude the first semester. *Prerequisite: Readiness for or completion of MAT 122.* *Co-requisite: CHY 122.*

### CHY 122 General Chemistry I Lab

1 Credit (0 Lecture 1 Lab 0 Shop)  
2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

This course emphasizes the experimental nature of chemistry. Laboratory safety and measurement are the first subjects. Physical properties, chemical properties, chemical reactions, stoichiometry, and other subjects that are introduced in the first semester lecture course will be studied. *Co-requisite: CHY 121.*

### CHY 123 General Chemistry II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The second semester of the general chemistry sequence includes the study of intermolecular forces and the properties of solutions, chemical kinetics, chemical equilibrium, acid-base equilibrium, and other aqueous equilibria. Other topics include chemical thermodynamics, electrochemistry, nuclear chemistry, organic chemistry and coordination chemistry.  
*Prerequisite: CHY 121 with C or higher.*

*Co-requisite: CHY 124.*

### CHY 124 General Chemistry II Lab

1 Credit (0 Lecture 1 Lab 0 Shop)  
2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

The second semester laboratory will present experimental support for subject matter presented in the lecture. There will also be the possibility of subject matter presented from an experimental perspective that is not presented in Lecture. *Prerequisite: C or better in CHY 121 and 122.*

### CHY 221 Organic Chemistry I

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Organic Chemistry is the study of the chemistry of compounds containing carbon. Organic Chemistry I Lecture is the first half of a comprehensive one-year course suitable for science majors. The first semester course includes structural and functional aspects of saturated and unsaturated hydrocarbons with various heteroatom functionalities. Discussion focuses on the mechanistic basis for organic compound reactivity. *Co-requisite: CHY 222.* *Prerequisites: C or better in CHY 123/124.*

### CHY 222 Organic Chemistry I Lab

2 Credits (0 Lecture 2 Lab 0 Shop)  
4 Hrs./Wk. (4 Hrs. Lab) \*15 wks.

Organic Chemistry I Lab runs concurrently with Organic Chemistry I Lecture. First semester labs concentrate on the basic techniques and procedures used in organic syntheses and separations, including microscale techniques. *Co-requisite: CHY 221.* *Prerequisites: C or better in CHY 123/124.*

### CHY 251 Organic Chemistry II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Organic Chemistry is the branch of chemical science engaged in understanding the structure, function, behavior, and reactivity of molecules containing carbon. Organic Chemistry II Lecture includes functional aspects of saturated and

# Course Descriptions

unsaturated hydrocarbons with various heteroatom functionalities. Discussion focuses on the mechanistic basis for organic compound reactivity for saturated and unsaturated hydrocarbons and approaches to synthetic design. In addition, modern analytical techniques such as infrared spectroscopy and nuclear magnetic resonance spectroscopy (1H & 13C) used in the identification of organic compounds will be discussed. *Co-requisite: CHY 252. Prerequisites: C or better in CHY 221/222.*

## CHY 252 Organic Chemistry II Lab

2 Credits (0 Lecture 2 Lab 0 Shop)  
4 Hrs./Wk. (4 Hrs. Lab) \*15 wks.

Organic Chemistry II Lab runs concurrently with Organic Chemistry II Lecture. Second semester lab is built upon the basic techniques and procedures first introduced in Organic Chemistry I, as applied to carrying out fundamental organic chemistry reactions (both ionic and radical). Additional emphasis is placed on the analysis of collected data using gas chromatography and various spectroscopic techniques (e.g., IR, NMR, and mass spectrometry). *Co-requisite: CHY 251. Prerequisites: C or better in CHY 221/222.*

## Communications (COM)

### COM 100 Public Speaking

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course provides the student with training and experience in researching, organizing, and presenting various types of oral presentations. Topics covered include audience analysis, speech organization, delivery techniques, and the use of visual aids, including Power-Point. Narrative, informative/ demonstration, persuasive, and group presentations are required. Speeches are videotaped for student review.

### COM 101 Interpersonal Communication

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces the student to the elements of interpersonal communication. The overall goal of the course is to enable students to improve the effectiveness of their interpersonal communication skills in their personal and professional lives. The course covers the nature of communication, the importance of one's identity, and the role of perception, emotions, and active listening. It examines the nature of language and non-verbal communication and considers gender and cultural differences. It focuses on improving communication in relationships, concentrating on relational dynamics, communication climates, and interpersonal conflict.

### COM 121 Group Process

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces the student to the elements of small group communication. The overall goal of the course is to have students develop more effective communication skills for use in small group situations. Students will practice providing appropriate and effective feedback among group members, resolving conflicts, problem solving in small groups, and participating in and facilitating group discussions. Students will be expected to study group theory and understand the small group communication process while undertaking a worthwhile community action project as a group effort.

### COM 151 Mass Media and Popular Culture

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces the student to the economic, political, and social dimensions of mass media with an emphasis on electronic media. Students will be introduced to a variety of perspectives on contemporary media and will examine the components of media literacy. The overall goal of the course is to enable students to

develop critical strategies of media analysis to become an active, informed media consumer.

### Computer Aided Drafting/ Design (CAD)

#### CAD 110 Introduction to Computer Aided Drafting (CAD)

3 Credits (1 Lecture 2 Lab 0 Shop)  
5 Hrs./Wk. (1 Hr. Lecture 4 Hrs. Lab) \*15 wks.

This is an introductory CAD based drafting and design course utilizing the latest CAD/BIM software. In conjunction with learning CAD, students will be introduced to the process of design, the related components and materials, research, drawing and presentation of construction related documents, from conceptual hand sketches, cad sketches, to CAD drawings and related spreadsheets, materials, and construction techniques. The focus of the course is divided into three main segments. The first segment is to introduce CAD. The second is to introduce factors in pre-design for the building and site as it relates to programming, codes, ADA, and space planning. The third is to integrate the pre-design factors into industry standard construction/design drawings created with CAD.

#### CAD 262 Intermediate Computer Aided Design (CAD)

3 Credits (1 Lecture 2 Lab 0 Shop)  
5 Hrs./Wk. (1 Hr. Lecture 4 Hrs. Lab) \*15 wks.

This is an intermediate based cad design course expanding upon introductory level commands to enhance greater efficiency, networking, team work, presentations, customization, and 3D concepts towards the creation of a A/E industry standard CAD based drawings for various interiors spaces in residential and commercial buildings. Students will research design and construction processes, materials, methods to design residential and commercial interiors with a focus on kitchens and bath, corporate team spaces, meeting and executive spaces. The student will evaluate and integrate, space use, access and flow, materials, furniture fixtures and equipment,

# Course Descriptions

lighting, color, texture, space, scale and integration of related building systems. This is a "hands-on" approach with all topics being directly applied in the CAD lab, so as to align cad software use with technique to create a variety of related drawings, renderings and 3D CAD models and related schedules. *Prerequisite: CAD 110.*

## **CAD 282 3-D CAD and Solid Models**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course is designed as an advanced CAD course using Auto CAD Mechanical Desktop on Windows-based personal computers. Auto CAD's 3-D Solid Model features will be the focus of this course utilizing parametric solids. All assignments will pertain to the design of mechanical components. *Prerequisite: CAD 262.*

## **CAD 284 Architectural CAD**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This is an advanced level CAD course utilizing Auto CAD on Windows-based personal computers. The focus of the course will be the creation of drawings for the construction industries. An emphasis will be given to the use of scales, dimension styles, and file management. The course will also include the use of 3-D with the creation of elevation and perspective views. *Prerequisite: CAD 262 or CAD 110.*

## **CAD 292 Advanced Solid Modeling**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course is designed to teach the use of advanced features found in the College's parametric modeling software. Students will work in a networked environment to: utilize advanced modeling techniques, produce assemblies, and use advanced drawing creation and annotations. The principles of finite element analysis (FEA) will also be introduced. All assignments will pertain to the design of mechanical components. *Prerequisite: CAD 282.*

## **Computer Technology (CPT)**

### **CPT 127 Introduction to Python Programming**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

Students taking this course will learn how to create structured programs using Python. Skills will include writing program code, creating controls, creating and manipulating variables, understanding and implementing program decision making logic, creating sub procedures, debugging, data manipulation, and object manipulation. Significant study time outside of class will be required to complete reading assignments and complete homework exercises.

### **CPT 130 Introduction to Visual BASIC**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

Students taking this course will learn how to create object-oriented programs using Microsoft's Visual Basic. Skills will include writing program code, creating a graphical user interface, creating controls, creating and manipulating variables, understanding and implementing program decision making logic, creating sub procedures, debugging, data manipulation and object manipulation. Significant study time outside of class will be required to complete reading assignments and complete homework exercises.

### **CPT 147 Introduction to PC Repair/ Operating Systems**

*3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Lecture 2 Lab) \*15 wks.*

This course is an introduction to the installation, maintenance and repair of PCs and related equipment and to introduce students to operating systems compatible with today's personal computers. It provides students with an understanding of PC environments including system components, peripherals, and component/card interface

and the fundamentals of repairs. The course will familiarize students with the major features and functions of each operating system and build competencies and familiarity with operational aspects of the software. This is the first of two courses designed to prepare students for the A+ exam.

### **CPT 166 Fundamentals of Structured Query Language**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

A broad based introduction course that will teach all the fundamentals of relational database access using structured query language (SQL). The course will cover the way to effectively retrieve and manipulate data in a database to meet an employer's or client's needs. The class will cover the basics of SQL, its strengths and weaknesses. It will focus on presenting implementation-independent SQL coding and use while highlighting several vendor specific implementations. The students will be required to become proficient in managing a small relational database under MS SQL Server, hosted on campus. Taking a hands-on approach, students will become skilled in designing and using SQL language to retrieve, organize, present, update and delete data. These competencies include a basic understanding of relational database, MS SQL Server and SQL. All learning will be in a lab environment where students will directly apply instructions using individual computers.

### **CPT 201 Linux**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course is an introduction to the Linux operating system. It will provide students with the basic introductory abilities required to install, configure, administer, and troubleshoot the Linux operating system. This course will also acquaint students with several of the many Linux distributions available, typical Linux applications and utilities, and it touches upon the important command line utilities and applications.

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## CPT 202 Advanced Linux

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is an extension of CPT 201. The focuses of this class are proper system management and administration, and an introduction to using Linux servers to fulfill the networking needs of a typical small business or school system. Students will configure Linux server systems such as DNS, DHCP, Web, Mail, Servers, routers, firewalls and file and print servers. *Prerequisites: CPT 201 and instructor permission.*

## CPT 225 Advanced PC Repair

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab) \*15 wks

The second of a series of two courses, instruction is designed to prepare students for A+ Certification. *Prerequisites: CPT 147; or one year's experience with PC repair and installation and instructor permission.*

## CPT 227 Virtualization

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The class will introduce students to the virtual machine environment. They will get the opportunity utilize the main virtual environment options and create their own virtual networks. Students will work within the 3 main virtualization platforms throughout this course. They will get exposure to the utilization of virtual machines and virtual networks within the business environment.

## CPT 235 Introduction to Networking

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is an introduction to core network fundamentals. It will provide students with the ability to design, install, maintain and troubleshoot computer networks. Students will be expected to demonstrate an understanding of a wide variety of network cabling, components and architecture. Identification of the seven-layer OSI (Open Systems Interconnection)

model, and how it interacts vertically and horizontally with other networks will also be required. The introduction and appropriate use of network protocols and network services will be introduced in this course.

*Note: network administration covering Software, Servers, Services, Domains, Workgroups and Users will be covered in CPT 266 Server Administration.*

## CPT 239 Advanced Networking Concepts

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is a relatively advanced look at network functions, which analyzes those functions from a troubleshooting perspective. Students will learn techniques required to support and troubleshoot networks on a daily basis. This course also introduces the student to concepts and terminology encompassing generic networking and routed WANs. Particular attention is devoted to the TCP/IP protocol and how its addressing scheme functions to provide network and host addresses and can be used to subnet a large network into more manageable segments. It will provide students with the basic abilities required to install, configure, administer, and troubleshoot equipment and TCP/IP. Students will be expected to demonstrate their expertise using a "hands-on" approach whenever possible. Equipment used in this class will include servers, hubs, switches, and routers. *Prerequisites: CPT 147 and 235, two or more years of IT work experience and instructor permission.*

## CPT 240 Advanced Visual BASIC

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course builds on the skills learned in CPT 130, Intro to Visual Basic. Students will demonstrate the ability to: create custom menus, work with sequential access files, string manipulation, work with variable arrays and arrays of structure, create functions, and integrate Visual Basic with an Access database. Study time outside of class will be required to complete reading assignments and homework exercises. *Prerequisite: CPT 130 or instructor permission.*

## CPT 245 Introduction to Java Programming

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This is an introductory course in Java programming. Students taking this course will learn how to create programs using the Java programming language. Skills will include writing program code, testing and debugging programming code, and compiling Java programs. Students will learn to create a variety of Java programs. This will be a hands-on class, where students will learn programming concepts by creating a variety of programs.

## CPT 250 Programming in C

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This is an introductory course in the applications of C, a programming language common in electronics and electromechanical engineering. The C language facilitates a structured and disciplined approach to Computer Program Design. Through examples, exercises and projects, students will be given the opportunity to solve real-world problems.

## CPT 252 Web Development

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This is a broad based introduction course that will teach the fundamentals of making web pages and posting them on a Web server. The course covers the basics of using HTML, developing a web site, and registering a domain name. The students will be required to deploy a small web site on the World Wide Web. Taking a hands-on approach, students will become skilled in Web Page design, management and deployment.

## CPT 253 Advanced Web Development

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

An intermediate course that will teach the skills necessary to expand a static web site into a data-driven, interactive website.



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The class will cover the basics of web-based data manipulation applications and using JavaScript based web site on the World Wide Web, hosted on a web server on campus. The class will also test these web sites using peer reviews and other quality assurance techniques, making changes to the sites as needed. Taking a hands-on approach, students will become skilled in complex web page design and data management. These competencies include advanced HTML, including Java and JavaScript. All learning will be in a lab environment where students will directly apply instructions using individual computers. *Prerequisites: CPT 252 or equivalent.*

## **CPT 256 Introduction to Game Level Design**

*3 Credits (3 Lecture 0 Lab 0 Shop)*

*3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This elective course will provide an introduction to the process of computer game design and programming. Topics will include graphics, game engines, and their high-level APIs, behavioral control for characters, level design, gameplay, interface issues and the business, social and personal aspects of games. Classes will be a mix of lecture format, seminar format and working group meeting. See the schedule for relevant structure and dates. Rather than focusing on programming game engines, the course deals with the development of gameplay using the 3D commercial game engine. Students will form small teams early in the semester, pitch a level idea to the instructor and to the class, then spend the rest of the time in the course working on the development of the level itself. The final for the course will be the presentation of a working version of your level play-tested at a LAN party. *Prerequisite: CPT 130.*

## **CPT 257 Advanced Game Level Design**

*3 Credits (3 Lecture 0 Lab 0 Shop)*

*3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This elective course is the second of two video game level design courses. It will provide an advanced look at the process of

computer game design and programming. Topics will include graphics, game engines and their high level APIs, behavioral control for characters, cut scenes, level design, gameplay, interface issues and the business, social and personal aspects of games. Classes will be a mix of lecture format, seminar format and working group meeting. See the schedule for relevant structure and dates. Rather than focusing on programming game engines, the course deals with the development of game play. Students will form small teams early in the semester, pitch a level idea to the instructor and to the class, then spend the rest of the time in the course working on the development of the level itself. The final for the course will be the presentation of a working version of your level play-tested at a LAN party. *Prerequisite: CPT 256.*

## **CPT 261 Computer Forensics I**

*3 Credits (3 Lecture 0 Lab 0 Shop)*

*3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course will provide an introductory understanding of computer forensics. The student will be exposed to different tools and techniques of obtaining data along with an understanding of the investigative process. Class discussions and hands-on activities will give students a thorough understanding of crime scene processing, data acquisition, computer forensic analysis, e-mail investigations, image and file recovery, witness requirements and report writing. *Prerequisites: CPT 147 or instructor permission.*

## **CPT 266 Server Administration**

*3 Credits (3 Lecture 0 Lab 0 Shop)*

*3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course builds on the foundations established in CPT 235 Introduction to Networking and prepares the student for a more in-depth knowledge of network communication. Students will design a network, install server software, create domains, OUs, groups, users, trusts and GPOs. Students will also create and apply user rights, privileges, file and print sharing and services. Server and data security will also be introduced. *Prerequisite: CPT 235.*

## **CPT 271 Network Security**

*3 Credits (3 Lecture 0 Lab 0 Shop)*

*3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course establishes a strong foundation in securing networks and working with many security tools. Students will utilize firewalls, security tools, and various computer security techniques. The class enforces legal and security concepts to help computer professionals and enthusiasts prevent such occurrences. Several networking operating systems will be discussed. Students will enhance their knowledge and familiarity with these network operating systems, more advanced computer networking concepts, and security issues that surround these topics. Students will also experiment with various system services while utilizing network analysis tools. In addition, students will research computer security topics and practice gained knowledge in a controlled environment. De-mystifying the "hacking" world and providing a comfort with securing the popular network operating systems are the primary goals of this course. *Prerequisite: CPT 235.*

## **CPT 273 Process Automation & Shell Scripting**

*3 Credits (3 Lecture 0 Lab 0 Shop)*

*3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course will be an in-depth look at the processes and tasks needed to effectively maintain an enterprise level server architecture. Students will be introduced to shell scripting concepts across different operating system platforms including the system level modules needed for effective automation. Students will then design shell scripts to automate those system tasks in various scenarios including but not limited to: Windows Server, Linux Enterprise Server, and select Cloud based services. Students will then verify the effectiveness of their scripts best on manufacture and industry best practice recommendations. *Prerequisites: CPT 266 or one semester of programming (CPT 127, 130, 245 or 250).*

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## CPT 275 Computer Forensics II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The class will review the basics of computer forensics while focusing on an in-depth knowledge of forensic software utilizing one of the top international forensic software options available. This software is used throughout the country and by our own Computer Crimes Task Forces in the state of Maine. Students will complete a full case from the crime scene acquisition to the final report along with a mock trial at the end of the case. *A criminal background check will be processed on students who register for this course.*

## CPT 281 Penetration Testing

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is an advanced course which will give students an understanding of network vulnerabilities and how to prevent them. Students will utilize hands-on experiences to setup and test baseline security settings on their networks. Once the vulnerabilities have been identified, students will create a plan to address identified vulnerabilities to keep malware and hackers out of their networks. The final stage will be to re-test the network to verify their changes creating a secure network. *Prerequisites: CPT 235, 266, and 271. A criminal background check will be processed on students who register for this course.*

## CPT 283 OS Hardening 3

credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will focus on an in-depth analysis of multiple operating systems and the security components that each feature. In addition to analysis of various industry standards, students will gain hands-on experience with the components that allow for access controls and security audits. Students will examine, plan, and implement appropriate access controls. These controls will focus on the ever-changing landscape of access technology, including the areas of: software, website, mobile devices, database access, and IoT.

## CPT 286 Security Analysis

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Students will gain hands-on experience detecting and planning for risk aversion. Utilizing multiple tools and technologies, students will manage the vulnerability of a simulated real-world system. Students will plan implementation and testing teams focusing on the scope of work to be completed. Students will be responsible for the appropriate testing mechanisms and developing a usability report for the testing that was implemented. Students will look at system exposure, attack methods, and defenses along with how to mitigate these risks.

## CPT 287 Database Security

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Students will design databases with security at the forefront. Utilizing an industry recognized database system, students will implement coding and management techniques to mitigate the major concerns of database security issues. Security models and programming life cycles will be utilized. A database security policy will be developed for addressing security issues. Students will gain an understanding in the use of protocols, processes, secure access, as well as verification and validation in securing databases.

## CPT 288 Incident Handling and Response

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Students gain experience in the art of utilizing industry standards to identify and respond to security breaches. Students will look at the planning process as well as the implementation of plans in the areas of Business Continuity. These plans would include sub-plans in incident response, disaster recovers, contingency planning. Within the plans students focus on threats, team members, backups, facility options, testing as well as maintaining the plans and policies.

## CPT 289 Mobile Device Forensics

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will provide students with hands-on experience working with mobile device seizures and analysis. Multiple software products will be utilized to work through cases. Mobile vulnerabilities and risks will be researched as well as utilizing appropriate security model applications.

## CPT 290 Introduction to Cyber Security

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The focus of this course is on the protection of the network by detecting and preventing threats. Utilizing an understanding of network fundamentals, students will design and implement a secure network. Utilizing industry recognized software and hardware devices to secure the network and establish a secure perimeter. Hands-on exposure to: VPN, firewall, intrusion detection, wireless devices and settings will give students a strong foundation in securing a network.

## CPT 296 Topics in Information Technology

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Students taking this course will explore selected topics in Information Technology that are relevant at the time of delivery. This course will not address subject matter currently offered within other CPT courses. Since the topics will change from year to year, students should check with the instructor to obtain more in-depth information on the topic offered for that given time period. *Prerequisites: CPT 235 and 2nd year standing.*

## CPT 297 Field Experience (Internship)

3 Credits - Number of hours per week to be determined by Advisor

This course is designed to provide the student with field experience in an actual workplace under the supervision of an

# Course Descriptions

information technology professional. Sites for this practical must be arranged prior to course registration. *Prerequisite: instructor permission.*

## CPT 298 Capstone

3 Credits (1 Lecture 2 Lab 0 Shop)

5 Hrs./Wk. (1 Hr. Lecture 4 Hrs. Lab) \*15 wks.

Students taking this course will use all of the hardware and networking skills they have accumulated thus far to create realistic networks that duplicate the types of hardware, software, configuration, and troubleshooting problems they might encounter in an employment scenario. Students will begin the semester by building the platform computers from parts, and culminate with the configuration and troubleshooting of user account, rights, and applications. Students will perform all cabling, install all hardware, operating systems and applications, as well as, troubleshoot network issues. *Co/Prerequisites: CPT 266, at least one networking elective, instructor permission.*

## Conservation Law Enforcement (CNL)

### CNL 120 Introduction to Conservation Law

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to introduce students to the profession of conservation law enforcement, the laws and policies associated with conservation law and the various aspects of conservation and resource management. Students will explore the philosophy, history and modern practice of conservation law.

### CNL 150 Principles of Fish and Wildlife Management

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed as an introduction to fish and wildlife management laws, principles, and policies. Students will explore the conservation and preservation

of natural resources and well as the environmental and political implications associated with the management of fish and wildlife.

### CNL 240 Conservation Law Operations I

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course provides students with the opportunity to develop the knowledge and skills associated with enforcement of conservation laws and policies. Students will be introduced to land navigation techniques, such as mapping, compass navigation and GPS usage. Additional skills such as water safety, surveillance and wildlife tracking will be introduced to students in preparation of further conservation studies. *Prerequisite: A grade of C or higher in CNL 120.*

### CNL 260 Conservation Law Operations II

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course provides students with additional skills to further enhance their understanding of the knowledge and skills associated with enforcement of conservation laws and policies. Students will be introduced to wilderness survival skills, search and rescue techniques and conservation law enforcement vehicle operation. Students will be provided the opportunity to successfully obtain Maine licensure in hunting safety and preparation to obtain licensure as a Maine Guide. *Prerequisite: Grade of C or higher in CNL 120 and 240.*

## Criminal Justice (CRJ)

### CRJ 101 Introduction to Criminal Justice

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to provide an overview of the legal system in America, including the history and evolution of law enforcement and the criminal law, to the present status of the criminal justice system.

Topics discussed will include the purposes and goals of the criminal justice system; the history and evolution of the criminal law and the legal process; the role of law enforcement in a democratic society; the balancing of individual rights versus the protection of society; the manner in which the criminal justice system confronts terrorism; and the development and current status of justice policy. The course will examine in significant detail the three primary components which comprise the criminal justice system: law enforcement, adjudication, and corrections. Juvenile justice and its purposes and goals will also be discussed. *Students must earn a C or higher in order to continue to other CRJ courses.*

### CRJ 110 Introduction to Corrections

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to provide an overview of the historical background of corrections. Topics discussed will include: the goal and purposes of corrections; the various past and current philosophies of corrections; the concepts and issues that determine the necessity for the development of the Maine Correctional Standards; the legal issues in corrections; the principles and issues of the Constitutional Law as it pertains to the 1st, 4th, 8th, and 14th Amendments and the rights of inmates; the structure and functions of incarceration; Probation and Parole Agencies, Management and treatment programs; and the differences between.

### CRJ 122 Criminal Law and Report Writing I

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course deals with the application and philosophy of criminal law, with a focus on the applicability of the statutory law. The goals and purposes of the criminal justice system will be examined. The formulation of the substantive law and limitations on that authority will be studied.

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## CRJ 201 Civil Liberties

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course examines the constitutional aspects of the American criminal justice process, including search and seizure, arrest, interrogation, trial and appeal.

## CRJ 202 Introduction to Emergency Management

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course offers a contemporary analysis of US emergency management principles. This course focuses on an introduction to FEMA's National Preparedness System, Whole Community Approach and Preparedness Cycle concepts. Emergency management principles and best practices will be used to analyze state and federal responses to recent disasters, applying the foundational principles to real world events.

## CRJ 209 Terrorism & Homeland Security

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course provides a theoretical and conceptual framework to allow the student to understand how terrorism arises and how it functions. It discusses sophisticated theories presented by some of the best terrorist analysts in the world, while also focusing on the domestic and international threat of terrorism and the basic security issues surrounding terrorism today. The course also gives essential historical (pre-1980) background on the phenomenon of terrorism and the roots of contemporary conflicts, including detailed descriptions of recent conflicts shaping the world stage, and covers theoretical and concrete information about Homeland Security organizations.

## CRJ 212 Criminal Investigation and Report Writing II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to teach students

proper methods in which to prepare a case for possible court presentation. Included in the course will be appropriate information gathering techniques; report writing; and pre-court preparation. Proper courtroom procedures, witness styles and behavior will also be discussed. *Prerequisite: A grade of C or higher in CRJ 101 and 122.*

## CRJ 220 Police Operations

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is concerned with providing the student with an understanding of the role police play in today's society.

## CRJ 227 Crime Scene Photography

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course covers the general principles and concepts of crime scene photography, while also delving into the more practical elements and advanced concepts of forensic photography. Topics such as composition, exposure, focus, depth of field and flash techniques will be explored. Lecture and practical exercises will center around photographing a crime scene, documentation of bodies and wounds, traffic accident photography, underwater photography and aerial photography. *Prerequisite: A grade of C or better in CRJ 101 and access to a 12 megapixel or higher digital camera.*

## CRJ 231 Death Investigations

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is an introductory course in conducting death investigations. Components of this course include: initial response and scene evaluation; recovery of human remains; wound dynamics and mechanisms of injury; manners of death including asphyxiation; sharp force, blunt force and chopping injuries; handgun, rifle and shotgun wounds; explosive, thermal and electrical injuries; infant and child death; sex-related death; death scenes with multiple victims; death scene management; and death scene evidence processing.

*Prerequisite: A grade of C or higher in CRJ 101.*

## CRJ 250 Criminalistics

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This class examines the techniques of crime scene investigation and basic investigation and basic evidence collection techniques. Once potential evidence has been identified at a crime scene, it must be secured, documented and properly collected. The course will include lecture and actual crime scene search and evidence collection. The laboratory analysis of the following will be covered: glass, soil, organic and inorganic substances, hairs, fibers, paint, drugs, poison, arson and explosive evidence, serology, DNA, fingerprints, firearms, tool impressions, miscellaneous impressions, photography, document and voice examinations. Emphasis is added to the challenges that "special victims" present to investigators.

## CRJ 257 Community Policing

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will present a modern-day perspective on the evolving partnership between police and citizens in solving community problems. Subject matter will include a balance of theory and hands-on practice, and students will engage in supervised team-building activities with youths who participate in the Auburn Police Activities League (P.A.L.). We will explore how law enforcement serves as a safety net for a variety of social issues, and students will be exposed to some of the community resources utilized by police agencies. *Prerequisite: A grade of C or higher in CRJ 101.*

## CRJ 275 Crime Scene Management

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course examines the expanded role of the crime scene investigator with regards to collecting and preserving evidence, both on a small and larger scale. Inter-

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agency cooperation and multi-jurisdictional considerations will be explored as well as changing techniques and trends in the forensic disciplines.

## CRJ 280 Effective De-escalation Concepts

6 Credits (6 Lecture 0 Lab 0 Shop)  
6 Hrs./Wk. (6 Hrs. Lecture) \* 15 wks.  
This course introduces students to strategies for maintaining professional demeanor and de-escalation in heightened law enforcement encounters. Students will learn to identify indicators of aggression, and methods to bring about peaceful resolutions when addressing hostile individuals in law enforcement settings. *Prerequisite: Must be degree-seeking (enrolled) in the Advanced Certificate in Police Operations.*

## CRJ 290 Defensive Tactics I

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \* 15 weeks.  
This course provides an overview of the basic defensive tactics skills used in law enforcement today. Students will learn real world techniques used in present day situations that officers will most likely encounter in their everyday performance of duties. Along with the physical techniques taught will be a fundamental understanding of state laws pertaining to the use of force as well as an essential need for physical and mental fitness necessary to be prepared for Use of Force situations.

## CRJ 291 Fitness Training for Law Enforcement

6 Credits (6 Lecture 0 Lab 0 Shop)  
6 Hrs./Wk. (6 Hrs. Lecture) \* 15 wks.  
This course consists of an intensive physical regimen designed to prepare students for the Physical Fitness Test (PFT) administered by the Maine Criminal Justice Academy. Topics that will be covered include develop healthy lifestyles around shift work, stress management, mental agility, personal safety, burnout, and nutrition for optimal performance in police work. Students will maintain a fitness and nutrition journal to help develop positive lifestyle habits.

*Prerequisite: An earned associate degree or higher with a cumulative GPA of 2.5 on a 4.0 scale in criminal justice or related field.*

## CRJ 292 Advanced Police Operations

6 Credits (6 Lecture 0 Lab 0 Shop)  
6 Hrs./Wk. (6 Hrs. Lecture) \* 15 wks.  
This is a multi-disciplinary course which will explore the paramilitary structure of law enforcement agencies and disciplines critical to police operations including: criminal law, ethics, crime scene management, interviewing and interrogation techniques, the incident command system and interagency cooperation. *Prerequisite: An earned associate degree or higher with a cumulative GPA of 2.5 on a 4.0 scale in criminal justice or related field.*

## CRJ 294 Field Practical

6 Credits (6 Lecture 0 Lab 0 Shop)  
6 Hrs./Wk. (6 Hrs. Lecture) \* 15 wks.  
Students will utilize the knowledge base of criminal law, tactical patrol skills, police report writing, crime scene management, and interview and interrogation techniques, and put these concepts into practice in real-world practical settings. This course builds upon skills and principles learned in Advanced Police Operations. *Prerequisite: An earned associate degree or higher with a cumulative GPA of 2.5 on a 4.0 scale in criminal justice or related field.*

## CRJ 295 Defensive Tactics II

3 Credits (3 Lecture, 0 Lab, 0 Shop)  
3 Hrs./Wk. (6 Hrs. Lecture) \* 15 wks.  
This course builds upon the skills taught in Defensive Tactics I. Through lectures, demonstrations, role play, and practical scenarios, students will continue to develop their understanding of the legal aspects, and the physical application pertaining to use of force situations. Students will learn to safely apply and adapt their tactical response as appropriate for a variety of physical and environmental settings. This course will emphasize the importance and techniques of effective documentation

following use of force encounters in police work. *Prerequisite: CRJ 290.*

## CRJ 297 Criminal Justice Internship

3 Credits (3 Lecture 0 Lab 0 Shop)  
In this course, a student is placed with a criminal justice agency and is supervised by the criminal justice internship coordinator. To participate in the internship, students must have completed at least two semesters and be in their second year at CMCC. *Students must have a minimum 2.5 grade point average.*

## Culinary Arts (CUA)

### CUA 100 Introduction to Culinary Arts

2 Credit (.5 Lecture 1.5 Lab 0 Shop)  
14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab \* 4 wks.  
This course will show students the fundamental workings of the professional kitchen. Safe knife handling techniques will be discussed in great detail as well as the importance of knife skills. Fabricating chicken and making white and dark stocks will be covered as well as the best ways to use each. Cooking eggs will also be explored, learning a minimum of four different cooking methods used in the common breakfast restaurant and the major components of breakfast will be taught.

### CUA 105 Fundamentals of Baking

2 Credit (.5 Lecture 1.5 Lab 0 Shop)  
14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab) \* 4 wks.  
This class will familiarize students with the commercial bake shop and the equipment and ingredients used most often. Production done within the class will help students better understand the need for accurate measuring, proper mixing and scaling of recipes. Methods and techniques will include the production of lean and rich yeast breads, quick breads and basic cookies and bars.

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## CUA 110 Techniques of Cooking

2 Credit (.5 Lecture 1.5 Lab 0 Shop)

14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

This course will use techniques for making stocks and turn them in to soups, chowders and sauces. French techniques will be a large part of this course, learning the five classical Mother Sauces and the seven classical cooking methods will be the main focus of this class. Understanding starches and how to properly cook vegetables will also be covered. *Prerequisite: CUA 100.*

## CUA 115 Baking Principles and Presentations

2 Credit (.5 Lecture 1.5 Lab 0 Shop)

14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

In this course students will continue to explore the basic principles of baking and enter the world of desserts. Using what they learned from the previous course and begin turning that knowledge into dessert quality items. Popular desserts will be explored including pies and tarts, Cheesecakes, and cream puffs or éclairs. An understanding of plate presentation will also be pursued. Learning the different sauce and how to properly construct a dessert presentation with both plated and buffet items. *Prerequisite: CUA 105.*

## CUA 121 Food Preparation Sanitation

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course stresses the importance and use of sanitary practices used in kitchen work. Proper storage and temperature control of perishable foods as well as methods of freezing food to slow down the growth of bacteria are studied. Maine laws governing eating and lodging establishments are reviewed. Students who successfully complete this course may apply for certification from the National Restaurant Association Educational Foundations ServSafe exam.

## CUA 150 Introduction to a La Carte

2 Credit (.5 Lecture 1.5 Lab 0 Shop)

14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

This course will concentrate on the behind the scenes actions that need to be taken to make a successful restaurant. Menu creation, menu planning, recipe costing, purchasing, cooking and presentation will all be covered. We will start by breaking down common fish bought whole and learn how to effectively break down primal and sub primal cuts of beef. *Prerequisite: CUA 110.*

## CUA 152 Specialty Foods

2 Credit (.5 Lecture 1.5 Lab 0 Shop)

14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

This course will culminate the students experience and require them to use all they have learned. We will explore several of the special diets and allergies that many chefs work around on a daily basis. International cuisines will be discussed, what methods they use and what makes their foods different from others. Simple wines will be discussed, talking about nose, legs, color, grape varieties and pairings. *Prerequisite: CUA 150.*

## CUA 154 Introduction to Cakes and Recipe Alterations

2 Credit (.5 Lecture 1.5 Lab 0 Shop)

14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

Students will begin learning the craft of cake making and decoration of simple cakes. Methods used to make cakes and different types of icings will be the focus of the course. Students will begin with simple decorations, borders, and masking techniques. The growing need for altering recipes for specialty diets will be explored. *Prerequisite: CUA 115.*

## CUA 156 Pastries and Contemporary Desserts

2 Credit (.5 Lecture 1.5 Lab 0 Shop)

14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

This course focuses on the more complex desserts, dessert components and trends. Students will learn to make laminated doughs as well as popular pastries including croissants, bear claws, bismarcks, tarte tatin, cream horns and others. *Prerequisite: CUA 154.*

## CUA 171 Nutrition and Food Quality

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

A study of the relationship between food and health. The importance of balanced and well-prepared meals is emphasized through study of the functions of carbohydrates, fats, protein and fiber in the diet. Students learn how to develop standardized menus and recipes, and how to prepare high protein foods such as meat, fish and poultry. Students who successfully complete this course may apply for certification from the National Restaurant Association Educational Foundation.

## CUA 210 Butchery

2 Credit (.5 Lecture 1.5 Lab 0 Shop)

14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

Students will learn the skills used to fabricate meats, poultry and fish, along with the proper sanitation and storage. Field trips will be part of the class, traveling to local farms and butcher shops to see the fabrication process with whole carcasses of beef, pork and poultry. An introduction to charcuterie with fresh sausage and confits will be also be explored. *Prerequisite: CUA 152.*

## CUA 212 International Cuisine

2 Credit (.5 Lecture 1.5 Lab 0 Shop)

14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

Students will have a unique opportunity

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to look at cooking styles, techniques and seasonings from around the world. North America, Mediterranean, Asian, European and local ethnic cuisines will be explored. Students will be encouraged to compare various cuisines and identify the differences of styles and techniques between them. *Prerequisite: CUA 152.*

## CUA 214 Petit Fours and Artisan Breads

2 Credit (.5 Lecture 1.5 Lab 0 Shop)  
14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

Students will have the opportunity to learn about varieties of petit fours and how to construct them. Macarons, cookies and simple petit fours are also a focus. Jellies, jams and preserves and proper canning procedure will be discussed and as well as how to make them with and without commercial pectin. Artisan breads will be covered including how to make sourdough starter and preferments. *Prerequisite: CUA 156.*

## CUA 216 Food and Beverage Purchase

3 Credit (3 Lecture 0 Lab 0 Shop)  
3 Hr/Wk (3 Hrs. Lecture) \*15 wks.

This class provides a basis for understanding the various challenges and responsibilities in developing an effective food and beverage control system, including standardizing recipes, cost-volume-profit analysis, inventory control and event ordering. *Prerequisite: CUA 152.*

## CUA 250 Modern Cooking

2 Credit (.5 Lecture 1.5 Lab 0 Shop)  
14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

Trends in the industry will be explored as well as the methods of cooking that are starting to emerge such as sous vide, the art of smoking meats and molecular gastronomy. Recipe alterations and specialty diets will be examined to keep up with some of the more common diets: gluten free, vegan, clean eating, raw and farm to

table. *Prerequisite: CUA 210.*

## CUA 252 Advanced Cakes

2 Credit (.5 Lecture 1.5 Lab 0 Shop)  
14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

A deeper look into techniques used to decorate cakes will be a highlight of this course. Students will gain skills in making new frostings as well as frosting decorations. Rolled fondant will be used to help students gain skills on this widely popular form of cake decorating. Advanced cake types will also include elegant mousse cakes and traditional world cakes. *Prerequisites: CUA 154 and 214.*

## CUA 254 Advanced a La Carte and Service

2 Credit (.5 Lecture 1.5 Lab 0 Shop)  
14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

This class focuses on a La Carte cooking and working on a line as well as service in a higher end establishment. Students are responsible for making and executing menus. Wine tasting and pairing will be explored. *Pre-requisites: CUA 150 and 210.*

## CUA 256 Chocolates Confections

2 Credit (.5 Lecture 1.5 Lab 0 Shop)  
14 Hr/Wk (2 Hrs. Lecture 12 Hrs. Lab)  
\*4 wks.

This course is designed to build a basic understanding of chocolate work. Students will gain skill and understanding in tempering chocolate. Students will have an opportunity to create chocolate confections including bon bons, fudge, cordials and experiment with hard candies. Frozen desserts including ice cream, frozen custards, gelato and sorbets will be explored. *Prerequisite: CUA 214.*

## CUA 297 Internship

3 Credits (3 Lecture 0 Lab 0 Shop)  
Students in this course will be placed in the restaurant industry and will be supervised by an internship coordinator. To participate in the internship, students must have completed at least two semesters and be in their second year of culinary arts at CMCC. Students must have a minimum 2.0 GPA. *Prerequisites: CUA 152 and 160.*

## CUA 299 Externship

4 Credits (0 Lecture 0 Lab 4 Shop)  
12 Hrs./Wk. (4 Hrs. Shop) \*15 wks.

This course provides the student with field experience in a workplace under the supervision of a culinary professional. Sites for this internship must be arranged prior to course registration. *Prerequisites: Minimum GPA of 2.0 and approval of program advisor or department chair.*

## Early Childhood Education (ECE)

### ECE 100 Introduction to Early Care and Education

3 Credits (3 Lecture 0 Lab 0 Field Exp.)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course provides an overview of all aspects of the professional field of Early Childhood Education, including the history, terminology, and career options of the field. Also discussed are diverse programs for young children, qualities and skills of care givers, health/safety and regulatory requirements of programs, principles of child development and partnerships with families.

### ECE 105 Infant and Toddler Curriculum

3 Credits (3 Lecture 0 Lab 0 Field Exp.)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

All domains of development will be reviewed pertaining to the child between birth to three years. This review will be used as the context for developing philosophy, goals and objectives for planning and providing appropriate environments and individualized curriculum. Students will discuss best ways to build relationships with children, nurture themselves as caregivers,

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and to build successful partnerships with parents. *Prerequisite: ECE 100. Co-requisite: ECE 147.*

## **ECE 113 Curriculum and Environments for Young Children**

*3 Credits (3 Lecture 0 Lab 0 Field Exp.)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

The physical, social, emotional, cognitive and language development of young children age 3-8 years will be reviewed in this course, as a basis for developing philosophy and goals for curriculum planning and development. Students will discuss and observe the diversity of learning styles, as well as ways to assess and evaluate development on an ongoing basis. The design of developmentally appropriate learning environments will be presented, and students will participate in hands-on experiences and assignments throughout the course. *Prerequisites: ECE 100 and PSY 114; Co-requisite: ECE 297.*

## **ECE 147 Infant and Toddler Field Work & Prep**

*3 Credits (1 Lecture, 0 Lab, 2 Field Exp.)  
7 Hrs./Wk. (1 Hr. Lecture, 6 hours Field Exp.) \*15 wks.*

Student will observe, assist, and teach in an approved Infant or Toddler site, under the supervision of an experienced early childhood professional. *ECE Majors Only. Prerequisite: ECE 100. Co-requisite: ECE 105.*

## **ECE 150 Language and Literacy for Young Children**

*3 Credits (3 Lecture 0 Lab 0 Field Exp.)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

Students will be introduced to how children acquire and develop language during the early years. The roles of the teacher in assisting children through the stages of language and communication development will be discussed. Developmentally appropriate ways to promote emerging literacy and to select and use excellent children's literature while working in partnerships with families, will be integral parts of this course.

## **ECE 201 Effective Teaching Practices**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course provides new students and new and experienced teachers with strategies that support successful classroom environments, effective teaching practices and family engagement techniques. Students apply skills and strategies directly in the classroom setting. This course focuses on trauma-informed and effective teaching practices, social-emotional foundations, classroom environments and routines, and supporting children with higher social-emotional and learning needs. Students will learn how these practices help create the foundation to support a successful classroom experience and ideal learning environment for all children.

## **ECE 203 Teaching Mathematics to Young Children**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course introduces ECE students to the extensiveness of math experiences in programs for young children. Students will learn to create a developmentally appropriate math curriculum for preschool and primary school age children. This course will introduce the students to the guidelines and standards of mathematics for young children through NAEYC, NCTM, and the State of Maine Learning Guidelines. *Prerequisite: Completion of a Level 100 math course.*

## **ECE 204 Creative Arts and Creativity for Young Children**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course offers an overview of developmentally appropriate ways to understand and promote creative development, including technology, with children between three through eight years.

## **ECE 205 Education of Children with Special Needs**

*3 Credits (3 Lecture 0 Lab 0 Field Experience)*

*3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course explores the meaning and practices of inclusive early childhood programs, as well as the history of legislation and regulations that have had an impact on early intervention. The student will learn the process of observing and referring children to community agencies, working in conjunction with parents; to design appropriate learning environments, create curriculum with children, and evaluate children's development. *Prerequisites: ECE 100 and PSY 114.*

## **ECE 208 Teaching Social Studies to Young Children**

*3 Credits (3 Lecture 0 Lab 0 Field Experience)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course focuses on developmentally appropriate social studies for children from 3 to 8 years old. Students will develop philosophy, goals, activities, and a social studies curriculum for young children based on the State of Maine Learning Guidelines and the National Common Core Standards for Social Studies. *Prerequisite: ECE 100 or currently an in-service teacher.*

## **ECE 250 Literacy for Infants and Toddlers**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course focuses on learning and development research and the Maine Infant and Toddler Guidelines for Learning and Development as a basis for effective language and literacy instruction for children from birth to 36 months of age. Students will design and implement effective learning opportunities for young children based upon this information. *Prerequisite: Criminal background check.*

## **ECE 297 Pre-School Field Experience**

*3 Credits (0 Lecture 0 Lab 3 Field Exp.)  
6 Hrs./Wk. (6 Hrs Field Experience)*

The student will observe and assist in an approved pre-school or school-age child care setting during the semester, under the supervision of an experienced early



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child hood professional. The student will be expected to apply the theory, ideas, and developmentally appropriate activities learned in ECE 113 to the work at the practicum site. Interactions that support a professional relationship between parents and early childhood educators will be expected to be practiced. Each student is responsible for arranging a schedule (usually morning) and transportation that will assure the completion of the required number of hours and assignments for this course. *Prerequisites:* ECE 100, 105, 147 and PSY 114. *Co-requisite:* ECE 113.

## ECE 299 Capstone in Early Childhood Education

3 Credits  
(1 Lecture 0 Lab 2 Field Experience)  
7 Hrs./Wk. (1 Hrs. Lecture, 6 Hrs. Field Experience) \*15 wks.

As a final practicum Field Experience, students will work in an approved early childhood setting under the supervision of experienced professionals. Students will choose the age range of children (birth-3rd grade) for their work, and will also attend seminars with the course instructor to discuss their experiences and professional portfolios. Evidence of student's ability to relate theory to practice must be clear when the instructor visits the Field Experience site while the student is working. The student is responsible for arranging a schedule and transportation that will assure the completion of the 90 field hours and scheduling for assignments to be completed in the classroom. *Prerequisites:* ECE 100, 105, 113, 147, 150, 205 and 297.

## Economics (ECO)

### ECO 201 Introduction to Macroeconomics

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is intended to introduce the student to the macro aspects of the economy such as demand and supply, national income, unemployment, inflation, business cycles, aggregate spending, fiscal policy, monetary policy, money

and banking, economic growth and international trade. This course promotes an understanding of the economic environment in which businesses operate.

### ECO 202 Introduction to Microeconomics

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is intended to introduce the student to the analysis of individual markets: the functioning of prices in a market economy, economic decision making by producers and consumers and market structure. Topics discussed include consumer preferences and consumer behavior, production theory and production costs, resource pricing and the monopoly firm. Additional topics are determined by individual instructors.

## Education (EDU)

### EDU 100 Education Seminar

1 Credit (1 Lecture 0 Lab 0 Shop)  
1 Hrs./Wk. (1 Hrs. Lecture) \*15 wks.  
1 Credit (2 Lecture 0 Lab 0 Shop)  
2 Hrs./Wk. (2 Hrs. Lecture) \*8 wks.

### EDU 101 Introduction to Education

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This survey course will introduce the student to education in America and the basic elements of its structure. The course will explore education's history, examine the role of public education in a democracy and identify current trends affecting education today. The course will also examine the relationship between education and society to analyze the impact they have on each other. The course will emphasize the role of educational staff in the contemporary schools environment.

### EDU 150 Pathways to Teacher Certification

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will prep students seeking Teacher Certification by combining an understanding of the Maine State Teacher Standards, practical experience in a public school classroom through job shadowing and PRAXIS I study skills strategies and practice. Students will begin to develop a professional portfolio.

### EDU 185 Fundamentals of Educating Students with Special Needs

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will survey a variety of special needs issues including condition syndromes, common limitations, mitigation strategies, adaptive equipment and frequently suggested accommodations. This course examines the fundamentals of working with students identified as having special needs and includes an overview PL 94-142 of IDEA and 504 guidelines. Students will study the referral process, evaluation methodologies, the PET process, IEP implementation strategies, transition plans, least restrictive environments, inclusion and other current principles in the field.

### EDU 220 Physical Activity and Nutrition for Students K-12

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will provide students information and resources on the effect of physical activity and healthy nutrition on children's readiness to learn in school, and provide opportunities to develop ways to integrate this information through activities in the classroom.

### EDU 222 Social Justice and Diversity in the Classroom

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The purpose of this course is to provide students an opportunity to explore the issues of diversity and social justice and how to cultivate an inclusive classroom PreK-12.

# Course Descriptions

## EDU 280 Mindfulness for Student, Family and Self

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Students will learn about mindfulness and how it can help them as a professional. Students will learn how to teach children about mindfulness and brain knowledge techniques through their curriculum, and ways to communicate with parents about positive effects of mindful practices at home.

## EDU 282 Adverse Early Childhood Experiences & Resilience

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Students learn about the research related to the knowledge that adverse early childhood experiences can negatively impact health. They will learn strategies to support resilience building. They will use this knowledge to help them better understand themselves, students and parents. They will participate in ways to use this knowledge to help children and families.

## EDU 284 Guidance and Self-Regulation

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Students will learn and practice a variety of techniques to help children learn self-regulation through evidence-informed guidance and mindful, respectful discipline.

## EDU 286 Nutrition, Gardening and Cooking with Students

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Students will learn about the USDA standards surrounding food served in schools and centers. Participants will explore the ideas of teaching nutrition through preparation of food in a school garden/learning environment with children.

## EDU 288 Self Care and Thriving

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will enable students to identify the signs of "teacher/caregiver burn out", which is an occupational hazard of educators; and use research and resources to identify ways to increase personal resiliency and build organizational networks of support.

## EDU 290 Strategies, Styles and Habits of Mind

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Students gain proficiency in explaining, justifying and modifying their ideas, and they gain the ability to reflect critically on their assumptions. The habits are ways in which students approach areas of knowledge and methods of inquiry. This course will provide an introduction to learning styles and general strategies for adapting teaching methods to the varying needs of students.

## Electromechanical Technology (ELT)

### ELT 101 Electricity I

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk.

(2 Hrs. Lecture 2 Hrs. Lab ) \*15 wks.

This is the student's first course in electricity. Atomic structure and units of electrical charge are covered as they apply to D.C. circuits. Test equipment includes voltmeters, ammeters, ohmmeters, power supplies and oscilloscopes. Problem solving techniques will be developed using a basic model of problem analysis. Particular emphasis is placed on Ohm's Law, Kirchoff's voltage and current laws, series, parallel, series-parallel circuits, magnetism, and basic DC ammeter and voltmeter design. The student will learn advanced techniques such as Superposition, Norton, Thevenin, and Millman's theorems used in trouble-shooting complex circuits and networks. The course will provide a foundation for future studies in the electrical and electronics areas. Co-requisite: MAT 100 or 122.

### ELT 115 Electricity II

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab )  
\*15 wks.

This course will prepare the student in the areas of logical analysis, testing, and trouble-shooting. This course is essential for the student's understanding of electricity and is a foundation for the study of more advanced courses. Necessary test equipment including oscilloscopes and signal generators will be covered in this unit. Proficiency in the use of test equipment and AC concepts used in troubleshooting circuits will be demonstrated by the student through hands on laboratory experimentation. Particular emphasis is placed on inductance, capacitance, magnetism, transformers, impedance matching, resonance, phase angle, and frequency effects in reactive circuits. The student will learn advanced circuit analysis techniques using vector analysis and the j operator. Prerequisites: ELT 101 and MAT 100, 122, 132, 280, 282 or 283.

### ELT 117 National Electrical Code I

3 Credits (1 Lecture 1 Lab 0 Shop)  
3 Hrs./Wk. (1 Hr. Lecture 2 Hrs. Lab) \*15 wks.

This course is a study of the first half of the latest National Electrical Code, NEPA 70. It offers electricians an understanding of how the NEC is organized and provides information on proper electrical installations. Students will review and research code rules pertaining to chapters 1 through 4. This course can be used as the code requirement to sit for the Electrician's Exam.

### ELT 123 Electrical Controls I

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab)  
\*15 wks.

This course is a study of the functioning of electrical devices that are primarily used for manual switching of circuits such as piloted single-pole switches, Eagle three-way switches, four-way switches, momentary relays, and latching relays. Emphasis is placed on methods of wiring these devices

# Course Descriptions

into a system following NEC procedures and interpreting blueprints and schematics. Applications include wiring switches to control lights and receptacles. Complete switching systems are formed by wiring together electrical equipment such as time-clocks, photoeyes, and relays. Single-phase transformers are used to step-up, step-down, and buck/boost voltages. DC motors are tested and connected for specific direction of rotation and speed. *Co-requisite: ELT 101.*

## ELT 145 Electronics I

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab)  
\*15 wks.

This first course in analog electronics is a study of semiconductor theory, PN diodes, and Bipolar transistors. These devices are analyzed by the use of 'r' parameters, Load-Line analysis, and the Ebers-Moll Model. Equivalent circuits are derived using Thevenin's and Norton's theorems. Particular emphasis is placed on I/V characteristics, methods of biasing, and selection of replacement devices. Diode applications include filtered rectifiers, limiters, clippers, and Zener voltage regulation. Bipolar transistor applications include current sources, transistor switch, and the amplifier. *Co-requisite: ELT 115.*

## ELT 153 Digital Logic

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab)  
\*15 wks.

This course is a study of the basic principles of TTL integrated circuits, and their applications in digital systems. This includes the use of logic gates, flip-flops, counters, shift registers, decoders, multiplexers and demultiplexers. In addition, we will cover IC terminology, specifications, circuits and troubleshooting. Other logic families besides TTL will be introduced. Electronic Workbench will be used for Boolean algebra and to simulate circuits. There will be an introduction to the use of oscilloscopes for the purpose of testing and troubleshooting. *Co-requisite: ELT 101.*

## ELT 201 Communications Electronics

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab)  
\*15 wks.

This course will ensure that the student can recognize, construct, analyze, troubleshoot, repair and modify data telecommunications equipment and circuitry. The course starts with the basics of microprocessors then proceeds to terminals, computer IO, data transmission and modems analyzing how electronics circuits accomplish these tasks. The course then continues with the study of ethernet LANs, the OSI reference model, the internet and TCP/IP. *Prerequisite: ELT 153; Co-requisite: ELT 145.*

## ELT 221 Industrial Controls

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab)  
\*15 wks.

This course is a study of electromagnetic controls, their applications in automated industrial systems and how to interface them with intelligent controllers. This includes the usage of I.E.C. and NEMA magnetic starters, overload heater selection, push button, timers, counters, and intelligent controllers. Particular emphasis is placed on ladder diagrams, designing and wiring control circuits, article 430 of the NEC, programming of an AC frequency Drive. Three phase distributors and three phase motors are also covered. *Prerequisites: ELT 115, 123, and 153.*

## ELT 222 Programmable Controls

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab)  
\*15 wks.

This course is a study of Programmable Logic Controllers (PLCs), which monitor electrical inputs and in turn controls outputs to automate a process or machine. Particular emphasis is placed on ladder logic programming. Programs are created using PLC instructions that are categorized by function: Relay logic, timers, counters, data-manipulation, arithmetic, data-

comparison, data-transfer, and program control. Students set up hardware addressing on PLC racks/modules and verify physical wiring of real-world devices. They establish communications between a computer and a PLC processor using

Rockwell's RSLink software. Ladder logic programs are written for Allen Bradley's PLC5 programmable controller using RSLogix5 software. Application includes the control of electric motors and industrial control circuits. Advanced topics include remote I/O communications and analog output control of AC frequency drives. *Prerequisite: ELT 221.*

## ELT 231 Process Measurement

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab)  
\*15 wks.

This course is designed to prepare the student in the areas of logical analysis, troubleshooting techniques, problem solving, maintenance, and function of industrial primary sensing devices. The study of various instrumentation used in process controls (control elements) are evaluated. Particular emphasis is placed on the theory and application of pressure, flow, level, density, humidity, and temperature measurements. Labs are designed to show the functionality of the various types of sensing devices, how they operate, and their integration to system control. *Prerequisites: ELT 115 and 145.*

## ELT 232 Process Control

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab)  
\*15 wks.

This course is a continuation of Process Measurement and explores the characteristics of common feedback control loops. The mechanisms for an application of various process control systems with different algorithms for control are explored. The dynamics of centrifugal pumping, TDH (total dynamic head) and system curve analysis are plotted and evaluated. Single control loops using temperature controllers along with

# Course Descriptions

digital chart recorders are used to show proper PID (proportional integral and derivative) tuning. Controller tuning with dead time, overshoot and proper decay ratios are studied using Ziegler-Nichols closed loop and open loop tuning. Many types of elements, (sensing and actuating), are evaluated for proper industrial applications. The student will be able to demonstrate proficiency in the process control fundamentals, and techniques in the lab. *Prerequisites: ELT 231 and 245.*

## ELT 245 Electronic Devices II

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab)  
\*15 wks.

This course is a study of Bipolar Junction Transistors (BJTs), Field Effect Transistors (FETs), and their circuit applications, including amplifiers. Bipolar CE amplifiers are examined for voltage gain, loading and frequency effects. CC amplifiers are used for current gain and buffering. Large-signal amplifiers include Class A, B, and C power amplifiers. FETs are studied with emphasis placed on transconductance curves, parameters, and bias stability. Depletion and Enhancement Metal Oxide Semiconductor Field Effect Transistors (MOSFETs) are also covered. Thyristor theory includes Silicon Control Rectifiers (SCRs) and Triacs. *Prerequisites: ELT 115 and 145.*

## ELT 246 Linear Integrated Electronics

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab)  
\*15 wks.

The goal of the course is to ensure that the student can recognize, construct, analyze, troubleshoot, repair and modify common operational amplifier circuit application. Differential amplifiers are discussed to introduce the students to the inner-workings of integrated circuit operational amplifiers. Students will then progress through the theory of inverting and non-inverting amplifiers; summing amplifiers; signal; active filters; comparators; integrators and differentiators; logarithmic amplifiers;

oscillators; and 555 ICs. *Prerequisite: ELT 245.*

## ELT 271 Industrial Robotics

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab)  
\*15 wks.

This course is a study of industrial robotic systems. Students examine practical applications typically found in automated industries. Particular emphasis is placed on microcomputer programming of a robot manipulator. A Teach Pendant is used to manually operate an industrial robotic arm. Visual BASIC, and ASCII editors are used to program robots in the native language. This course examines industrial robot terminology, manipulator arm geometry, robot classification, work envelope, and end-effectors. Parallel and serial personal computer communication is included. *Co-requisite: ELT 221.*

## ELT 275 Robotics & Control Systems

2 Credits (1 Lecture 1 Lab 0 Shop)  
3 Hrs./Wk. (1 Hr. Lecture 2 Hrs. Lab) \*15 wks.

This course in robotics focuses on advanced applications of robotics and automation in industry. Students will write V+ programs to control a SCARA (Selective Compliance Assembly Robotic Arm) industrial robot. They will also use digital and analog programmable logic controllers in conjunction with robot I/O to form complete workcells. Man Machine Interface (MMI) will be used to integrate automation. This course includes an examination of Servo motors and feedback devices, End-Of-Arm tooling, and pneumatic systems using directional valves. *Prerequisites: ELT 221 and 271.*

## ELT 276 Automation Systems

2 credits (1 Lecture 1 Lab 0 Shop)  
3 Hrs./Wk. (1 Hr. Lecture 2 Hrs. Lab) \*15 wks.

This course focuses on advanced applications of robotics and automation in industry. Students will write programs to control industrial robots and robotic

controller I/Os using native languages and Visual BASIC.NET. They will also use digital and analog Programmable Logic Controllers in conjunction with robot I/O to form complete workcells. Man Machine Interface (MMI) and Object Interface Terminal (OIT) will be used to integrate automation. This course includes an examination of Servo motors and feedback devices, End-Of-Arm tooling, and pneumatic systems using directional valves. *Prerequisites: ELT 221 and ELT 271.*

## English (ENG)

### ENG 090 English Workshop

4 Credits (4 Lecture 0 Lab 0 Shop)  
4.5 Hrs./Wk. (4.5 Hrs. Lecture) \*15 wks.

English Workshop is designed to prepare students for the range of reading and reading most likely to be encountered in introductory college courses. It will expose students to the range of reading most likely to be encountered in the academic setting, and the skills most helpful in understanding and responding to texts. Students will develop critical reading skills and learn to apply their understanding of texts to student-led classroom discussion, oral presentations, and written responses. Students will receive instruction in planning, organizing, and basic academic composition. Emphasis is on the reading and writing process. Students are expected to use the library to do research and use either the MLA or APA citation style to document sources. This course is taught in a computer lab and requires regular use of the internet and computer applications. In order to take ENG 101 instead of ENG 105, a student must earn a grade of B or higher. *Prerequisites: See page 33 for placement and prerequisite chart.*

### ENG 101 College Writing

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

College Writing is designed to expose students to the range of writing most likely to be encountered in the academic setting, and the skills most helpful in writing for

# Course Descriptions

all purposes. The course provides students with instruction and practice in writing clear arguments and expository prose. Emphasis is on the writing process, revising and editing. Students are expected to use the library to research a contemporary issue and use either the MLA or APA citation style to document sources. This course is taught in a computer lab and requires regular use of the internet and computer applications. *Prerequisites: Reading and writing SAT® score of 540 for new SAT®'s (or 480 for older version) or higher or Accuplacer® score of 68 or higher and Write Placer score of 6 or higher, or ENG 090 with a grade of B or higher.*

## **ENG 105 College Writing Seminar** 4 Credits (4 Lecture 0 Lab 0 Shop) 4.5 Hrs./Wk. (4.5 Hrs. Lecture) \*15 wks.

College Writing Seminar is designed to expose students to the range of writing most likely to be encountered in the academic setting, and the skills most helpful in writing for all purposes. The course provides students with detailed, intensive instruction and practice in writing clear arguments and expository prose. Students will receive instruction in planning, organizing, and basic academic composition. Emphasis is on the writing process, revising and editing. Students are expected to use the library to research a contemporary issue and use either the MLA or APA citation style to document sources. This course is taught in a computer lab and requires regular use of the internet and computer applications. *Prerequisites: See page 33 for placement & prerequisite chart or completion of ENG 090.*

## **ENG 112 American Literature I** 3 Credits (3 Lecture 0 Lab 0 Shop) 3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is a general introduction to American Literature from the early colonial period to Civil War Reconstruction. The course will provide a literary overview of Native American oral history, European explorers, Colonial, Puritan, Revolutionary, Civil War authors. Learners will explore themes reflected in the literature, examining which are particular to a place

or time and which are woven through our nation's history. Through examining the process of early nation building reflected in its literature, learners will gain a greater understanding of how the American character was created, a better understanding of themselves and what it means to be an American. *Prerequisite: ENG 101 ready.*

## **ENG 113 American Literature II** 3 Credits (3 Lecture 0 Lab 0 Shop) 3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is a general introduction to American Literature from 1865 through the modern period into the present day, examining major authors from all regions. Learners will explore exclusively American themes reflected in literary works. Topics of examination may include the Emergence of Poetic Voices, the Development of the Narrative, Developments in Women's Writing, Alienation and Literary Experimentation, the New Negro Renaissance, The Beat Movement, The Vietnam Conflict, and other literature to the present day. Through examining the growing identity of America and the individual voice reflected in its literature, learners will gain a greater understanding of how the American character continues to evolve, a better understanding of themselves and what it means to be an American. *Prerequisites: ENG 101 ready.*

## **ENG 121 The Short Story** 3 Credits (3 Lecture 0 Lab 0 Shop) 3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces the students to the short story and examines universal themes through literature. The course content will focus on oral and written interpretations of short stories. The course will include the definition of literary terms, and will examine the evolution of the short story as a unique literary form. In addition to the works presented in class, the students will also be required to complete some outside reading of their own choice. They will be encouraged to select some authors from non-dominant cultures. *Prerequisite: ENG 101 ready.*

## **ENG 123 Introduction to Mystery Literature**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces students to mystery literature, traces its origins as a genre, and explores the elements of fiction as they are applied to the genre. Students will read a variety of novels and short crime fiction, and analyze characters, means and motive based on the elements of the text and on period forensic techniques. Students will also compose a mystery incorporating concepts and materials from the course. Critical thinking, speaking, writing, observation, and critical reading skills will be sharpened in this course. *Prerequisite: Successful completion of ENG 101 or 105 with a C or better.*

## **ENG 125 Introduction to Literature** 3 Credits (3 Lecture 0 Lab 0 Shop) 3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Introduction to Literature introduces the student to a variety of ways to think and write about the three literary genres: short fiction, poetry and drama. Through close textual readings, class discussions, and writing assignments, students will learn to think critically and to write confidently about literary works, as well as to discuss such texts with an understanding of literary terms. This course is designed for transfer into a four year program. *Prerequisite: Successful completion of ENG 101 or 105 with a C or better.*

## **ENG 131 Style and Syntax of American English**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course examines English grammar and usage, to assist students in understanding and producing correct and effective prose. Topics include parts of speech; common errors in sentence mechanics and spelling, punctuation and usage; and editing and proofreading techniques. The course is recommended for students whose jobs require them to produce accurate writing. Student work will be graded using tests and quizzes. *Prerequisite: ENG 101 ready.*

# Course Descriptions

## ENG 150 Introduction to Journalism

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Conducting interviews, generating story ideas and examining the ethical dilemmas of reporting, students will write several news articles themselves as well as examine well-written articles published in newspapers, magazines and online. The focus will be on writing as a way to explore and explain the events, people and cultural artifacts that surround us in our daily lives. Guest speakers—editors and journalists—will connect the classroom with the newsroom. This course is taught in a computer lab and requires regular use of the internet and computer applications. *Prerequisite: Successful completion of ENG 101 or 105 with a C or better.*

## ENG 201 Technical Writing

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Technical Writing familiarizes the student with common writing styles and formats used in business and industry. Students will practice organizing and presenting technical information for a variety of readers. Topics include style and readability of technical prose, organizing technical information, using graphics, writing effective letters and memos, writing reports, preparing employment correspondence, and presenting technical information orally. This course is taught in a computer lab and requires regular use of the internet and computer applications. *Prerequisite: Successful completion of ENG 101 or 105 with a C or better.*

## ENG 211 Creative Writing

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces students to the creative writing techniques, with an emphasis on creative non-fiction. Students are encouraged to sharpen their observation skills, use fresh and vivid details, and develop realistic characters to create short pieces of writing. Publishing opportunities will also be explored. Students will produce a portfolio of writing, developed through review and discussion

of students' drafts, and revision. This course is taught in a computer lab and requires regular use of the internet and computer applications. *Prerequisite: Successful completion of ENG 101 or 105 with a C or better.*

## ENG 215 Film as Literature

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to introduce students to the use of film as a narrative device. This course will follow a chronological plan from early filmmaking as documentary of everyday life or historic, news making events to film as a vehicle for diverse, insightful and thought-provoking literature. Learners will enhance their analytical abilities by viewing various films and discussing specific topics, using the vocabulary of film, such as: the structure, cinematography, production design, performance style, editing, and sound design. Film viewing will take place in the classroom as well as independently. This course will provide opportunities to explore the modes of screen reality, Hollywood, and foreign films. Learners will be introduced to elementary Film Criticism and Interpretation. Last, learners will discuss models of film theory. *Prerequisite: Successful completion of ENG 101 or 105 with a C or better.*

## ENG 220 Business Communication

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Business Communication focuses on developing formal business documents, correspondence, presentations, sales literature, personnel documents (resumes and cover letters, performance evaluations, reprimands, etc.). The course will concentrate on correct document formats, grammar and editing, business etiquette, effective communication techniques, and job-seeking skills. Each student will prepare a portfolio and two formal oral presentations. This course is taught in a computer lab and requires regular use of the internet and computer applications. *Prerequisite: Successful completion of ENG 101 or 105 with a C or better.*

## ENG 221 Advanced Composition and Research

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course provides instruction in composing for specific academic purposes. Topics include critical analysis of literature and historical documents, position papers, annotated bibliography and argument. The emphasis is on conducting research, evaluating sources, integrating information and documenting sources using both MLA and APA styles. This course is taught in a computer lab and requires regular use of the internet and computer applications. *Prerequisite: Successful completion of ENG 101 or 105 with a C or better.*

## ENG 230 Children's Literature

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The study of children's literature as a legitimate literary form will allow learners to examine how it plays an intricate role in the belief systems we carry into adulthood. Learners will develop and deepen their appreciation of the literature through an extensive survey of multicultural and diverse books in children's literature. This course will include study of the various literary genres found in children's literature. *Prerequisite: Successful completion of ENG 101 or 105 with a C or better.*

## ENG 294 Special Topics in Literature

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will examine particular aspects of literature, depending on the semester. Examples might be - specific genres such as fantasy, graphic novels or poetry; literature of a particular place, time or related to social or political issues such as Russian literature, Renaissance literature, literature of the Beat Generation, or protest literature; or feature the work of writers as individuals or as members of a particular literary movement such as Shakespeare, Chaucer, Jane Austen, native American writers. Because this is not a regular offering of the Humanities Department, students are encouraged to seek detailed information from the instructor or department chair,

# Course Descriptions

prior to registering. *Prerequisite: Successful completion of ENG 101 or 105 with a C or better.*

## ENG 296 Portfolio Preparation Seminar

1 Credits (1 Lecture 0 Lab 0 Shop)  
1 Hr./Wk (1 Hr. Lecture) \*15 wks.

This course is designed to assist students who wish to prepare a portfolio to document past learning for the purpose of obtaining credit towards their degree. The course introduces the student to the purpose of an experiential portfolio, presents a format for presenting their experience and learning outcomes, and provides an opportunity for peer evaluation and critique. The course is graded on a pass/fail basis. *Prerequisite: ENG 201 or 220 or instructor permission.*

## English as a Second Language (ESL)

*Placement in ESL courses is based on the student's scores on Central Maine Community College's assessment test*

## ESL 070 Study Skills for International Students

1 Credit (1 Lecture 0 Lab 0 Shop)  
1 Hr./Wk (1 Hr. Lecture) \*15 wks.

This course examines the cultural expectations of students in US higher education, as well as techniques to help students succeed in that environment. Topics include: the syllabus, organizing work, time management, preparing for exams and quizzes, academic honesty, individual vs. collective responsibilities, basic computer/word processing skills, academic vocabulary, using textbooks effectively, taking notes, and student support services.

## ESL 074 History and Structure of English

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This is an introduction to the origins and history of English and the structure of English grammar. The course covers the nature of language.

## ESL 101 Academic Writing and Grammar

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course covers narration, argument and research, with companion grammar and style components. Students will be expected to write according to the conventions of written American English. This course is taught in a computer lab and requires regular use of the internet and computer applications.

## ESL 102 Literature

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces students to various genres of American literature, with a focus on exploring cultural mores and social interaction. Literature will be contemporary and historical, and will require some writing, speaking and listening comprehension.

## ESL 103 American Studies

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course helps students develop an understanding and appreciation of the current social and economic structure of the US, applying those constructs to literature, current events and personal exploration. The student will examine historical documents, literature, music, and art to establish a cultural context for understanding college texts.

## ESL 105 English Second Language/ Listening

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course focuses on aural comprehension of academic lectures taken from core courses typically recommended for first-year students. The course rigorously prepares students to take notes on salient lecture points. Students will be exposed to a variety of academic lectures to enhance their listening comprehension skills.

## Esports (ESP)

### ESP 100 Introduction to Esports Management

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces students to career opportunities, esports elements, and business concepts required to manage esports organizations and operations. The course will analyze the industry structure and challenges.

### ESP 150 World of Competitive Gaming

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course initiates students into the world of competitive gaming. Culture, climate, and team development will be explored from both a competitive gaming standpoint and an esports business perspective.

### ESP 225 Aspects of Game Design

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces various aspects of game design to students planning to work as part of management, production, and/or design teams. Various platforms, genres, objectives, rule dynamics, and quality will be explored. Emphasis will be placed on the elements of production including, conception, interface, storyboarding, character development, level of design, and soundtrack. *Prerequisite: ESP 100 and degree-seeking in the Esports program.*

### ESP 228 Esports Event Management

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course provides an overview of event management and the coordination of the technical aspects related to esports events. The responsibilities of an esports event manager often include the implementation of event plans and event oversight. Students will gain an understanding of how to execute organizational tactics that will assist in meeting event concepts and

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customer expectations. *Prerequisite: ESP 100 and degree-seeking in the Esports program.*

## ESP 250 Esports Industry Trends

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course examines popular culture both inside and outside of the competitive gaming industry. Students will gain an understanding of how trends evolve and transform within the entertainment industry. Students will learn how to apply this knowledge in order to anticipate market changes and develop games for targeted audiences. A focus will be placed on discussing new and evolving technologies as well as current events in the entertainment industry. *Prerequisite: ESP 100 and degree-seeking in the Esports program.*

## ESP 290 Esports Planning and Strategy

3 Credits (2 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (2 Hrs. Lecture 2 Hrs. Lab)

This course prepares students to develop, market, and execute small and large scale esports events. Students will focus on the business aspect of esports while learning to develop teams and online communities. Students will be required to develop their own best strategy and plan for an esports event. The event will center around the use of the latest streaming technologies and competitive game play. *Prerequisite: ESP 100 and 228.*

## GAM 156 Esports Game Technologies

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture)

This course is an introduction to the computer technologies utilized in esports. Student will examine and learn basic configurations of arena networking and streaming technologies.

## Ford ASSET (FOA)

(Automotive Student Service Educational

Training)

## FOA 100 Dealer Practices

2 Credits (1 Lecture 1 Lab 0 Shop)  
22.5 Hrs./Wk. (7.5 Hrs. Lecture 15 Hrs. Lab) \*2 wks.

This course consists of two major sections of instruction and lab experience. The first section introduces the student to the automotive industry, dealership operations, shop safety; Ford service publications, hand and power tool usage, and basic vehicle overview. The second section teaches basic electrical theory, use of electrical test equipment, circuit and component testing, and battery testing and service. In addition, fundamentals, servicing and testing of starting systems, charging systems, and ignition system will also be covered.

## FOA 130 Gas Engine Repair/Climate Control

4 Credits (1 Lecture 0 Lab 3 Shop)  
19 Hrs./Wk. (2 Hr. Lecture 17 Hrs. Shop) \*8 wks.

This course consists of two major sections of instruction and lab experience. The first section teaches the principles of four-stroke engine operation, identification of engine systems and components, cylinder head and valve train diagnosis and service, engine noise diagnosis, and turbocharger/supercharger principles. In addition, disassembly and reassembly of complete gas engines, inspection, measurement and repair of all components; engine repair and overhaul procedures will also be covered. The second section teaches the operation of heating/air conditioning systems; principles of refrigeration; inspection, testing and servicing climate control system components; and automatic temperature control. *Prerequisites: FOA 191 or instructor permission.*

## FOA 131 Field Experience

2 Credits (0 Lecture 0 Lab 2 Shop)  
18 Hrs./Wk. (18 Hrs. Shop) \*5 wks.

In FOA 131 the student works in the service department of a local Ford or Lincoln/

Mercury dealership. This hands-on training under the direction and supervision of an experienced technician, reinforces the subjects learned in FOA 130. *Prerequisite: FOA 130.*

## FOA 151 Field Experience

5 Credits (0 Lecture 0 Lab 5 Shop)  
28 Hrs./Wk. (28 Hrs. Shop) \*8 wks.

The student works in the service department of a local Ford or Lincoln/Mercury dealership. This hands-on training, under the direction and supervision of an experienced technician, reinforces the subjects learned in FOA 100 and 152. *Prerequisite: FOA 100 and 152.*

## FOA 152 Auto Electrical Systems

3 Credits (1 Lecture 0 Lab 2 Shop)  
17.50 Hrs./Wk. (2.5 Hrs. Lecture 15 Hrs. Shop) \*6 wks.

This course teaches basic electrical theory, use of electrical test equipment, circuit and component testing, and battery testing and service. In addition, fundamentals, servicing and testing of starting systems, charging systems, and ignition system will also be covered as related to Ford vehicles.

## FOA 190 Brakes, Steering and Suspension, Manual Transmission and Driveline

5 Credits (3 Lecture 0 Lab 2 Shop)  
17 Hrs./Wk. (6 Hrs. Lecture 11 Hrs. Shop) \*8 wks.

This course consists of three major sections of instruction and lab experience. The first section teaches basic hydraulic principles; operation of brake systems; master cylinder, drum brakes, disc brakes, power assist, parking brakes, and anti-lock brake systems. The second section teaches front and rear suspension systems; manual and power steering systems; wheel alignment; tire and wheel balance; tire wear; noise, vibration and harshness. In addition, electronically controlled vehicle riding height systems, variable shock dampening, and variable power steering assist will be covered. The third section teaches manual



# Course Descriptions

transmission operation and service; drive train basic principles; types of drivelines; differentials; clutches; U-joints; RWD, FWD, and 4-wheel drive. *Prerequisites:* FOA 151 or instructor permission.

## FOA 191 Field Experience

5 Credits (0 Lecture 0 Lab 5 Shop)  
28 Hrs./Wk. (28 Hrs. Shop) \* 8 wks.

The student works in the service department of a local Ford or Lincoln/Mercury dealership. This hands-on training, under the direction and supervision of an experienced technician, reinforces the subjects learned in FOA 190. *Prerequisite:* FOA 190.

## FOA 232 Field Experience

4 Credits (0 Lecture 0 Lab 4 Shop)  
22.5 Hrs./Wk. (22.5 Hrs. Shop) \* 8 wks.

In FOA 232 the student works in the service department of a local Ford or Lincoln/Mercury dealership. This hands-on training, under the direction and supervision of an experienced technician, reinforces the subjects learned in FOA 270. *Prerequisite:* FOA 130.

## FOA 240 Automatic/Manual Transmission

5 Credits (3 Lecture 0 Lab 2 Shop)  
17 Hrs./Wk. (6 Hrs. Lecture 11 Hrs. Shop) \* 8wks.

This course consists of one section of instruction and lab experience. This section teaches operating principles of Ford rear-wheel drive automatic transmission and front-wheel drive automatic trans axles; diagnosis; disassembly; repair and reassembly. *Prerequisite:* FOA 271.

## FOA 270 Computer Controlled Systems, Engine Performance

5 Credits (3 Lecture 0 Lab 2 Shop)  
17 Hrs./Wk. (6 Hrs. Lecture 11 Hrs. Shop) \* 8 wks.

This course covers the fundamentals of electronic control systems, electronic control system components, automotive microcomputer systems, and electronic engine control strategies. Also covered will

be Ford's EEC V System and engine drivability diagnosis. *Prerequisite:* FOA 232.

## FOA 271 Field Experience

5 Credits (3 Lecture 0 Lab 2 Shop)  
17 Hrs./Wk. (6 Hrs. Lecture 11 Hrs. Shop) \* 8 wks.

In FOA 271, the student works in the service department of a local Ford or Lincoln/Mercury dealership. This hands-on training under the direction and supervision of an experienced technician reinforces the subjects learned in FOA 270. *Prerequisite:* FOA 270.

## French (FRE)

### FRE 101 Beginning French I

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \* 15 wks.

This course offers an introduction to the French language and to the cultures of French-speaking areas of the world. The class will be communicative and interactive: the class will be conducted in French, and students will speak French in every session. This course is designed for students with no prior knowledge of French.

### FRE 102 Beginning French II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \* 15 wks.

This course offers continuing study of the French language and the cultures of French-speaking areas of the world. The class will be communicative and interactive: the class will be conducted in French and students will speak French in every session. This course is for students who have completed FRE 101 or two years of high school French. *Prerequisite:* FRE 101 or two years of high school French.

## Forensic Science (FRN)

### FRN 101 Introduction to Forensic Science

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \* 15 wks.

This course introduces students to the field of forensic science. The scientific techniques utilized by forensic scientists, forensic technicians and law enforcement personnel will be discussed and examined. Students will be introduced to the concept of how forensic science applies to the larger criminal justice field and what potential areas of employment and public service are available. Students will be required to write a research paper.

## Geology (GEO)

### GEO 101 Geology

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \* 15 wks.

This course will cover the fundamentals of geology. Topics covered will include rocks and minerals, the water cycle, glaciers, oceans, plate tectonics, volcanoes and earthquakes. Also covered will be tools and basic science concepts used to acquire information in each of these areas. There is no math prerequisite, however math concepts will be used in describing models, and students will be expected to solve problems using arithmetic and simple algebra concepts.

### GEO 102 Environmental Geology

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \* 15 wks.

Environment Geology involves the relationships of geology, humans and their environment. The course examines the ways in which geologic hazards (earthquakes, volcanoes, floods, landslides, tsunamis and others) affect people and the places and manners in which they live. Additionally, students will study the effects of people and the activities of our daily lives on the earth's surface: our use of soil to grow food, our habits-walking, driving and building on soils and bedrock, extraction of drinking water from the ground, use of petroleum and other mineral resources, and pollution of soil and water, as examples. There is no prerequisite for this course; however, high school earth science and/or Introductory Geology (GEO 101) would be helpful. Basic math concepts and functions will be

# Course Descriptions

incorporated into the course.

## Geography (GEY)

### GEY 101 Human Geography

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

Human Geography constitutes an introductory course designed to furnish the student with a general understanding of the spatial dimensions of human culture. The course provides an overview of the global distribution of such elements of culture as population, languages, religions, economic activities, urban systems, and political organization. The spatial perspective will furnish a greater understanding of the cultural world around us, and patterns of human activity which exist in dynamic interaction with the physical environment.

## Graphic Communications (GRC)

### GRC 102 Graphic Design I

*3 Credit (3 Lecture 0 Lab 0 Shop)  
3 Hr/Wk (3 Hr. Lecture) \*15 wks.*

This introductory course will help students develop a foundation in graphic design. Through the creation of projects, students will learn to apply the basic principles and elements of graphic design. The skills acquired in this course will allow students to create effective pieces for their portfolios. Graphic Design I offers students a unique, project-based, creatively challenging course. Projects such as designing and publishing a font will familiarize students with the basic visual principles and design techniques needed when entering the work force. Additionally, students will gain experience assessing their work through collaborative critique sessions.

### GRC 103 Digital Page Layout I

*3 Credit (3 Lecture 0 Lab 0 Shop)  
3 Hr/Wk (3 Hr. Lecture) \*15 wks.*

This course will introduce students to Adobe InDesign and typographic principles as they apply to digital page layout. Students will learn to design, layout, impose and print various documents, including

business cards, and a collaborative project such as the Maine Themed Game note pad. Students will learn about leading, kerning, tracking, typing on paths, in-line graphics, step-and-repeat and much more, while creating projects in a hands-on environment. Assignments will consist of a mix of in class activities and independent, outside of class, assignments and projects.

### GRC 106 Vector Illustration I

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course will introduce students to Adobe Illustrator and the creation of vector graphics. While exploring Illustrator's tools, students will learn to work with spot colors to create multi-color vinyl decals. Other topics include creating and rendering 3D objects. Students will be expected to complete assignments in a hands-on, lab environment and in independent, outside of class, assignments.

### GRC 107 Digital Systems & Equipment I

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course will introduce students to the Macintosh Operating System and operation of such peripheral equipment such as flatbed scanners, laser printers, copiers, wide-format printers and vinyl cutters. Students will learn proper file management techniques while learning to use the GRC server. Students will also learn safe work practices while working with the digital paper cutter and folding and padding equipment. Other topics include creating digital portfolios and interactive documents with Adobe Acrobat Pro.

### GRC 118 Introduction to Digital Photography

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This introductory course will guide students in the operation of digital cameras. Students will learn to correct exposure within the camera, apply various camera modes to achieve desired results, and

to save digital images for printing and web. Other topics will include setting up a photo-shoot and color correcting photos. Students must have access to a digital camera that allows editing of the settings to the camera's Aperture, Shutter Speed, ISO, Exposure Value, and Manual mode, and takes and saves photos in RAW format.

### GRC 119 Web Media I

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course introduces the students to the process of planning, defining and developing an interactive Web site. Adobe Dreamweaver, a program for Web application and development, will be the primary software used to create the Web sites. Adobe In-Design, Photoshop and Illustrator will also be used in the creation of web site elements.

### GRC 152 Portfolio Design & Development

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course will take students through the process of designing and building both traditional and digital portfolios. Each student will create a resume which will contain links to their portfolios. Students will learn how to post their portfolios on YouTube and other social media sites such as Facebook and LinkedIn. Digital portfolios will be formatted for smart devices, email, and traditional computers. Students will practice interview skills while presenting their portfolios in class.

### GRC 153 Introduction to Screen Printing

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

In this hands-on, fast paced environment, students will learn to screen print single and multi-color designs. Students will use their own designs in the production of T-shirts, while learning to output positives, prep, coat and image screens, and print garments utilizing state of the art screen printing equipment.

# Course Descriptions

## GRC 176 Photoshop I

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is an introduction to Adobe Photoshop Creative Cloud presented in a project-based format. Students will utilize selection tools, layers, retouching tools, colorization techniques and Content-aware in the correction and manipulation of photographs.

## GRC 204 Vector Illustration II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

In this advanced course, students will enhance their skills using Adobe Illustrator to create vector graphics. Students will apply the principles of typography, color theory and digital illustration to the solution of advanced design problems, including identity design. In class critiques, discussion and analysis of work submitted will lead to sound design practices. Students will be expected to complete assignments in a hands-on, lab environment and in independent, outside of class, assignments. *Prerequisite: GRC 106.*

## GRC 210 Digital Page Layout II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

In this course, students study the technical and creative potential of Adobe InDesign, an industry standard page layout program. After reviewing the fundamentals, students study multiple page document setup, master pages, style sheets, text editing and preflighting. Students will be expected to complete lab assignments in a hands-on lab environment as well as independent, outside the class, assignments. *Prerequisites: GRC 103 or GRC 105*

## GRC 220 Web Media II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Students will enhance their web design skills by creating web site with various web development applications. Students will be introduced to animation including creating, editing and importing characters from other design platforms. Students will be exposed

to advertising, branding and will publish a portfolio web page on the Adobe Spark web server. *Prerequisite: GRC 119.*

## GRC 249 Digital Photo Editing

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Students will explore industry standard software such as Lightroom and Photoshop for digital photo editing. Photo manipulation techniques will include: correcting for color casts, adjusting tonal values and contrast and improving out of focus shots. Calibrating displays and output devices will be covered in addition to preparing photographs for web and print output. Students will learn how to adjust and edit photos in RAW format. Students will also learn to import, organize, and output their images. Students must have access to a digital SLR camera that allows use in manual mode and takes and saves photos in RAW format. *Prerequisite: GRC 118.*

## GRC 250 Graphic Design II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

In this second-level course, students will enhance their design skills while tackling various design challenges. In this project-based course, students will manage type and images to create meaningful messages aimed at their target audiences. Students will utilize their creativity and problem-solving skills to develop effective designs. Designing pieces for a variety of production methods, such as packaging, digital printing, vinyl cut signage, and more, will be covered in this course. *Prerequisite: GRC 102, 103, 106, and 176.*

## GRC 252 Advanced Screen Printing

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

In this advanced course students will learn to print full color photographs using traditional CMYK methods, simulated process and digital imaging techniques. Students will retension Newman Roller frames, create and print underbases and

experience specialty inks such as discharge ink. Students will gain extensive experience in creating and printing halftone images in this course. *Prerequisite: GRC 153.*

## GRC 254 Digital Imaging and Wrap Installations

3 Credits (1 Lecture 2 Lab 0 Shop)  
5 Hrs./Wk. (1 Hr. Lecture 4 Hrs. Lab) \*15 wks.

In this hands-on course, students will learn the basics about vinyl and how to prepare surfaces for application of vinyl graphics and decals. The wide format printer/cutter will be used to teach file preparation, graphics printing, cutting and wrap techniques. Vehicle wrap techniques will be practiced using tuning film and varied tools to apply to vehicle doors, fenders, and other surfaces. Vinyl lettering and wall graphics and their installation will also be covered. *Prerequisites: GRC 102, 103, 106, 107 and 176.*

## GRC 276 Photoshop II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

In this advanced course, students will learn to improve low quality images, manipulate photographs and create original artwork while learning to use Photoshop in conjunction with the rest of the Creative Suite. In-depth work with layer masks, actions, paths and blending modes are just a few of topics covered in this course. *Prerequisite: GRC 176.*

## GRC 296 Special Topic

3 Credits (3 Lecture, 0 Lab, 0 Shop)  
The students in this course will analyze and focus on a selected topic in Graphic Communications, offered at various times throughout the year. Since the topic covered in this class differs from year to year, students should seek further information from the instructor before registering regarding the particular topic that will be analyzed.

## GRC 297 Internship Experience

3 Credits (0 Lecture, 0 Lab, 0 Shop, 3 Field Experience)

# Course Descriptions

160 hours in the field \*15 wks.

This course provides further skill development and refinement through work experience in the graphic arts industry. The student must complete a 15-week block of successful employment at an approved work site within the industry. Students are required to submit weekly work reports, two evaluations from their supervisor and a portfolio or other professional summary documentation of skills learned and applied during the internship experience. *Prerequisites:* GRC 102, 103, 106, 107, 119, 176 and instructor approval prior to registration.

## GRC 298 Production Experience

3 Credits (1 Lecture 2 Lab)  
5 Hrs./Wk. (1 Hr. Lecture 4 Hrs. Lab)

This course is designed to provide print, web and multi-media production experiences that apply the knowledge and skills gained from previous GRC class work. *Prerequisites:* GRC 102, 103, 106, 107, 119, 176.

## Heating Ventilation, Air Conditioning and Refrigeration Technology (HVT)

### HVT 105 Basic Refrigeration Principles

3 credits (1 Lecture 0 Lab 2 Shop)  
7 Hrs./Wk. (1 Lecture 6 Shop) \*15 wks.

This course provides an introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationship, safety, refrigeration containment, and refrigeration components.

### HVT 111 Electricity for HVAC/R

3 credits (1 Lecture 0 Lab 2 Shop)  
7 Hrs./Wk. (1 Lecture 6 Shop) \*15 wks.

This course introduces principles of electricity for HVAC/R technicians including proper use of test equipment, A/C and D/C circuits, and component theory and operation.

### HVT 120 Residential Load Calculations

2 credits (.5 Lecture 0 Lab 1.5 Shop)  
10 Hrs./Wk. (1 Lecture 9 Shop) \*8 wks.

This course introduces students to

psychrometrics, heating and cooling load calculations, and refrigeration load calculations.

### HVT 152 Heat Pumps

3 credits (1 Lecture 0 Lab 2 Shop)  
7 Hrs./Wk. (1 Lecture 6 Shop) \*15 wks.

This course provides knowledge necessary to install, service, troubleshoot, and repair heat pumps. Emphasis will be placed on air-to-air systems; ground source systems will be introduced and briefly examined. Topics will include a review of the refrigeration cycle, reversing valves, the defrost cycle, defrost timers including electromechanical as well as solid state devices, balance point, and backup heat systems. *Prerequisites:* HVT 105 and HVT 111.

### HVT 180 HVAC/R Diagnostics and Servicing

4 credits (1 Lecture 0 Lab 3 Shop)  
10 Hrs./Wk. (1 Lecture 9 Shop) \*15 wks.

This course covers the essential knowledge and skills necessary to properly service common residential HVAC/R equipment. Emphasis will be placed on confirming proper operation for safety, efficiency, and reliability. *Prerequisites:* HVT 105 and 111.

### HVT 252 HVAC/R System Design

3 credits (1 Lecture 0 Lab 2 Shop)  
7 Hrs./Wk. (1 Lecture 6 Shop) \*15 wks.

This course provides a study of the properties of air and results of cooling, heating, humidifying or dehumidifying in residential systems. Emphasis is placed on heat gain and heat loss calculations including residential equipment selection and balancing an air system. *Prerequisite:* HVT 180.

### HVT 255 Commercial Refrigeration

2 credits (.5 Lecture 0 Lab 1.5 Shop)  
10 Hrs./Wk. (1 Lecture 9 Shop) \*8 wks.

This course provides theory and practical application in the maintenance of commercial refrigeration; high, medium, and low temperature applications. The student will be introduced to various controls and components used in these applications. This course covers piping procedures, wiring, operation, and troubleshooting. The student will be

introduced to air cooled, water cooled, and evaporative cooled condensers and their applications. *Prerequisite:* HVT 180.

### HVT 297 Externship

3 credits (.5 Lecture 0 Lab 2.5 Shop)  
15 Hrs./Wk. (1 Lecture 14 Shop) \*8

wks. The externship experience provides the student with an opportunity to explore career interests in HVAC/R while applying knowledge and skills learned in the classroom to a work setting. *Prerequisites:* HVT 180, and OSHA 30-hour card, and department chair approval.

## History (HIS)

### HIS 131 US History to 1877

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The political, economic, social and historical trends of the United States will be discussed. The time period beginning with the colonial period to 1877 will be covered with particular focus on critical analysis of historical events in this time frame. Such events can include: Native American culture, the European discovery of the new World, the social, political and military aspects of the American Revolution, the Louisiana Purchase, the "Trail of Tears," the New Democracy of Andrew Jackson, slavery and the Civil War.

### HIS 132 US History Since 1877

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The political, economic, social and historical trends of the United States will be discussed. The time period beginning with 1877 to the present will be covered with particular focus on critical analysis of historical events in this time frame. Such events can include: The Glided Age, Westward Expansion, Anger and Reform: Populism and Progressivism, World War I, the "Roaring Twenties", the Great Depression and the New Deal, World War II, the Cold War, the Civil Rights Movement, the Social and Political Activism of the Sixties and the resurgence of conservatism.

# Course Descriptions

## HIS 151 Western Civilization I

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces the student to the heritage of Western society from ancient to early-modern times. Particular attention is given to the ancient civilizations of Egypt, Greece and Rome. Medieval civilization is explored with a focus on the institutions it bequeathed to the modern world. The Renaissance and Reformation and the rise of the great nation-states are studied. Throughout the course important individuals are considered such as Alexander the Great, Caesar, Charlemagne, Michelangelo, and Elizabeth I.

## HIS 152 Western Civilization II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces the student to the heritage of Western society from early modern times to the atomic age. Particular attention is given to the Enlightenment, the French Revolution, the rise of the industrial era, the growth of nationalism, and the World Wars. Personalities such as those of Napoleon, Marx, and Hitler are studied.

## HIS 201 Maine History

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will explore the social, political, and economic development of Maine from the time of settlement to the present. Discussion of early European and Native American influences on the political, social, and economic activities will provide a framework for discussion of contemporary fishing, hunting, lumbering, and tourist industries.

## HIS 210 The Washburns of Livermore, ME

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will use traditional historical research and several field trips to learn about one of the most outstanding political dynasties in American history. Israel and Martha Washburn had a large family

during the hard years of the early 19th century. Raised with "the iron hand of poverty always on their shoulders" the seven sons of Israel and "Patty" wrote their names large across the middle of 19th century political life. Out of the seven boys came two governors of different states, four US Representatives, one Union Army major general, a commander in the US Navy, one senator, one minister to France, one minister to Paraguay, one secretary of state, three authors, the founders of Gold Medal Flour and the Pillsbury Corporation, one millionaire banker philanthropist, the founders of a Wisconsin Railway still in operation, "The Mighty Soo," and three founders of the Republican Party.

## HIS 220 America and the Cold War

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will introduce the student to the political, military, economic and social stresses of the Cold War era that lasted from the end of World War II until 1989. Emphasis will be placed on such developments as the Cold War psyche, political discourse within the U.S., the arms race, the civil rights movement, the United Nations, international conflicts such as Korea and Vietnam, military spending, human rights and the Reagan and Gorbachev era.

## HIS 296 Special Topics in History

3 credits (3 Lecture 0 Lab 0 Shop)  
3 Hr/Wk (3 Hr. Lecture) \*15 weeks

The students in this course will analyze selected topics in history. These topics will analyze various periods and themes in history. The special topic analyzed is not a regular course offering of the social sciences department. Since the topic covered in this class differs from year to year, students should seek further information before registering regarding the particular topic that will be analyzed. Possible topics to be analyzed include: Modern African-American History, the Vietnam War, Native American History, Women in American History and The History of Lewiston-Auburn.  
*Co- or prerequisite: One history course or*

*instructor permission.*

## Humanities (HUM)

### HUM 294 Special Topics in Humanities

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will examine particular aspects of the humanities, depending on the semester. Examples might be - music, literature and art of a specific time period; the history of language as it related to modern modes of communication; the work of artists, writers and thinkers of a particular period or movement. Topics can cover a range of disciplines classified under the category "humanities" - art, music, language, cinema, philosophy, gender studies, and so on. Because this is not a regular offering of the Humanities Department, students are encouraged to seek detailed information from the instructor or department chair, prior to registering.  
*Pre requisite: Successful completion of ENG 101 or 105 with a C or better.*

### HUM 296 Independent Study in Humanities

3 Credits \*15 wks. Number of hours per week to be determined by Advisor

This course is designed to allow students to work on a semester long project in the humanities. The project will be developed by the student in conjunction with the instructor of the course. The student will meet with the instructor periodically through the semester to ensure the project objectives are being met. Prerequisites: The student must have completed (12) credit hours in a catalog program, be in good academic standing, be recommended by his or her advisor, and meet with the course instructor.

# Course Descriptions

## Human Services (HUS)

### HUS 100 Seminar in Human Services

1 credit (1 Lecture 0 Lab 0 Shop) \*15 weeks, 1 Credit (2 Lecture 0 Lab 0 Shop) \*8 weeks

This seminar is an introduction to counseling and human services inquiry. Each seminar will focus on a specific related topic, and students will use exploration of that topic to fully engage in practices and study of human services, set goals in preparation for practicum, employment and further study.

### HUS 101 Critical Thinking and the Addictions Professional

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The purpose of this course is to provide knowledge, skills and attitude learning opportunities that will prepare students to enter the addictions profession at entry levels and for those pursuing certification in addictions. The course will introduce students to the principles of critical thinking and will provide practice in applying these principles in everyday decision making within the addictions field. *Prerequisites:* Scores of 68 or higher on Reading Accuplacer® and scores of 5 or higher on WritePlacer, or completion of ENG 090 or ESL 101 with a C or better.

### HUS 112 Introduction to Human Services

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course provides a historical framework for understanding the current role of human services in meeting a variety of human needs in society. An emphasis is placed on the work of social service agencies and the roles of human services workers. The nature of helping relationships including attitudes, skills and knowledge required, value conflicts and dilemmas in the field will be explored. The organization and delivery of services offered to individuals, families and the community will be discussed. Care of specific populations such as children, the aging, and those

with substance abuse, mental illness, and developmental disabilities in a multicultural society will be highlighted. This course will also explore the different methods, careers, and job opportunities in the various helping professions, and the goals of the human service program in particular.

### HUS 151 Interviewing and Counseling

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The purpose of this course will be to present an overview of the major contemporary counseling theories and various techniques of interviewing, kinds of interviewing, and issues relevant to interviewing, such as confidentiality, case recording and nonverbal communication. Students will be actively involved in the integration of theoretical concepts and practical skills. The course will include practical exercises in the various techniques and methods specifically used in the human services field. *Prerequisites:* Completion of HUS 112 and PSY 101, with a grade of C or better or instructor permission.

### HUS 153 Substance Abuse

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course investigates drug use, abuse, and addiction. Psychological, social, legal, spiritual, and philosophical sources of drug use and abuse are explored. Five areas of emphasis will be examined including the societal forces that influence the phenomenon; the drugs themselves, so-called licit and illicit drugs or "street drugs" and medications and their use and effects on mind, body, and emotions, i.e., the pharmacology of drug use; the drug users themselves, and why they use drugs; the theories of addiction; rehabilitation and relapse prevention which will address what works and what does not; and prevention including drug wars, education as prevention, and the failure of drug education.

### HUS 155 Case Management

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course explores the theory, principles, and methods of casework in various social agency settings with attention focused on identifying and assessing situational problems using social and social psychological variables. Skill development will emphasize basic methods of case load management, coordinating various components to community social services, and insuring continuity of services to clients. Topics covered include: information gathering, record keeping, monitoring treatment plan implementation, referral to other service providers, and the appropriate utilization of a caseworker's time. The case management policies of various community agencies will be examined. *Prerequisite:* Successful completion of HUS 112 or instructor permission.

### HUS 158 Behavioral Health Professional Certification

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The purpose of this course is to prepare students for working with youth and their families in home and community settings. Students will gain an understanding of: typical child and family development, the impact of trauma, development of the ITP, communication skills, principles of behavior, principles of instruction and the use of community resources. This course requires that students successfully complete CPR/First Aid and Blood Borne Pathogens Certification.

### HUS 160 Addiction and the Family

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The purpose of this course is to explore the numerous substance abuse related issues that may impact the family system. Topics of exploration include possible causes of substance abuse and addiction within the family, the wide-ranging impact upon family members and dynamics, intervention and treatment, as well as long-term recovery issues.

# Course Descriptions

## HUS 161 Addiction Over the Lifespan

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to introduce students to the fundamental concepts of chemical dependency across the lifespan. Topics of study include common substances of abuse, neurochemical/ physiology of addiction, various developmental models and addiction, as well as treatment and prevention.

## HUS 201 Multicultural Perspectives in Human Services

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will examine the various perspectives of multiculturalism within the human services environment and the effects on the delivery of services. Topics will include culture, ethnicity, gender, social class, age, ability and their influence on the delivery of services to diverse populations. Students will examine their own attitudes and beliefs as these relate to their development as human service professionals.

## HUS 202 Psychosocial Aspects of Disability

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will present an overview of current theoretical and philosophical perspectives relating to the day-to-day problems of those with mental, physical and developmental disabilities including mental retardation, autism, cerebral palsy, epilepsy, TBI and other nervous symptom disorders. The rehabilitation process will be examined, including the history and background, legislation, basic principles and philosophy. Also considered are the steps in the rehabilitation process, historical attitudes toward people with disabilities, the medical model and independent living programs. Course content and activities will enable students to recognize ways in which disability affects individuals as members of families, groups, organizations and communities. Course focus will also be on exploring techniques used in various

life stages and reviewing innovative ways to overcome apathy and discrimination in populations. Additional focus will be on developing the knowledge and basic skills necessary for rehab goal planning, functional assessment, and direct skills teaching along with job development, analysis, matching and retention. Major emphasis is given to the operation of the state vocation/federal system. Ethical and legal issues such as self-determination, strategies for independence and nondiscrimination will be addressed.

## HUS 204 Vocational Rehabilitation

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The purpose of this course will be to present a survey of the historical, sociological, theoretical, legislative and operational foundation of vocational rehabilitation counseling and service delivery along with the vocational aspects of disability. Specifically how these issues relate to persons with disabilities, to include, physical, intellectual, behavioral and psychological will be addressed. Students will examine and analyze philosophical, historical, legislative and organizational structures; vocational rehabilitation and related programs; referral and service delivery systems; the vocational rehabilitation process; administration of rehabilitation programs and professional and ethical issues. *Prerequisites: PSY 101 and a prerequisite or co-requisite of HUS112.*

## HUS 205 Crisis Intervention

3 Credits (3 Lecture 0 Lab 0 Shop) \*15 wks.

3 hrs/week (3 hrs. lecture) 15 weeks

This course is an introduction to crisis theory and crisis intervention strategies. Students will explore various techniques, assessments, treatment modalities, and practical applications for crisis situations. Additional emphasis will be placed de-escalation techniques and working effectively in traumatic situations with diverse populations.

## HUS 208 Mindfulness & Self-Care

3 Credits (3 Lecture 0 Lab 0 Shop) \*15 wks.

3 hrs/week (3 hrs. lecture) 15 weeks

This experiential course examines theoretical foundations and research in the field of mindfulness and the emerging science that shows promising, beneficial effects for physical and mental health and well-being. We will explore mindfulness as a personal practice for self-compassion, intention, attitude, motivation, as well as practices to integrate and sustain mindfulness in everyday personal and professional life.

## HUS 241 Human Services Practicum I

4 Credits (1 Lecture 0 Lab 3 Clinical)  
10 Hrs./Wk. (1 Hr. Lecture 9 Hrs. Clinical)  
\*15 wks.

The goal of the course is to integrate course theory learned throughout the curriculum with practical, beginning clinical work and community service networking, by providing prospective human services workers with an opportunity to learn experientially at a human services agency in the community. The focus is for the student to learn how an agency functions and experience being a part of that agency. A weekly one hour seminar will assist the student to process and integrate knowledge gained in the foundation courses with the experiential learning gained at the field site. It will serve as a forum for sharing field experiences and provides students with a peer support group. The focus will be on developing the skills necessary for human services practice, i.e., observation, human relations, interviewing, self-awareness, and leadership. *Prerequisites: Students should have successfully completed 30 credits of the HUS degree requirements and permission from Department Chair.*

## HUS 250 Ethics & Issues in Human Services

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 hrs/week (3 hrs. lecture) 15 wks.

# Course Descriptions

This course provides an overview of ethical issues and decision-making faced by human services professionals. The roles, functions, and ethical responsibilities of human services professionals are explored in the context of case-studies and ethical dilemmas that may arise.

## HUS 251 Human Services Practicum II

4 Credits (1 Lecture 0 Lab 3 Clinical)  
10 Hrs./Wk. (1 Hr. Lec. 9 Hrs. Clinical)  
\*15 wks.

A continuation of the practicum and seminar experience which will provide opportunities for students to advance their learning and practice skills, and to learn more about themselves, client populations with whom they work and the network of human services. *Prerequisite: HUS 241*

## HUS 266 Grief, Loss and Bereavement

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 hrs/week (3 hrs. lecture) 15 wks.

The course explores theories, common beliefs and perspectives of death, loss, and grief responses within the context of individual, family, community, and societal factors. Students will assess their own self-awareness and philosophy regarding grief and loss. Community resources and support systems for grief and loss will be emphasized from a human services perspective.

## HUS 296 Special Topics in Human Services

3 Credits, (3 lecture, 0 lab, 0 Shop)  
3 hrs/week (3 hrs. lecture) 15 wks.

The student in this course will analyze related topics in Human Services. These topics will focus on various individual client and community needs in regard to the Human Service profession. The special topic analyzed is not a regular course offering of the Social Sciences department. Since the topic covered in the class differs from year to year students should seek further information from the instructor before registering regarding

the particular topic that will be analyzed. Possible topics that maybe available for analysis include: counseling – individual and group, multicultural issues and concerns, professional issues & concerns, credentialing & certification, social issues, government and agency influences on profession and ethics and working in an ethical manner. *Only available to HUS majors.*

## Interdisciplinary Studies (INS)

### INS 101 Technology and Society

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Technology and Society examines the issue of technology from a variety of perspectives. Students will explore how technological innovation has been treated in 20th century fiction and film, and how thinkers have examined the implications of living in a technological society. *Prerequisite: Successful completion of ENG 101 or 105 with a C or better.*

### INS 211 The Asian Tradition

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The Asian Tradition will provide students with an overview of the largest continent starting with the religion, history, and literature of Ancient India and the Chinese Dynasties, and continue through medieval Asia with the emergence of Japan and Southeast Asia. Because of Asia's vast size, the development of the various cultures was distinct. Unique art, literature, and religious traditions emerged, but the extraordinary diversity was often accompanied with mistrust and conflict. The course ends with an examination of modern Asia and an investigation of how the volatile current events (India/Pakistan, North/South Korea, China/Tibet, China/Taiwan,) are the product of ages-old cultural traditions. *Prerequisite: Meet the ENG 105 prerequisites.*

### INS 250 Western Thought and Culture I

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course provides students with a cultural context for appreciating Western Civilization and understanding the present. Students study the cultures of ancient Egypt, the Golden Age of Greece, Imperial Rome, the Dark Ages, the Byzantine Empire and the Middle Ages. Students consider each culture in terms of the dominant characteristics of its origins, world view, political thought, religion, ethics, art, architecture, literature, music, philosophy, science, mathematics, and medicine, as the case may be, as well as its leading figures. (Not all aspects apply to all cultures.) The objective is not to present a comprehensive survey of all subjects but rather a composite picture of the essential typical characteristics, figures, and symbols of the age that students can carry with them into life and use as a basis for understanding in other courses. *Prerequisite: Successful completion of ENG 101 or ENG 105 with a C or better.*

### INS 251 Western Thought and Culture II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This survey course introduces the student to the major ideas and artistic achievements in the western tradition from the Renaissance to today. The course will focus on the evolution of thinking in each period, including the Renaissance, the Baroque, the Enlightenment, the Modern, and the Postmodern. In each period, the role and nature of the arts, including painting, sculpture, architecture, literature, and music will be examined. *Prerequisite: Successful Completion of ENG 101 or ENG 105 with a C or better.*

### INS 296 Interdisciplinary Seminar

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This interdisciplinary seminar, which focuses on a different topic every year, is offered by the Humanities, Social Science and/or Mathematics and Science faculty. Students will examine the topic from different viewpoints to gain a more broad-



# Course Descriptions

based understanding of the subject. This seminar requires students to read a variety of material to prepare for class

discussions and participate actively in class.  
*Prerequisite: Successful completion of ENG 101 or ENG 105 with a C or better.*

## Justice Studies (JUS)

### JUS 204 Victimology

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course presents a comprehensive and balanced exploration of victimology, a vital new and, at times, controversial branch of criminology. This course examines the victims' plight, and is careful to place statistics from the FBI's Uniform Crime Reports and Bureau of Justice Statistics National Crime Victimization in context. This course systematically investigates how victims currently are handled by the criminal justice system, analyzes the goals of the victims' rights movement, and discusses what the future is likely to hold. Also discussed will be: human trafficking, crimes on campus, identity theft, stalking, motor vehicle theft, and prisoners attacked behind bars.

### JUS 205 - Crisis Intervention for Justice Studies

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will introduce the student to crisis theory, concepts, intervention and strategies for justice-related occupations. Special emphasis is given to contemporary research in suicidology, disaster psychology, and crisis management for public schools. Topics of discussion include emergency situations such as natural disasters, terrorism, school violence, abuse, and crisis interventions with diverse populations.

### JUS 210 The Juvenile Justice System

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will examine the Juvenile Justice system in America, including its history, philosophy and development, along with future challenges the system

must confront. The rights of Juveniles in the American Juvenile Justice System will be thoroughly explored and discussed. Differences between the adult criminal system and juvenile offender treatment will be analyzed. The problems facing youth as well as the impact of cultural, sociological and other forces will be examined. Other societies' treatment of youthful offenders will be compared and contrasted with the American system. Appropriate punishment of juvenile offenders, including community programs and institutionalization, will be studied. The class will explore in depth the challenges facing the juvenile justice system and discuss ways in which the system might be improved and advanced. Other modalities such as outside speakers, films and/or field trips may be utilized during the course to assist students in more fully integrating the concepts explored.

### JUS 225 Race and Ethnicity Issues in Law Enforcement

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

May be taken as a Social Science Elective  
The course examines the impact of cultural diversity on law enforcement to include a discussion of cultural awareness, bias, prejudice, training, recruitment and cross cultural communication. Police challenges in engaging with specific racial/ethnic groups are examined, to include Asian/Pacific Americans, African-Americans, Latino/Hispanic Americans, Arab Americans, Native Americans and others. Homeland security concerns, racial profiling and hate crimes are also addressed.

### JUS 232 Criminal Psychology

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is an examination of psychology of human behavior as it relates to crime. This course will assist the student in understanding the factors that contribute to criminal behavior in order to determine appropriate intervention strategies. Emphasis will be placed on origins of criminal behavior, aggression, psychopathy, crime and mental disorders, homicide, and

sexual assault. Biological, psychological, educational and situational factors are examined to assess behaviors, patterns, and motivations.

### JUS 245 Criminology

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will define crime and evaluate the various ways crime is measured. Students will be provided with an overview of the more popular criminological theories, emphasizing the biological, psychological and sociological schools of thought. In addition, crime control and prevention strategies as they relate to each theory will be examined in terms of theory, practice and effectiveness.

### JUS 252 Offender Rehabilitation

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course examines programs and practices designed to rehabilitate offenders. Rehabilitation will be considered across a variety of areas contributing to offender recidivism. Evidenced-based methods of rehabilitation explored will include interventions for people who have drug addictions, mental illness, and those who perpetrate property offenses, sexual crimes, and domestic violence. This course will also consider offender rehabilitation with men and women of different ages and ethnic/cultural background and relevant professional ethics issues.

### JUS 260 Organized Crime

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

May be taken as a Social Science Elective  
This course provides a thorough introduction to the structure, history and the criminological impact of organized crime on society.

### JUS 296 Special Topics in Justice Studies

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

May be taken as a Social Science Elective  
Students in this course will analyze selected topics focused on Justice Studies.

# Course Descriptions

## Learning Resources (LER)

### LER 100 First-Year Seminar

1 Credit (1 Lecture 0 Lab 0 Shop)

1 Hr./Wk (1 Hr. Lecture) \*15 wks.

1 Credit (2 Lecture 0 Lab 0 Shop)

2 Hr./Wk (2 Hr. Lecture) \*8 wks.

This course provides an introduction for students transitioning to Central Maine Community College. It is designed to provide students with an opportunity to acquire the skills to succeed in college, career and life. Through classroom exercises and guest lecturers, on topics such as time management, academic goal development, career development, financial literacy and critical thinking, students develop strategies for success. This course is required of all General Studies Associate of Arts students and open to all others.

## Mathematics (MAT)

### MAT 030 Basic Mathematics

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This preparatory course provides a review of the arithmetic processes including addition, subtraction, multiplication and division of whole numbers, fractions, decimals, percents, and measurement. Includes an introduction to algebraic concepts. Students are expected to gain mastery in each of these areas and demonstrate their competency on appropriate tests. *Prerequisite:* See page 33 of Academic Catalog for placement & prerequisite chart.

### MAT 050 Algebra I

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course covers an introduction to algebraic operations including problem solving with simple equations, graphing, systems of equations, exponents, and polynomials. Students are expected to gain mastery in each of these areas and demonstrate their competency on appropriate tests. *Prerequisite:* See page 33 of Academic Catalog for placement &

*prerequisite chart.*

### MAT 080 Pre Statistics

3 Credits (3 Lecture 0 Lab 0 Shop) 3 Hrs./

Wk. (3 Hrs. Lecture) \*15 wks.

This is a pathway course to introductory statistics that focuses on descriptive statistics. No previous experience in the understanding or use of statistics is assumed. Performing operations and evaluating expressions will be reviewed. Topics of study include types of sampling, observational studies and experiments, display of data, measures of center and spread, probability, scatterplots, and linear modeling, functions, graphing linear equations, and solving linear equations and formulas. Note: This course only serves as a prerequisite for MAT 135 Statistics. MAT 100 Intermediate Algebra (a prerequisite for higher level math courses including MAT 135) is recommended for those who plan to transfer into business, advanced health, science, technology, engineering, and math programs. *Prerequisite:* See page 33 of Academic Catalog for placement & prerequisite chart.

### MAT 100 Intermediate Algebra

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course covers the fundamentals of algebra including the real number system, solving equations and formulas, graphing equations, systems of linear equations, factoring and fractional expressions, quadratic equations, exponents and radicals. *Prerequisites:* See page 37 for placement & prerequisite chart.

### MAT 101 Business Mathematics

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to develop the computational and vocabulary skills necessary for: retailing, marketing, accounting, finance and business management. Topics studied include: interest, banking, depreciation systems, payroll, statistics and graphics. It includes expanded application of algebraic

principles through the study of quadratics and linear equations to business problems including standard of deviation and coefficient of variation to quality control problems. See page 37 for placement & prerequisite chart.

### MAT 102 Numbers and Logic

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course explores: (1) various number systems - conversions between them and the arithmetic used in them; (2) Sets-description of sets and operations involving sets; (3) Logic statements, symbols, decision tables and applications; (4) Mathematical systems - clock arithmetic, modular systems and applications and finite systems; (5) Counting - ways of counting, sequences, combinations and permutations; (6) Probability - finite and conditional probability; (7) Proportion and variation. See page 37 for placement & prerequisite chart.

### MAT 104 Technical Mathematics

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course focuses on mathematics topics relevant to a variety of trades and technical disciplines. Topics include: proportions, percentages, measurement, algebra, geometry, and trigonometry. An emphasis is placed on practical, contextual applications. See page 37 for placement & prerequisite chart.

### MAT 105 Geometry and Trigonometry

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will begin with a review of the techniques for solving linear equations in one and two unknowns, formulas, quadratic equations, and proportions. The course will cover the U.S. and International units of measurement, geometry of some common geometric shapes and the Pythagorean Theorem. Also included will be right triangle trigonometry, trigonometry of any angle and vector addition. See page 37 for

# Course Descriptions

placement & prerequisite chart.

## **MAT 115 Quantitative Reasoning**

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Quantitative Reasoning provides a foundation in critical thinking, problem solving, and mathematical and statistical skills aligned with citizenship, workforce and real-world applications. The goal of the course is to engage students in meaningful mathematical experiences that will increase the student's quantitative and logical reasoning abilities and strengthen the mathematical abilities that they will encounter in other disciplines. A focus of the course is to develop and support communication and collaboration skills. This course is designed as a gateway course for students entering non-STEM degree programs. See page 33 of *Academic Catalog* for placement & prerequisite chart.

## **MAT 122 College Algebra**

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course covers variables and symbols; scientific notation; formulas and literal equations; right triangle trigonometry; slope, intercepts, and equations of lines; graphs of linear and quadratic functions; graphs of linear inequalities; solving systems of linear equations; polynomials, products and factors; roots and rational exponents; rational expressions; solving linear, quadratic, and higher order equations; solving linear inequalities; an introduction to exponential and logarithmic functions, and applied problem solving. See page 37 for placement & prerequisite chart.

## **MAT 125 Finite Mathematics**

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will cover several topics related to problem solving in the areas of business, finance, sociology, economics, and other areas in which mathematical methods are used. Specific topics include linear functions, systems of equations, matrix algebra, linear programming,

and the fundamentals of probability and statistics. No previous experience in finite mathematics is necessary; however, a solid foundation in algebra is essential. See page 37 for placement & prerequisite chart.

## **MAT 132 Pre-Calculus**

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will begin with a review of the trigonometric functions and solving problems involving right triangles. The course will include the geometry of common geometric figures (including perimeter, area, and volume), trigonometric functions of any angle, vectors, and graphing of trigonometric functions. Complex numbers, additional topics in trigonometry, plane analytic geometry and a review of functions will complete the course. See page 37 for placement & prerequisite chart.

## **MAT 135 Statistics**

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course studies methods of collecting, organizing, summarizing, and presenting data, providing students the opportunity to develop skills using statistical techniques. Topics of study also include sampling methods, descriptive statistics, probability and probability distributions, normal distributions, confidence intervals, hypothesis testing, inferential statistics, regression, and correlation. Technology will be employed as appropriate. See page 37 for placement & prerequisite chart.

## **MAT 283 Calculus I**

4 Credits (4 Lecture 0 Lab 0 Shop)

4 Hrs./Wk. (4 Hrs. Lecture) \*15 wks.

This is the first course in a typical three-semester sequence covering the basic calculus of real variables. Calculus I introduces the concept of limits and applies that concept to the definitions of derivative and integral of a function. Derivatives and their applications are covered as well as integrals and their applications. The course will also include the differentiation and

integration of transcendental functions. See page 37 for placement & prerequisite chart.

## **MAT 284 Calculus II**

4 Credits (4 Lecture 0 Lab 0 Shop)

4 Hrs./Wk. (4 Hrs. Lecture) \*15 wks.

This is the second course in a typical three-semester sequence covering the basic calculus of real variables. Calculus II topics include inverse trigonometric functions, hyperbolic functions, methods of integration, improper integration, indeterminate forms, parametric equations, polar coordinates and infinite series.

See page 37 for placement & prerequisite chart.

## **MAT 296 Math Special Topics**

Variable Credit

This course reviews basic operations with real numbers including fractions, decimals, and percentages. Topics include U.S. and International units of measurement, techniques for solving linear equations, use of formulas, proportions and variation, geometry of common geometric shapes, and right triangle trigonometry.

*Prerequisite:* MAT 050 with a grade of C or higher or SAT Math score of 480 (SAT Math score of 450 with 12th grade college prep math) or ACT Math score of 18 (ACT Math score of 17 with 12th grade college prep math) or 230 on the QRAS Accuplacer.

## **Medical Assistant (MEA)**

### **MEA 100 Medical Assistant Seminar**

1 Credit (1 Lecture 0 Lab 0 Shop)

1 Hrs./Wk. (1 Hrs. Lecture) \*15 wks.

1 Credit (2 Lecture 0 Lab 0 Shop)

2 Hrs./Wk. (2 Hrs. Lecture) \*8 wks.

This course provides MCO students with an opportunity to acquire the skills to succeed in college, career and life. Students will develop strategies through activities on topics such as time management, academic goal development, career development in the field of medical assisting, financial

# Course Descriptions

literacy and critical thinking.

## **MEA 165 Medical Ethics and Law**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will provide students with an overview of laws, ethics, liabilities, and their relationships as they relate to the Medical Assisting profession. Covered topics will include ethical and legal responsibilities, licensure requirements, physician and patient rights, negligence, medical records confidentiality, and revocation of licensure.

## **MEA 205 Medical Office Administration & Electronic Records**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will focus on the administrative procedures of a medical office. Competencies include: performing clerical functions; performing bookkeeping procedures; preparing special accounting entries; processing insurance claims; communicating with patients, verbally and written; understanding legal concepts; explaining general office policies; performing various operational functions; and maintaining a level of professionalism. *Prerequisites:* MET 111 and BCA 120.

## **MEA 210 Insurance Coding/Claims Processing**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will focus on the insurance and claims processing duties of the medical office professional. The student will gain an understanding of the health care industry; medical coding; insurance claims procedures; and several major health insurance programs. The course will explore the legal aspects of insurance billing, ICD-10-CM coding, HCPCS coding, various medical claims forms, Electronic Data Interchange (EDI), Managed Care, Blue Cross/Blue Shield, Medicare, Medicaid, and Workers' Compensation. A billing simulation will be completed as a final evaluation. *Prerequisite:* MET 111.

## **MEA 221 Medical Clinical Procedures I (Lab)**

2 Credits (0 Lecture 2 Lab 0 Shop)  
4 Hrs./Wk. (4 Hrs. Lab) \*15 wks.

These labs will follow the lecture as much as possible and include the practice to perform procedures and skills efficiently in the medical assisting setting. *Co-requisite* MEA 222, *Prerequisites:* BIO 101/102 and BIO 105 OR BIO 115/116 and BIO 117/118.

## **MEA 222 Medical Clinical Procedures I (Lecture)**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course begins as an introductory course and continues into preparing the student for Medical Assisting with some basic skills. The student will receive an introductory look at the profession to include managing the clinical environment, learning communication and patient teaching skills, and taking health history and vital signs. Students will continue by learning infection control, safety, sterilization, instrument preparation, the process of a general patient exam, minor office surgery, emergencies, first aid, CPR, diet, nutrition, pharmacology, phlebotomy and the administration of medications. *Co-requisite* MEA 221. *Prerequisites:* Grade of C or higher in BIO 101/102 and BIO 105 OR BIO 115/116 and BIO 117/118.

## **MEA 230 Advanced Medical Clinical Procedures II (Lecture)**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will continue presenting clinical skills needed for the medical assistant in a medical setting. During this course the student will learn basic laboratory testing procedures. A basic treatment of microbiology, urology, and diagnostic imaging will be presented. The student will also be introduced to the different special ties of a medical practice: Gynecology, Obstetrics, Pediatrics, Neurology, Psychiatry, Orthopedics, Rehabilitation, Cardiology, Pulmonology, Gastroenterology, Dermatology,

Ophthalmology, Otolaryngology, Endocrinology, Oncology, Immunology and Allergy. *Prerequisites:* Grade of C or higher in MEA 221 and 222; *Co-requisite* MEA 231.

## **MEA 231 Advanced Medical Clinical Procedures II (Lab)**

2 Credits (0 Lecture 2 Lab 0 Clinical)  
4 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

The labs will follow the lecture as much as possible and include the practice to perform procedures and skills efficiently in the medical assisting setting. *Co-requisite* MEA 230.

## **MEA 240 Essentials of Pharmacology for Medical Assistants**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will cover basic pharmacological concepts. 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 presented. The course covers a review of mathematical skills required to calculate drug dosages.

## **MEA 266 Medical Assistant Externship**

6 Credits (0 Lecture 0 Lab 6 Clinical)

Following coordinator's approval, the student will spend two days a week for 15 weeks during the spring semester in local physician's offices or hospitals observing and participating in basic procedures used in the operation of the clinical, laboratory, and administrative areas. *Prerequisites:* Successful completion of MEA 222 and 221. *Co-requisites:* the prescribed fourth semester courses, a GPA of 2.0 and a C or better in medical assisting, biology, and business and computer applications courses.

# Course Descriptions

## Medical Coding and Electronic Health Records (MCO)

### MCO 100 Medical Coding Seminar

1 Credit (1 Lecture, 0 Lab, 0 Shop)

1 Hrs./Wk. (1 Hrs. Lecture) \*15 wks.

1 Credit (2 Lecture, 0 Lab, 0 Shop)

2 Hrs./Wk. (2 Hrs. Lecture) \*8 wks.

This course provides MCO students with an opportunity to acquire the skills to succeed in college, career, and life. Students will develop strategies for success through activities on topics such as time management, academic goal development, career development in the field of medical coding, financial literacy and critical thinking.

### MCO 111 Health Information Management

4 Credits (4 Lecture, 0 Lab, 0 Shop)

4 Hrs./Wk. (4 Hrs. Lecture) \*15 wks.

An introduction to the allied health profession of Health Information Management to include Healthcare Data Management, Health Statistics, Quality Management and Healthcare Delivery Systems. This course is an overview of HIM key topics including computer systems and health records systems, privacy and security, healthcare data sets, research and regulatory, and compliance issues.

### MCO 116 Healthcare Statistics

2 Credits (2 Lecture 0 Lab 0 Shop)

2 Hrs./Wk. (2 Hrs Lecture) \*15 wks.

This course introduces students to the gathering, compiling and computing of statistics utilized in healthcare. *Prerequisite:* MCO 111.

### MCO 121 ICD CM Coding

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs Lecture) \*15 wks.

Medical coding is defined as the translation of diagnosis, procedures, services and supplies into numeric and/or alpha numeric characters for universal use in reporting and reimbursement. This course provides an

introduction to the ICD-CM coding system (International Classification of Diseases, current Revision, Clinical Modification) introducing the student to specific coding issues within each body system and disease processes. This course is the stepping stone into the world of clinical coding and is utilized throughout the United States. *Co-requisites:* BIO 105 or BIO 117/118 and MET 111.

### MCO 125 CPT & HCPCS Coding

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs Lecture) \*15 wks.

This course builds upon Clinical Coding System I providing an introduction to the coding of procedures and services utilizing ICD-10-CM coding system (International Classification of Diseases, current Revision, Clinical Modification), CPT (Current Procedural Coding) and HCPCS (Healthcare Common Procedure Coding System) introducing the student to specific coding issues within each body system and associated procedures. This course is the stepping stone into the world of procedural coding that is utilized throughout the United States. *Co-requisites:* BIO 105 or BIO 117/118 and MET 111.

### MCO 134 ICD PCS Coding

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs Lecture) \*15 wks.

Medical coding is defined as the translation of diagnosis, procedures, services and supplies into numeric and/or alpha numeric characters for universal use in reporting and reimbursement. This course introduces the ICD-PCS coding system (International Classification of Diseases, current Revision, Procedure Coding System) introducing the student to inpatient procedure coding.

*Prerequisites:* MET 111 and BIO 105 or BIO 117/118.

### MCO 136 Intermediate CPT & HCPCS Coding

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs Lecture) \*15 wks.

This course will build upon the Basic CPT Coding course. Students will delve further

into the complete health record, applying procedural codes to reflect the intricate details of surgical procedures. *Prerequisites:* MCO 125.

### MCO 150 Medical Specialties and Pathophysiology

4 Credits (4 Lecture 0 Lab 0 Shop)

4 Hrs./Wk. (4 Hrs Lecture) \*15 wks.

The focus of this course will be on the pathophysiology of disease in different organ systems. This course will also include basic pharmacology as well as building on the anatomy and physiology discussed in Medical Terminology. Topics covered will include cells and cellular metabolism, study of disease, inflammation and tissue repair, the respiratory (ventilation) system, the circulatory system (perfusion), nutrition and the digestive system and the elimination systems, as well as some of the medications and treatments associated with these systems. *Prerequisites:* MET 111.

### MCO 215 Reimbursement Methodology

3 Credits (3 Lecture, 0 Lab, 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Addressing the complex financial systems associated with today's healthcare environment, this course provides an understanding of the basics of health insurance, managed healthcare, revenue cycle management, medical coding, reimbursement, Clinical Documentation Improvement (CDI) and workers' compensation. *Prerequisites:* MCO 111.

### MCO 299 Practicum

3 Credits (0 Lecture 0 Lab 0 Shop 3 Field Exp.)

(45 Hrs. Field Experience) \*15 wks.

This course provides hands on exposure in the field of coding and electronic health records. Students are required to complete 135 hours of virtual clinical experience. This course also serves as the capstone MCO course. A review for the CPC or CCA credentialing exam will be conducted. *Prerequisites:* C or higher in MCO 121,

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125 and MET 111.

## Medical Terminology (MET)

### MET 111 Medical Terminology

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This is an entry level medical terminology course designed to introduce the student to terms and language commonly found in the medical and health care professions. The student builds vocabulary through the study of word structure by learning prefixes, suffixes and root words.

## Music (MUS)

### MUS 101 Music Appreciation and History

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Music Appreciation and History is a one-semester survey of the Western music tradition, from the chant of the Middle Ages to the art music of this century. It includes study of the major composers, genres, and forms of each period. An understanding of musical style through repeated listening is a primary goal of the class.

### MUS 111 Listening to Jazz

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

In this course the student will be able to demonstrate an understanding of the following concepts: The correct terms and usage to describe the fundamental musical elements of jazz, the origins of jazz and the characteristics of key stylistic periods from the music's inception until the present, the seminal artists and their important contributions. The students will be able to demonstrate the ability to aurally recognize key historical styles of jazz, aurally recognize seminal jazz artists and corresponding masterworks as studied during the course; write and speak coherently about jazz, using appropriate, basic terminology.

## Nursing (NUR)

Students are responsible for prior knowledge. Supervised clinical experiences take place on nursing units within a structured health care setting. Pre- and post-conferences are designed to assist students to further utilize the nursing process and provide nursing care.

### NUR 112 Foundations of Nursing/ Nursing Care of Adults

9 Credits (5 Lecture 0 Lab 4 Clinical)  
17 Hours/Week (5 Hrs. Lecture 12 Hrs. Clinical) \*15 wks.

This course emphasizes the acquisition of knowledge and skills by the student for the provision of basic patient care. Major focus areas for the student include professional behaviors, communication, techniques of physical assessment, critical thinking, nursing process, patient teaching strategies and the management of time and resources for the student and the provision of care. The student uses the classroom, the laboratory and clinical areas for practice and discussion. *Prerequisites:* Admission to the Nursing Program; *Co-requisites:* BIO 115/116; ENG 101 or 105.

### NUR 115 Medication Preparation, Administration and Dosage Calculations

1 Credit (1 Lecture 0 Lab 0 Clinical)  
2 Hr/Wk (1 Hr. Lecture) \*7.5 wks.

This course is designed for nursing students. It focuses on the safety and accuracy required for medication administration. Included will be the interpretation of drug orders (including standards and common abbreviations used in a drug order), understanding drug labels, oral and parenteral drug administration, reconstitution of solutions, pediatric and adult dosages based on body weight and body surface area, calculating and adjusting intravenous solutions, and dosage calculations using the formula, ratio and proportion or dimensional analysis approach. *Prerequisite:* Admission to the Nursing Program.

### NUR 116 Role Transition - LPN

3 Credits (1 Lecture 0 Lab 2 Clinical)  
7 Hrs./Wk. (1 Hr. Lecture 6 Hrs. Clinical)  
\*15 wks.

This course is designed to assist the licensed practical nurse with the role transition to professional role of the associate degree nursing student. The emphasis in this course includes application of assessment, planning, intervention and evaluation of outcomes in the provision of holistic care to patients with common, well defined health problems. Major focus areas for the student include practice of the role of the student nurse, development of assessment skills, nursing care planning, communication with patients and families, generation of clinical judgments related to patient's assessed needs, increasing proficiency with nursing skills, patient teaching, and identification of student's own learning needs. *Prerequisites:* Completion of an approved Practical Nursing Program and current Maine LPN license and ENG 101, or 105, BIO 115/116. *Co-requisites:* PSY 101, BIO 117/118.

### NUR 121 Nursing Across the Life Span I

10 Credits (6 Lecture 0 Lab 4 Clinical)  
18 Hrs./Wk. (6 Hrs. Lecture 12 Hrs. Clinical) \*15 wks.

The emphasis in this course includes application of assessment, planning, intervention and evaluation of outcomes in the provision of holistic care to patients with common, well defined health problems as well as patients in the childbearing/child rearing stage of life. Major focus areas for the student include practice of the role of the student nurse, communication with patients across the life span, growth and development issues, generation of clinical judgments related to patient's assessed needs, increasing proficiency with nursing skills, patient teaching, and identification of student's own learning needs. *Prerequisites:* NUR 112, ENG 101 or 105. *Co-requisites:* BIO 115/116, BIO 117/118 and PSY 101.

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## **NUR 210 Pharmacology for Nurses**

3 credits (3 Lecture 0 Lab 0 Shop)  
3 Hr./Wk (3 Hr. Lecture) \*15 wks.

This course is designed for third semester nursing students and provides an overview of the principles of pharmacokinetics and pharmacodynamics. The major drug categories are reviewed with emphasis on therapeutic use, action and adverse reactions. The role of the nurse and the use of the nursing process in assessment, safe administration and evaluation of patient response is emphasized. *Prerequisites:* BIO 117/118 and NUR 121.

## **NUR 212 Nursing Across the Life Span II**

9 Credits (5 Lecture 0 Lab 4 Clinical)  
17 Hrs./Wk. (5 Hrs. Lecture 12 Hrs. Clinical) \*15 wks.

This course builds on previous coursework while increasing the student knowledge and responsibility in the provision of care for two or more patients experiencing complex health needs. Emphasis is placed on effective communication with other health care team members, use of assessment data, prioritization of patient needs and the formulation of clinical judgments to provide holistic nursing care. *Prerequisites:* All Level I (1st year) courses except NUR 134. *LPN advanced placement students must complete NUR 116. Co-requisites:* BIO 211/212 and PSY 111.

## **NUR 213 Nursing Across the Life Span III**

9 Credits (5 Lecture 0 Lab 4 Clinical)  
17 Hrs./Wk. (5 Hrs. Lecture 12 Hrs. Clinical) \*15 wks.

In this course the student moves into the professional role of the AD nurse. Provision of holistic care through effective collaboration with the health care team, the patient and families, collection and analysis of relevant data and the formulation of clinical judgments for patients of all ages with more complex or multiple health needs becomes the focus of this course. Students assume responsibility for a group of patients practice delegation while working within the health care team in the

provision of care. Students are encouraged to continue their own education through courses and/or review of professional resources. *Prerequisites:* NUR 212, BIO 211/212 and PSY 111. *Co-requisites:* COM 100, *Humanities Elective and General Education Elective.*

## **NUR 299 Practicum: Nursing**

45 hours of clinical practice equals 1 credit hour

This course is designed to provide nursing students with a supervised experience in an area of clinical specialization which has been previously studied in didactic classes. Credit hours range from 4 to 6 credits at a formula of 45 hours of clinical practice equaling 1 credit hour. *Prerequisite:* Department chair approval.

## **Occupational Health and Safety (OHS)**

### **OHS 102 Introduction to Occupational Health and Safety**

1 Credits (1 Lecture 0 Lab 0 Shop)  
1 Hrs./Wk. (1 Hrs. Lecture) \*15 wks.

This one credit course is designed to introduce students in disciplines other than Occupational Health and Safety to the fundamentals of workplace

health and safety. Concepts of health and safety hazards and their control and the legal framework of occupational health and safety will be covered. Students will receive a 10 hour card from the OSHA Training Institute in addition to academic credit. Note: This course is not applicable to either the Certificate or the Associate Degree in Occupational Health and Safety.

### **OHS 111 Construction Safety & Health**

1 Credit (1 Lecture, 0 Lab, 0 Shop)  
7.5Hr/Wk (7.5 Hr. Lecture) \*2 weeks.

The OSHA 10 hour construction training course will be completed in 15hrs and is intended to provide construction workers with a basic knowledge of the most common safety and health hazards found on many construction sites. This construction

training course also provides students with an overview of how the Occupational Safety and Health Administration (OSHA) operates. It is intended for workers in construction related jobs, like ground-up construction projects, demolition work, and major renovation projects.

## **OHS 115 Construction Health & Safety**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This class will examine the fundamentals of a construction safety and health program and the minimum requirements under the Federal Occupational Safety and Health Administration (OSHA). Students will receive a 30-hour OSHA Construction Safety and Health Training Card from OSHA at the successful completion of the course.

## **Parts and Service Management (PSM)**

### **PSM 100 Parts & Service Management I**

3 Credits (2 Lecture 0 Lab 1 Shop)  
5 Hrs./Wk. (2 Hrs. Lecture 3 hrs. Shop) \*15 wks.

This course is the first in a series of automotive related management courses. The operation of parts counters and service operations will be studied. A practical field experience at a cooperative business will complement the classroom theory.

### **PSM 101 Advanced Automotive Systems**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course explores all various automotive systems and their functions. Students will learn how to locate and identify components and their relationship to parts and service manuals. *Prerequisite:* PSM 105.

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## PSM 105 Introduction to Automotive Systems

3 Credit (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course explores basic automotive systems and their functions. Students will learn how to locate and identify components and practice diagnostic techniques through online scenarios. Students will also take practice tests in preparation for future ASE certification.

## PSM 205 Parts & Service Management II

3 Credits (1 Lecture 0 Shop 2 Shop)

7 Hrs./Wk. (1 Hr. Lecture 6 Hrs. Shop) \*15 wks.

This course is the final component in a series of automotive related management courses. Compliance with applicable agencies and a safe work environment will be reinforced. The effective use of human resources will finalize the classroom portion of the PSM courses. A practical internship at a cooperative business will complement the classroom theory. *Prerequisite:* PSM 100.

## Philosophy (PHI)

### PHI 101 Critical Thinking

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course introduces the student to the principles of critical thinking and provides practice in applying these principles to everyday decision making and argument analysis. The student will learn to distinguish between rational thoughts and feelings, identify assumptions, identify the quality of evidence, clarify by asking questions, fair-mindedly analyze multiple viewpoints, and make reasonable judgments. Students will apply principles of clear thinking to evaluating messages from the news media and advertising. *Prerequisite:* SAT® ERW score of 420 or higher or Reading Accuplacer® score of 68 or higher and Writeplacer Accuplacer® score of 5 or higher or completion of ENG 090 or ESL 101 with a C or higher.

### PHI 111 Introduction to Ethics

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course provides the students with an introduction to ethics, or moral reasoning. The value of studying ethics will be examined, and common ethical principles will be discussed and applied to everyday ethical decisions. A methodology for making sound ethical choices based on moral principles and likely outcomes will be introduced and practiced in class. Students will have an opportunity to examine specific ethical problems in a number of disciplines including law, business, medicine, and science, the overall emphasis of the course will be on practical ethical decision making.

### PHI 151 Introduction to Western Philosophy

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Examine the major philosophers and philosophies of Western thought starting with the early Greek and Christian thinkers, followed by an examination of the arrival of science and the new trend toward rationalism. The course ends with an investigation of the modern, more individualistic philosophies of Existentialism and Nihilism. Western Philosophy will also address the major philosophical questions regarding happiness, reason, emotions, and God. *Prerequisite:* Successful Completion of ENG 090 or ESL 101 with a C or better or ENG 101 or 105.

### PHI 153 An Introduction to Eastern Philosophy

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Unlike Western faith-based religious tradition, Eastern thought is experiential. To that end, Philosophy 153 will not only include a historical overview, but will also incorporate several primary texts from Hinduism, Buddhism, and Taoism to gain a deeper understanding. Topics will include: Eastern Philosophy's inquiries into happiness, the nature of reason, goals and desires, the function of emotions, Reincarnation, God, Enlightenment, as

well as major spiritual figures. *Prerequisite:* Successful completion of ESL 090 or ESL 101 with a C or better or ENG 101 or 105.

## Physics (PHY)

### PHY 121 Technical Physics I (Lec.)

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will cover physical measurements, motion, vectors, concurrent forces, work and energy, rotational motion, gears and pulleys and non-concurrent forces. *Co-requisite:* PHY 122 Lab; *Prerequisite:* MAT 105 or 122 with C or better.

### PHY 122 Technical Physics I (lab)

1 Credit (0 Lecture 1 Lab 0 Shop)

2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

Experiments designed to support the subjects being introduced in Technical Physics I. *Co-requisite:* PHY 121.

### PHY 142 Physics I (Lec.)

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Basics of statics and dynamics are investigated; including forces, velocity and acceleration, dynamics of falling bodies, energy and work, momentum and impulse, circular motion and rotational dynamics. *Co-requisites:* MAT 132 and PHY 143.

### PHY 143 Physics I (lab)

1 Credit (0 Lecture 1 Lab 0 Shop)

2 Hrs./Wk. (2 hrs. Lab) \*15 wks.

Experiments designed to support the subjects being introduced in PHY 142. *Co-requisite:* PHY 142.

### PHY 221 Technical Physics II (Lec.)

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is a continuation of Technical Physics I and includes: Strength of Materials, Fluid Systems, heat and temperature and thermal expansion of materials, the gas laws, electricity and magnetism and simple circuits. *Prerequisite:*



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PHY 121 with a grade of C or better. Co-requisite: PHY 222.

## PHY 222 Technical Physics II (lab)

1 Credit (0 Lecture 1 Lab 0 Shop)  
2 Hrs./Wk. (2 hrs. Lab) \*15 wks.

Experiments designed to support the subjects being introduced in Technical Physics II. Co-requisite: PHY 221.

## PHY 242 Physics II

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

A continuation of Physics I. Course content includes solids and fluids, temperature, heat and thermal expansion. Also introduced are Thermodynamics, vibrations and waves, sound, light and electricity. Prerequisites: PHY 142/143 with a grade of C or better. Co-requisite: PHY 243.

## PHY 243 Physics II (lab)

1 Credit (0 Lecture 1 Lab 0 Shop)  
2 Hrs./Wk. (2 Hrs. Lab) \*15 wks.

Experiments designed to support the subjects being introduced in PHY 242. Co-requisite: PHY 242.

## PHY 296 Physics Directed Study

Variable Credit (1 - 4)

This course is intended to meet the needs of students interested in expanding their knowledge of physics or advanced mathematical concepts. Topics will be based on need and interest. Performance contract is developed by student and faculty. Prerequisites: PHY 121/122 or PHY 142/143 with a grade of C or better.

## Physical Fitness (PHF)

### PHF 101-107 Physical Fitness Activity Classes

1 credit/30 hours

These courses will be available as they are created (ex. Cardio Conditioning). These classes will be electives open to all students.

### PHF 110 Exercise Science, Athletic Training & Physical Fitness Seminar

1 Credit (1 Lecture 0 Lab 0 Shop)  
1/Hr./Wk (1 Lecture) \*15 wks.

This course explores the variety of careers available in the exercise science field such as athletic training, strength and conditioning, personal training and physical education. Topics include the required education to be a successful professional in exercise science related occupations as well as the skills to succeed in college, career and life.

### PHF 122 Kinesiology

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course covers the various types of levers of the musculoskeletal system and an understanding of the factors that contribute to human strength and power. Students will analyze movements in sports and exercise and make movement-oriented exercise prescriptions. Students will evaluate resistive force and power patterns of strength training movements and exercise devices. Prerequisites: BIO 105 or BIO 115/116.

### PHF 150 Methods of Life Style Coaching

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This class is a foundation to support healthy individuals and those struggling with lifestyle-related chronic disease through lifestyle coaching. Students will gain skills to mobilize the internal strengths of their clients and offer external resources for sustainable change in their clients' lives. Students will learn coaching strategies as well as the core competencies necessary for a competent lifestyle coach to demonstrate.

### PHF 155 Introduction to Exercise Science

4 Credits (3 Lecture 1 Lab 0 Shop)  
4 Hrs./Wk. (3 Hrs. Lecture 1 Hr. Lab) \*15 wks.

This course presents the basic scientific

foundations and the practical application of techniques used in exercise science including the fundamentals of muscle physiology, human systems, energy systems and its acute/chronic adaptations to resistance and cardiorespiratory exercise. Prerequisites: BIO 105 or BIO 115/116.

### PHF 197 Field Experience

2 Credits (1 Lecture 0 Lab 0 Shop 2 Field Experience)

3Hrs./Wk. (1 Lecture 2 Field Exp.) \*15 wks.

This introductory field experience provides opportunity for practical application of knowledge gained through prior coursework in exercise science. The student will assist in the leadership of on and/or off-campus programs, with special emphasis on either personal training experiences, group exercise instruction, or basic athletic training and sports injury evaluation. The focus is to expose PHF students to at least 3 career opportunities in their discipline. They will be exposed to the environment, skills, human relations, observations and training necessary to be successful in this career path. The one hour classroom session each week will help assist the student in professionalism, job sharing, and preparedness for each experience. Prerequisite: PHF 155.

### PHF 204 Nutrition to Improve Human Performance

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course covers the principles of nutrition to support improvement in human health and fitness. Active individuals need to understand the importance of nutrition and metabolism for optimum weight, energy requirements and nutrients to support performance and recovery. The student will also learn pre-exercise, exercise and post-exercise nutritional requirements. Prerequisite: BIO 121.

### PHF 207 Introduction to Injury Prevention and Management

3 Credits (3 Lecture 0 Lab 0 Shop)

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3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The purpose of this class is to introduce the basic concepts of injury prevention and management. It will address sports related injuries, injury prevention, evaluation, treatment, management and rehabilitation and sports medicine related topics. Students will become certified in CPR, AED, basic first aid and basic sports medicine concepts in the field of athletic training. Students have to successfully complete CPR, AED and basic first aid to pass the course  
*Prerequisites: PHF 155 and BIO 105 or BIO 115/116.*

## PHF 208 Exercise Testing and Prescription

4 credits (3 Lecture 1 Lab 0 Shop)

5 Hrs./Wk. (3 Hrs. Lecture 2 Hr, Lab) \*15 wks.

Students will participate in client interviews to develop fitness goals and assess compatibility. The course will cover pre-participation health appraisal screening and recognize when to refer individuals to healthcare professionals. Students will understand and correctly administer proper fitness assessments on exercise clients in a safe manner. Students will understand apply concepts of strength training and aerobic endurance to design strength and aerobic endurance programs specific to client goals for healthy and special populations.  
*Prerequisite: PHF 155.*

## PHF 251 Methods of Teaching

### Group Exercise

3 Credits (3 Lecture 0 Lab 0 Shop)

3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will provide students with the knowledge and experience to prepare and lead a safe and effective group exercise class for participants of all ages and abilities. The course will examine research-based exercise programming, teaching, evaluation, supervision and leadership in a variety of instructional class formats adapted to different environments.  
*Prerequisite: PHF 122.*

## PHF 299 Practicum

4 credits (2 Lecture 2 field experience)

12 hrs week (2 hr lecture 10 hrs field experience) \*15 wks.

Building upon experiences gained from PHF 197 Field Experience, the student continues assisting in the leadership of on and/or off campus programs, with emphasis on personal training experiences, group exercise instruction, and athletic training. The focus of this practicum will be to identify the specific career path from the student's individualized plan which they will shadow for their work experience. Students will be supervised, met with individually and as a group throughout the semester preparing the student for the job market or continued education. *Prerequisites: PHF 122, 197, 202 and 204 all with grades C or higher.*

## Plumbing & Heating Technology (PHT)

### PHT 100 Plumbing Code

3 Credits (3 Lecture, 0 Lab, 0 Shop)

3 Hrs./Wk. (3 Lecture) \*15 wks.

This course provides students with plumbing code requirements and fundamental importance of adhering to Uniform Plumbing Code.

### PHT 103 Plumbing Technology I

5 Credits (2 Lecture, 0 Lab, 3 Shop)

11 Hrs./Wk. (2 Lecture 9 Shop)\*15 wks.

This course introduces plumbing principles as they apply to the plumbing industry in light commercial and residential applications. Students learn basic plumbing concepts, plumbing lexicon and terminology, the use of critical plumbing tools and equipment, basics of jobsite safety, applications and installation for a residential plumbing system.

### PHT 125 Plumbing Technology II

5 Credits (2 Lecture, 0 Lab, 3 Shop)

11 Hrs./Wk. (2 Lecture 9 Shop)\*15 wks.

This course introduces advanced plumbing principles as they apply to the plumbing industry in commercial and residential applications. Students learn to identify a variety of fixtures, faucets, appliances, and materials in domestic water and drainage

installations. *Prerequisite: PHT 103.*

## PHT 135 Electricity, Pumps and Hydronics

3 Credits (1 Lecture, 0 Lab, 2 Shop)

7 Hrs./Wk. (1 Lecture 6 Shop) \*15 wks.

This course will provide students with a basic knowledge of electricity, pumps and circulation and controls of hydronic heating.

## PHT 140 Print Reading and Interpretation

2 Credits (2 Lecture, 0 Lab, 0 Shop)

4 Hours/Week (4 Lecture) \*8 Wks..

Introduction to print reading for plumbing and HVAC students for residential and commercial applications. Course work includes study of specifications and information contained on paper as well as electronic construction drawings.

## PHT 207 Heating I

4 Credits (1 Lecture, 0 Lab, 3 Shop)

10 Hrs./Wk. (1 Lecture 9 Shop)\*15 wks.

This course provides an introduction to oil heating systems. Students will learn industry standards, safety, and how to efficiently install fuel tanks, piping, venting systems and distribution systems. This course prepares students for Maine Journeyman 1 & 2 oils - up to 15 GPH licensure. *Co-requisite: PHT 225. Prerequisite: PHT 125 or HVT 180.*

## PHT 209 Propane and Natural Gas I

4 Credits (1 Lecture, 0 Lab, 3 Shop)

10 Hrs./Wk. (1 Lecture 9 Shop)\*15 wks.

This course provides students with the basic principles and practices of working with propane and natural gas to ensure safety and provide quality service. This course will help prepare students for NPGA CETP certification. *Prerequisite: PHT 125 or HVT 180.*

## PHT 225 Maine Oil/Solid Fuel Code

1 credit (1 lecture, 0 shop)

2 Hrs./Wk. (1 Lecture) \*8 wks.

This course provides an introduction to the laws and rules governing oil and solid fuel burning appliances in Maine. *Co-requisite: PHT 207.*

## PHT 257 Heating II

4 Credits (1 Lecture, 0 Lab, 3 Shop)

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10 Hrs./Wk. (1 Lecture 9 Shop)\*15 wks.  
This course provides advanced knowledge and skills regarding the installation, maintenance, servicing, troubleshooting and repair of oil heating systems. This course prepares students for Maine Journeyman 1 & 2 oils - up to 15 GPH licensure. *Prerequisite: PHT 207.*

## **PHT 259 Propane and Natural Gas II**

4 Credits (1 Lecture, 0 Lab, 3 Shop)  
10 Hrs./Wk. (1 Lecture 9 Shop)\*15 wks.  
This course provides students with advanced knowledge and practices of working with propane and natural gas applications including methods of piping and distribution. This course will help prepare students for NPGA CETP certification. *Prerequisite: PHT 209.*

## **PHT 297 Externship**

3 Credits (.5 Lecture, 0 Lab, 2.5 Shop)  
8 Hrs./Wk. (.5 Lecture, 7.5 Shop) \* 15 Wks..

(Total hour commitment varies from 135 hrs to 280 hrs based on the nature of the project/experience. This number will be determined by Department Chair prior to course registration.)

The externship experience provides the student with an opportunity to explore career interests in plumbing and heating while applying knowledge and skills learned in the classroom to a work setting. *Prerequisites: Department chair approval, PHT 207, 209 and successful completion of OSHA 30-hour card.*

## **Political Science (POS)**

### **POS 150 Introduction to American Politics**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will introduce the student to the fundamentals of American politics. Students will study and analyze the many different aspects of United States politics, including political culture, the founding period, the constitution, the federal system, public opinion and the mass media, campaigns and elections, political parties, interest groups, Congress, the presidency, the bureaucracy, the judiciary,

public policies, civil liberties, civil rights and international and defense policies. In addition, the student will study and analyze how power operates as a part of political culture, various institutions and important actors within American politics.

### **POS 151 American State and Local Government**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is intended to introduce the student to the essentials of sub-national government in the United States. We will study and analyze many different aspects of state and local politics, including: federalism, state constitutions, citizen participation, elections, political parties, interest groups, campaigns, governors, budgeting, the bureaucracy, state legislatures, the judiciary, local government, leadership and governance, economic development, intergovernmental relations, and various public policies. Particular attention will be paid to state and local government within Maine. In addition, the student will study and analyze how power operates as a part of political culture, various institutions and important actors within sub-national government in the United States.

### **POS 152 Introduction to Public Policy**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is designed to familiarize the student with various analytical models and important debates in the formulation, execution, and reform of public policies. Areas of major focus include health and welfare, education, international trade, immigration, environmental policy, civil rights, defense policy, economic policy and criminal justice.

### **POS 160 Introduction to International Relations**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This introductory course is about the theory and contemporary history of global

politics from an international relations perspective. Subjects include: the nature of personal leadership, the environment, power and decision making; causes of terrorism, war, peace, and relations between national security and domestic political stability; economic development and trade management, technology and the global revolution in communications and interdependence and ethnic and religious identities in regional and global politics.

### **POS 170 Sports and Politics**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will introduce the student to the relationships between sports and politics in the contemporary world. In particular, the course will analyze how politics and laws affect the structure and outcomes of sports and how sports affect the structure and content of politics and laws. Specifically, the course will focus on the following themes: civil rights and sports, the legal and fiscal environment of sports, federal and state and local government regulations of sports, commercialism in sports and the globalization of sports. Both amateur and professional sports will be analyzed. The following specific sports and sporting events will be analyzed: the Olympics, baseball, soccer, hockey, and snowmobiling. In a more general way, football and basketball will also be analyzed. Within these, the following issues will be analyzed: the legal environment of competition and antitrust law, the responsibility and rights of owners, player associations and fans, the collective bargaining process, drugs and sports, gender equality and law, international politics and amateur sports and safety and regulation of sports. There may be some field trips to sporting events.

### **POS 205 Introduction to Comparative Politics**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course offers a broad, comparative introduction to the structure and function of national political systems, with an emphasis on the structural and function

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attributes that distinguish democracies from non-democracies, and that distinguish different types of democracies and non-democracies from each other. Additional substantive areas to be analyzed include the global environment, the social sources of power, the economic sources of power, demand, support and decision-making, system maintenance, force and military intervention and violence and political change.

## POS 296 Special Topics in Political Science

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

The students in this course will analyze selected topics in political science. These topics will analyze various controversies in contemporary political science. The topics may be found in the political institutions, social institutions and public policy of selected countries. The special topic analyzed is not a regular course offering of the Social Sciences department. Since the topic covered in this class differs from year to year, students should seek further information from the instructor before registering regarding the particular topic that will be analyzed. Possible topics to be analyzed include: US residential elections, civil liberties, terrorism, technology and politics and political participation.

## Precision Machining Technology (PMT)

### PMT 103 Blueprint Reading and Sketching

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Week (3 Hrs. Lecture)

This course is designed to teach the fundamentals of print reading and sketching. Throughout the course assignments students will adhere to current ASME or ANSI standards. The students will be taught the basics of orthographic projection, pictorial sketching, and print reading through a combination of sketching and textbook assignments.

### PMT 111 Introduction to Lathes

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course is designed to familiarize the student with the lathe and its functions. Each student will be taught safety precautions, setup and operating procedures for facing, turning, drilling and boring. Tool geometry and the use of measuring tools related to the lathe operations will also be covered.

### PMT 112 Introduction to Manual Milling

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students with a basic understanding of vertical milling machines. Emphasis will be on nomenclature, basic functions, and safety.

### PMT 118 Introduction to CNC Milling

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students with the fundamentals to program, setup and operate Computer Numerical Control (CNC) Milling Centers.

### PMT 119 Introduction to CNC Lathes

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students with the fundamentals to program, setup and operate Computer Numerical Control (CNC) Turner Centers.

### PMT 121 Introduction to Threading Processes

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students with information to machine internal and external degree Unified Threads. The wire method for thread inspection will be emphasized. *Prerequisite:* PMT 111 or

*faculty approval.*

### PMT 122 Work Holding Methods for Milling

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students with information to use different types of work holding devices in milling. Emphasis will be placed on students milling and assembling completed components. *Prerequisite:* PMT 112 or *faculty approval.*

### PMT 124 Applied Computer Numerical Control

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students the opportunity to program, setup and operate CNC machines. Students will have the opportunity to try the NIMS level 1 CNC milling and turning part. *Prerequisite:* PMT 118 or *faculty approval.*

### PMT 125 CNC Turning Methods

2 credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students the opportunity to program, set-up and operate CNC lathes. Students will have the opportunity to try the NIMS level 1 Turning part. *Prerequisite:* PMT 119 or *instructor permission.*

### PMT 209 Geometric Dimensioning and Tolerancing

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Week (3 Hrs. Lecture)

This course is designed to introduce the student to the basic principles of geometric dimensioning and tolerancing related to the precision machining industry. The theory principles will be enforced through exercises in the quality control lab. Students will also be provided the opportunity to learn the theory and application of gaging. *Prerequisites:* PMT 103 or *faculty approval.*

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## **PMT 211 Advanced Threading Processes**

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course provides students with information for machining multiple start transmitting screw threads. Methods of measuring tapers will also be discussed. The principles of Lean Manufacturing will be demonstrated and applied to this course. *Prerequisite: PMT 121 or faculty approval.*

## **PMT 212 Circular CNC Milling Processes**

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students with information to use different types of CNC milling operations. Students will learn to produce threads and slots on a CNC mill. Lean Manufacturing concepts will be introduced to the students. *Prerequisite: PMT 124.*

## **PMT 214 Advanced Computer Numerical Control**

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students the opportunity to produce complex parts on the CNC mills and lathes. Students will also be introduced to multiple setups, fixtures, and MasterCam to aid with the completion of projects. *Prerequisite: PMT 125 or faculty approval.*

## **PMT 217 Introduction to Toolmaking**

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will introduce the student to the realm of tool making. While the design of jigs, fixtures and stamping dies will be studied, the course will focus more on the basic tool making practices and techniques used in their construction. *Prerequisites: PMT 211, 212 or faculty approval.*

## **PMT 221 Advanced CNC Turning Processes**

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students an opportunity to perform a variety of complex machining tasks on CNC lathes. Emphasis will be placed on the carbide tooling identification system. *Prerequisite: PMT 214.*

## **PMT 228 Metallurgy**

1 Credit (1 Lecture 0 Lab 0 Shop)  
1 Hr./Wk. (1 Lecture) \*15 wks.

This course develops familiarization with the various metals used in the industry both ferrous and non-ferrous. The concepts of heat treatment by various methods and their relationship to tool steels are included in this course. The history and evolution of metals and their uses will be studied.

## **PMT 229 Advanced CNC II**

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students the opportunity to set-up and run multi-axis CNC milling equipment. Students will also have the opportunity to use a tool setter and probe for set-ups. Emphasis will be placed on faster set-up times and cycle time reduction. *Prerequisite: PMT 212 Circular CNC Milling Processes or faculty approval.*

## **PMT 230 Introduction to CMM's**

2 Credits (.5 Lecture 1 Lab .5 Shop)  
4 Hrs./Wk. (.5 Hr. Lecture 2 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students with the theory and fundamentals to program set-up and operate Coordinate Measuring Machines (CMM's). *Prerequisite: PMT 209 or 210 or faculty approval.*

## **PMT 240 2-D Cam Programming**

2 Credits (2 Lecture 0 Lab 0 Shop)  
2 Hrs./Wk. (2 Hrs. Lecture) \*15 wks.

This course is designed to introduce the basic aspects of CNC milling and lathe programming using Master Cam. Students will be provided the resources to create a CNC program from a blueprint. *Prerequisite: PMT 124.*

## **PMT 270 Introduction to Solid Modeling**

3 Credits (3 Lecture 0 Lab 0 Shop)

This course will provide students the opportunity to learn about three dimensional solid modeling, create a drawing from a solid model, and create an assembly from multiple solid modeling parts.

## **PMT 276 Advanced Cam Programming**

2 Credits (2 Lecture 0 Lab 0 Shop)  
2 Hrs./Wk. (2 Hrs. Lecture) \*15 wks.

This course will provide students the opportunity to learn the programming principles three dimensional parts for vertical milling centers, live tooling for turning centers, and spindle probing for complex parts.

## **PMT 279 Multi Axis CNC Lathe**

3 Credits (.5 Lecture 2 Lab .5 Shop)  
6 Hrs./Wk. (.5 Hr. Lecture 4 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students the opportunity to learn advanced set-up and operation of CNC lathes. Students will have to complete parts using a tailstock as well as live tooling.

## **PMT 281 3-D Surface Milling**

3 Credits (.5 Lecture 2 Lab .5 Shop)  
6 Hrs./Wk. (.5 Hr. Lecture 4 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students the opportunity to program, set-up and operate 3 axis CNC Milling Centers for advanced milling operations with an emphasis on three dimensional milling. Students will have to use spindle probes to pick-up work offsets and CMM's for part verification.

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## **PMT 282 Multi Axis Cam Programming**

2 Credits (2 Lecture 0 Lab 0 Shop)  
2 Hrs./Wk. (2 Hrs. Lecture) \*15 wks.

This course will provide students an opportunity to learn the programming principals for 4 axis vertical and horizontal CNC milling centers and 5 axis vertical CNC milling centers.

## **PMT 285 4 and 5 Axis CNC Milling**

3 Credits (.5 Lecture 2 Lab .5 Shop)  
6 Hrs./Wk. (.5 Hr. Lecture 4 Hrs. Lab 1.5 Hrs. Shop) \*15 wks.

This course will provide students the opportunity to program, set-up and operate 4 and 5 axis horizontal and vertical CNC Milling Center. Students will be exposed to spindle probing and CMM operation to verify part dimensions.

## **PMT 294 Special Topics in Precision Machining**

Variable Credit

Students taking this course will explore selected topics in Precision Machining Technology that are relevant at the time of delivery. This course will not address subject matter currently offered within other PMT courses. Since the topics will change from year to year, students should check with the instructor or chair to obtain more in-depth information on the topics offered for that given time period.

## **Psychology (PSY)**

### **PSY 101 Introduction to Psychology**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is an introduction to the study of human behavior and its application to everyday life situations. Among the topics discussed are physiological foundations of behavior, altered states of consciousness, emotion, learning, and thinking. Using these topics as a basis for discussion, students will further explore the following topics: personality, interpersonal

communication, conflict, group processes, behavior disorders and therapies, and industrial psychology.

### **PSY 111 Developmental Psychology**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course is a multi-disciplinary study of life span development from prenatal and postnatal stages through infancy, childhood, adolescence, adulthood, old age, and death. Included will be discussions of genetic, environmental, psychological, and sociological influences of the development of and changes in physical, cognitive and language, and psychosocial domains of individuals.

### **PSY 114 Child Development**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

Development of the young child, from conception to pre-adolescence, will be studied through presentation of theory, observation of children, and review of the current research. This will provide a holistic content for understanding the many variables that influence the on-going growth and development of young children. This course will also provide the basis for creating developmentally appropriate curriculum for children birth through age eight years.

### **PSY 116 Psychology of Group Dynamics**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will examine the theories, history, and stages of group development, group dynamics and processes, distinguish between the various types, uses and functions of groups. Identification of the major components of groups such as roles, rules, structure, norms, cohesion, conflict, leadership roles and styles will be explored. Emphasis will be on the principle dynamics of group interaction, group decision-making, and these may be applied in the therapeutic milieu, and within organizations. Students will demonstrate a basic knowledge and demonstration

of skills useful in working in and with groups, through participation in structured exercises.

### **PSY 120 Psychology in the Workplace**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course presents a framework for understanding behaviors and interactions in the workplace. Major topics include communication, structure and function of groups and organizations, employer and employee relations and maintaining physical and mental health in the workplace. Class discussions and projects will focus on helping the student apply the principles to the workplace.

### **PSY 201 Social Psychology**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course will examine individual human behavior in social contexts. The cognitive, symbolic interaction, exchange, role-reference group, and dramaturgical approaches are explored. An emphasis will be placed on language and communication, intergroup conflict and conflict resolution, social judgments and decisions attitudes, perceptions of others, social influence, attraction, aggression, and group pressure.

### **PSY 210 Behavior Analysis and Management**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

This course presents a framework for observing, analyzing, and managing behavior. The principles of operant conditioning will be discussed, emphasizing ways the environment can be managed so that the individual's behaviors can be managed within family, school and other social services agencies, and work settings.  
*Prerequisite: PSY 101 or instructor permission.*

### **PSY 212 Abuse, Trauma and Recovery**

3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.

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This course examines human adaptations to traumatic events including various types and sources of violence and abuse. The historical and social contexts in which abuse and trauma are identified will be explored. Stages of recovery, and an intervention framework for the human service worker with traumatized people will be examined. Topics included: domestic violence, sexual abuse, workplace violence of people over the life course.

## **PSY 260 Abnormal Psychology**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course will examine the psychological and biological processes of abnormal behavior. Students will explore the symptoms, theory, and treatment of a wide variety of psychological disorders. *Prerequisite: Grade of C or higher in PSY 101.*

## **PSY 296 Special Topics in Psychology**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

The students in this course will analyze selected topics in psychology. These topics will analyze various individual and social patterns in contemporary psychology. The special topic analyzed is not a regular course offering of the social sciences department. Since the topic covered in this class differs from year to year, students should seek further information from the instructor before registering regarding the particular topic that will be analyzed. Possible areas to be analyzed include: counseling, industrial organizational, professional issues and ethics, research methods, cognitive, developmental, family, social, and general. Possible topics to be addressed include: close relationships, personality, abnormal psychology and diagnosis, and persuasion.

## **Real Estate (REE)**

### **REE 101 Sales Agent Course**

*4 Credits (4 Lecture 0 Lab 0 Shop)  
4 Hrs./Wk. (4 Hrs. Lecture) \*15 wks.*

This course provides the student with sufficient competency in Real Estate to sit

for the Maine Real Estate Commission Sales Agent Exam. Students who successfully complete this course can apply for the exam. Topics will include license and contract law, the listing process, types of mortgages, real estate math, and the negotiating and closing process. This course is subject to annual review and approval by the Maine Real Estate Commission.

## **Religion (REL)**

### **REL 101 Comparative Religion**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

Are religious beliefs vastly different from one another? Are they a major cause of strife around the world or a source of peace? Where are the similarities? Can religions even exist in our hectic 21st Century world? Can science and religion coexist? Does God even exist? Comparative religions will look for answers by examining the major religious traditions of the world. From the West – Christianity, Judaism, Islam. From the East – Hinduism, Buddhism, Taoism. In addition, we'll explore some of the lesser known beliefs such as Native American beliefs, Paganism, Wicca, Scientology, and others. We'll be following a text, but the course will also include several primary sources and religious documents for a more comprehensive understanding. *Prerequisites: ENG 101 or 105 ready.*

## **Social Science (SSC)**

### **SSC 100 Public Safety and Social Sciences Seminar**

*1 Credit (1 Lecture 0 Lab 0 Shop)  
1 Hrs./Wk. (1 Hrs. Lecture) \*15 wks.*

This course explores the variety of careers available in the field of public service and social sciences. Topics include the required education to be a successful professional in public service and social science related occupations as well as the skills to succeed in college, career and life.

### **SSC 110 Occupational Health and**

### **Safety in American Society**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course is designed to introduce students in disciplines other than Occupational Health and Safety to the fundamentals of workplace health and safety. Development of workplace health and safety programs, concepts of health and safety hazards and their control and the legal framework of occupational health and safety will be covered. The economic, social, psychological and historical impact of Occupational Health and Safety will be discussed.

### **SSC 200 Research Methods for Social Sciences**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course introduces methods for research design and data collection in Social Sciences. Methods used to conduct research will be examined, including defining research problems, ethics in research, selecting and measuring variables, and writing a basic research design. Students will be required to complete a research paper. *Prerequisite: ENG 101 or 105.*

### **SSC 247 Research Methods for Social Sciences**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course introduces methods for research design and data collection in justice studies. Methods used to conduct research will be examined, including defining research problems, ethics in research, selecting and measuring variables, and writing a research design and paper. *Pre-requisite: ENG 101 or 105.*

### **SSC 296 Independent Study in Social Science**

*3 Credits - Number of hours per week to be determined by Advisor*

This course is designed to allow students to work on a semester long project in one of the social sciences. The project will be developed by the student in conjunction

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with the instructor of the course. The student will meet with the instructor periodically through the semester to ensure the project objectives are being met. *Prerequisites: The student must have completed (12) credit hours in a catalog program, be in good academic standing, be recommended by their advisor, and meet with the course instructor.*

## **SSC 298 Service Learning Capstone**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course blends academic learning with career interests and pathways while engaging students in service. Students engage in a project that is carried out over an extended period of time and that mutually benefits the student and community. This capstone prepares students to interact with racially and culturally diverse societies, to understand issues influenced by social, economic or cultural factors, to work effectively with others and to develop a life-long commitment to civic and ethical responsibility. *Pre-requisite: SSC 200.*

## **Sociology (SOC)**

### **SOC 101 Introduction to Sociology**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course is an introduction to the study of influences of social and cultural factors on human behavior. Among topics discussed are culture; conformity/non-conformity; equality/inequality of different races, sexes, and ages; social institutions; group processes; and how change occurs in society.

### **SOC 200 Issues in Diversity**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course will examine issues related to diversity between families, in workplaces and schools, and other societal settings. Topics related to race, age, gender, disability, and cultural background will be explored and how these affect minority and majority relations in the United

States. Appreciation for different cultural backgrounds and how the global nature of business is affected by diversity today.

### **SOC 201 Sociology of Aging**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course surveys the biological, social psychological, and social aspects of the aging process. Students study aging as a developmental stage and explore current issues such as ageism, mandatory retirement, sex, crime, and intergenerational communications. Topics covered include social conditions, economics, and politics as they affect the aged, as well as community responses to the problems confronting the elder population. Students examine public, voluntary, and self-help (advocacy) programs and assess their ability to meet the needs of aging adults in such areas as recreation, income maintenance, retirement, housing, transportation, mental and physical health.

### **SOC 203 Crime and Social Policy**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course introduces students to a multitude of social and political ideologies regarding the role of law enforcement in the 21st Century. Topics of discussion include community policing, liberal vs. conservative perspectives on justice, Black Lives Matter movement, Defund the Police movement, societal expectations of law enforcement, and the militarization of police. Students will think critically and engage various perspectives in search of meaningful policies through reading modern excerpts, written exercises and online discussion.

### **SOC 210 Crime and Deviance**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course will examine delinquency and crime in society. Discussions will include critical analysis of theories, causes, and treatment of delinquents and criminal offenders. Crime associated with modern technology and other white collar crime

and their effect on society will be explored.

### **SOC 215 Sociology of Gender**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course will examine gender from a sociological perspective. Factors that affect gender relations, inequality and communication will be discussed, with special emphasis given to theoretical approaches, socialization, and power differentials. How gender is implicated in our social institutions such as the educational system, workplace, family, criminal justice system, and government will be explored. Additionally, how gender shapes more micro interactions and the relationship between gender in the macro setting of social institutions and micro setting of personal interactions will also be addressed. Topics will include: gender in education; gender and work; gender in intimate relationships; and gender, crime and justice.

### **SOC 220 Sociology of the Family**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course will examine traditional and current trends in families. The dynamics of social interactions within the family will be presented. The diversity of the modern family will be discussed. Further examination of how this diversity of families affects other social institutions, such as the economy (via business and workplaces) and education (via schools and other community agencies).

### **SOC 230 Human Sexuality**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course deals with sex as it relates to the individual, family, group and society. Historical and cultural perspectives on contemporary American sexuality; knowledge, attitudes, and practices; sexuality over the life cycle, socialization; affection, interpersonal attraction; marriage, law, other institutions will be addressed.



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## **SOC 296 Special Topics in Sociology**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

The students in this course will analyze selected topics in sociology. These topics will analyze various social patterns in contemporary society. The special topic analyzed is not a regular course offering of the social sciences department. Since the topic covered in this class differs from year to year, students should seek further information from the instructor before registering regarding the particular topic that will be analyzed. Possible areas to be analyzed include: family and life course, research methods, social change and development, social deviance and mental health, social organization, social psychology, social inequality, and general. Possible topics to be addressed include: gender roles, race and ethnic relations, aging, deviance and criminology.

## **Spanish (SPA)**

### **SPA 101 Beginning Spanish I**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

An introductory course in Spanish with emphasis on development of listening comprehension, speaking, reading and writing skills. For students who have had no Spanish or one year of high school Spanish.

### **SPA 102 Beginning Spanish II**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

Continuation of Spanish 101. Emphasis on development of listening comprehension, speaking, reading and writing skills.  
*Prerequisite: SPA 101 or 2 years of high school Spanish.*

## **Theater**

### **THE 101 Introduction to Theater**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hr./Wk (3 Hr. Lecture) \*15 weeks*

This course introduces students to theater as a collaborative, multi-disciplinary art form.

It examines the nature of theater, its origins, its position in our culture and the basic elements that come together in modern theater practice: performance, directing, design and playwriting. The course will also give students guiding principles for viewing and responding to the theater they see. Students can expect to participate in theater exercises to learn about performance, to read plays, to do small design projects, and to see at least one professional theater production. A research project with a partner will culminate with in-class performances. There may be modest expense for tickets. No previous theater experience necessary.

### **THE 102 Introduction to Acting**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hr/Wk (3 Hr. Lecture) \*15 weeks*

This is an active hands-on course that introduces students to the basics of stage acting including voice production, physical expression, stage conventions, character development and text interpretation. Group exercises will be interspersed with discussion, viewing and responding to student performances, the occasional brief lecture and video. The class will attend and write about one professional show\* (required). Students will present rehearsed, fully memorized, in-class performances of one monologue and two scenes. While there will be class time dedicated to rehearsals, at least half of the rehearsals for the in-class performances must take place outside of class meeting time. Assigned reading will include chapters from the required text, one play and miscellaneous brief articles. Written work will include weekly e-journal entries, monologue and scene script scores, a written response to a professional production and a final scene project portfolio. We will attend a professional theater production. Ticket price and transportation are the responsibility of the student.

examine women's positions in and contributions to society. This course covers a broad scope of issues in Women's Studies, including definitions of feminism, the role of gender in social interaction, women of color, women's sexuality, health and the female body, women in mythology, women in the workplace, violence against women, images of women/women's self-image, and women and aging. Students will be asked to explore their own beliefs and attitudes, as well as the attitudes of societies. The course will look at commonalities and differences among women, and investigate the multiple dimensions of women's experiences. Part of the course will be to consider the ways in which institutions (education, the workplace, family) influence women's lives. Weekly assignments require writing and reading a variety of texts.

## **Women's Studies (WST)**

### **WST 101 Women's Studies**

*3 Credits (3 Lecture 0 Lab 0 Shop)  
3 Hrs./Wk. (3 Hrs. Lecture) \*15 wks.*

This course employs a range of interdisciplinary sources in order to

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Alyson Daniels

# Administration and Faculty

**Abbott, Develan**, Librarian

Learning Commons  
B.A., Saint Joseph's College of Maine

**Allard, James**, Librarian

Learning Commons  
B.S., Thomas College; M.S., MLIS, IAKM, Kent State University

**Alexander, Donna**, Retention Advisor

TRIO Success Center  
A.S., Central Maine Community College;  
B.S., University of Maine Augusta

**Arienti, Rosalie**, Department Chairperson

Life Sciences and Allied Health  
B.A., Boston University; M.S., Tufts University

**Aube, Maureen**, Dean of Finance and General Services

Business Office  
B. S. University of Maine Augusta

**Ayotte, Crystal**, Instructor

Nursing  
M.S.N., University of South Alabama

**Barth, Barbara**, Gender Equity Coordinator

Student Services  
B.S., Niagara University; M.A., University of Connecticut;  
Master of Divinity, Lutheran School of Theology

**Bechard, Brandon**, Instructor

Automotive Technology  
A.A.S., Central Maine Community College; Ford Senior  
Master Technician

**Berg, Eric**, Instructional Research Associate

Office of Admissions  
A.A.S., Central Maine Community College  
B.S. University of Maine at Augusta

**Bernier, Dennis**, Instructor

Graphic Communications  
A.A.S., Central Maine Community College

**Bilodeau, Jennifer**, Instructor

Early Childhood Education  
B.S., University of Maine Farmington; M.Ed., University of  
Maine

**Blais, Jean**, Student Services Representative

Student Services  
Cert., Washington County Community College  
A.A., Central Maine Community College;  
B.A., University of Maine at Augusta

**Bolding, Richard**, Department Chairperson

Precision Machining Technology  
A.A.S., Central Maine Community College

**Bolduc, Stephen**, Instructor

Precision Machining Technology  
A.A.S., Central Maine Community College;

B.S., University of Southern Maine

**Bonney, Meredith**, Assistant Director of Registration & Records

Office of the Registrar  
A.S., A.A.S., Central Maine Community College

**Boucher, Robert**, Dean of I.T. and Chief Information Security Officer

Information Technology  
A.S., A.A.S., Central Maine Community College;  
B.S. University of Southern Maine; MCP; A+ Certified

**Bouttenot, Denis**, Department Chairperson

Mathematics and Physical Science  
B.S., Lowell Technological Institute;  
M.B.A., University of Southern Maine

**Bowie, John**, Director of Financial Aid and Student Information Services

Office of Financial Aid  
B.A., University of Maine; M.S., Southern New Hampshire  
University

**Bragdon, Toby**, Associate Academic Dean

Academic Affairs  
B.S., University of Augusta; M.Ed., University of Maine

**Braun, Timothy**, Department Chairperson

Architectural and Civil Engineering  
B.S., Norwich University

**Brewer, Margaret**, Interim Academic Dean

Business Administration and Management  
B.S., St. Joseph's College; M.S., Southern New Hampshire  
University; Grad Cert., Kaplan University

**Brown, Travis-Jon**, Department Chairperson

Electromechanical Technology  
A.A.S., Northern Maine Technical College

**Burke, Will**, Instructor

Humanities  
B.A., University of Southern Maine; M.F.A., Louisiana State  
University

**Caputo, Curry**, Department Chairperson

Building Construction Technology  
B.A., College of the Atlantic

**Chapman, Kyle**, Instructor

Life Sciences and Allied Health  
B.S., Brigham Young University

**Charlton, Terry**, Director

TRIO Success Center  
B.A. Boston College; M.Ed. Emmanuel College

**Coffin, Peter**, Instructor

Building Construction Technology  
A.A., Wentworth Institute of Technology; B.S. Northern  
Arizona University

# Administration and Faculty

**Conway, Dwayne**, Dean  
Center for Workforce and Professional Development  
B.S., University of Farmington; M.S., M.B.A., Thomas  
College; Ed.D., University of New England

**Cook, Kevin**, Instructor  
Computer Technology  
B.A., University of Maine at Farmington; A+ Certified; Net+  
Certified

**Crossley, Todd**, Evening Administrator & Director of  
Student Activities  
Administration  
B.S., Bentley College

**Daniels, Alyson**, Executive Assistant to the President and  
CM Foundation Liason  
President's Office  
B.A., M.S., Southern New Hampshire University

**D'Auria, Maria**, Learning and Advising Specialist  
Student Services  
B.S., Merrimack College

**Daye, Dawn**, Financial Aid Representative  
Office of Financial Aid  
B.A., University of Southern Maine

**Derenburger, Miranda**, Instructor  
Nursing  
B.S., University of Southern Maine; M.S., St. Joseph's  
College

**Dionne, Catherine**, Department Chairperson  
Humanities  
B.S., Massachusetts Institute of Technology; M.A., Boston  
College

**Doak, Stephen**, Instructor  
Business Administration and Management  
B.S., University of Maine; M.S., Husson College

**Doyle, Brianna**, Director of Records and Institutional  
Research  
Department of Planning and Public Affairs  
B.A., Hannibal-LaGrange University; M.S., Simmons  
University

**Drown, Diana**, Instructor  
Life Sciences and Allied Health  
B.S., M.S., University of New England

**Emery, Michael**, Admissions Representative  
Student Services  
B.A., University of Southern Maine

**Frigon, Suzanne**, Associate Director of Financial Aid  
Office of Financial Aid  
B.A., M.A., Bloomsburg University of Pennsylvania

**Gallant, Suzanna**, Director of Human Resources  
B.S., University of Maine at Augusta

**Gilbert, Marc**, Department Chairperson

Plumbing and Heating Technology/Heating, Ventilation, Air  
Conditioning and Refrigeration Technology  
B.S., University of Southern Maine

**Gonyea, David**, Director of Athletics, Housing and  
Security  
Athletics; Student Services  
A.A., University of Southern Maine

**Gray, Steven**, Instructor  
Plumbing and Heating Technology/Heating, Ventilation, Air  
Conditioning and Refrigeration Technology  
A.A.S., Southern Maine Technical College

**Hamel, Nicholas**, Dean of Student Services  
Student Services  
A.S., Central Maine Community College;  
B.S., University of Southern Maine; M.B.A., Thomas College

**Hartill, Bailey**, Admissions Representative  
Student Services  
A.A., Central Maine Community College

**Henry, Michael**, Interim Department Chairperson  
Business Administration and Management  
B.S., M.B.A., University of Maine

**Holt, Frankie**, Instructor  
Public Service & Social Sciences  
B.A., University of Illinois; M.A., Western Illinois University;  
M.S., Indiana State University

**Hooper, Dana**, Instructor  
Plumbing and Heating Technology/Heating, Ventilation, Air  
Conditioning and Refrigeration Technology  
A.A., Washington County Vocational Technical Institute;  
Licensed Master Plumber, Propane License, Journeyman Oil  
Burner License

**Hughen, Andrew**, Department Chairperson  
Computer Technology  
B.S. and B.A., University of Southern Maine;  
M.B.A., Southern New Hampshire University

**Iadonisi, Carmin**, Instructor  
Life Sciences and Allied Health  
B.S., University of Massachusetts;  
N.D., University of Bridgeport College

**Joiner, Jeff**, Instructor  
Electromechanical Technology  
A.S., Vermont Technical College;  
B.S., University of Southern Maine

**Johnson, Allie**, Associate Dean of Finance and General  
Services  
B.S., University of Southern Maine; B.S., University of  
Southern Maine; M.B.A., Southern New Hampshire  
University

**King, David**, Instructor  
Public Service & Social Sciences  
B.A., University of Southern Maine;

# Administration and Faculty

M.S., Southern New Hampshire University

**King, Rachel**, Learning & Advising Specialist  
Student Services  
B.A., University of Maine Augusta

**Kinney, Sharon**, Instructor  
Nursing  
M.S., St. Joseph's College

**Latendresse, Kevin**, Instructor  
Electromechanical Technology  
B.A., M.A., University of Maine; M.A., Indiana University

**Lee, Christine**, Learning & Advising Specialist  
Student Services  
B.S., University of Maine Augusta;  
M.S., University of Southern Maine

**Libby, Betsy**, President  
B.A., University of Maine; M.A., Ball State University  
Ed.D., NorthCentral University

**Lopez, Laurie**, Instructor  
Business Administration and Management  
B.S., Northeastern University; M.S.A., Boston University

**Lyons, Jennifer**, Assistant to the Academic Dean/  
Disability Services Coordinator  
Office of Academic Affairs  
A.A.S., Westbrook College

**Maalim, Abdimalik**, Learning and Advising  
Representative  
Student Services  
A.A.S. Central Maine Community College

**Magda, Barry**, Computer Curriculum Designer  
Center for Workforce and Professional Development  
B.S., Massachusetts Institute of Technology

**McKinley, Rachel**, Director of Marketing and  
Communication  
Student Services  
B.S., Kaplan University

**McManus, Kathleen**, Department Chairperson  
Nursing  
B.S.N., M.S.N., University of Southern Maine; Registered  
Nurse;  
COHN-S

**Meador, Eric**, Director of Learning and Advising  
Student Services  
A.A.S., Central Maine Community College;  
B.A., University of Maine Augusta; M.S., University of  
Southern Maine

**Miller, Peter**, Instructor  
Nursing  
M.S., University of Southern Maine

**Montegut, Kathleen**, Instructor

Nursing  
B.S., Salve Regina University; M.S.N, University of Maine

**Moreno, Judith**, Director  
Learning Commons  
B.A., St. Michael's College; M.L.I.S., University of South  
Carolina;  
C.A.S. University of Southern Maine.

**Morong, Andrew**, Associate Dean of Enrollment  
Management  
Student Services  
B.A., University of Maine;  
M.A. Southern New Hampshire University

**Oken, Elizabeth**, Director of Placement and Transfer  
Services  
Student Services  
B.A., Regis College; M.Ed., American International College

**Peacock, Mackenzie**, Instructor  
Humanities  
B.A., M.A., University of Maine

**Perreault, Austin**, Department Chairperson  
Culinary Arts  
A.A.S. Central Maine Community College;  
B.A., Le Cordon Bleu College of Culinary Arts

**Philgence, Kern**, Workforce Development Curriculum  
Designer  
Center for Workforce and Professional Development  
B.A., University of Central Florida; M.A., Norwich  
University; Ph.D., NorthCentral University

**Pullen, Tatiana**, TRIO Retention and Transfer Advisor  
TRIO Student Success Center  
B.A., St. Thomas University; M.B.A., St. Thomas University

**Ramsey, Michelle**, Instructor  
Nursing  
A.S., New Hampshire Community Technical College;  
B.S.N., University of New England;  
M.S.N., University of Southern Maine; Registered Nurse;  
FNP

**Rattray, Gary**, Instructor  
Mathematics and Physical Sciences  
B.A., University of Maine; M.S., Air Force Institute of  
Technology

**Rayburn, Casey**, Instructor  
Automotive  
A.A.S., Central Maine Community College

**Roberts-Sherman, June**, Department Chairperson  
Graphic Communications  
A.A.S., Central Maine Community College;  
B.A., University of Southern Maine

**Santilli, Alessia**, Instructor  
Life Sciences and Allied Health

# Administration and Faculty

B.S., M.S., University of Camarino

**Smith, Jessica**, Instructor

Humanities

B.A., SUNY Fredonia;

M.F.A., Minnesota State University at Mankato

**St. Pierre, Anne**, Department Chairperson

Human Services

B.A., M.S., University of Southern Maine

**Tiftt, Kristen**, Instructor

Nursing

B.S., University of Southern Maine; M.S.N., St. Joseph's College

**Tiftt, Matthew**, Department Chairperson

Public Service & Social Sciences

M.P.P.M, Muskie School of Public Services

**Thoma, Christopher**, TRIO Tutor Coordinator

TRIO Student Success Center

M.S., College of William and Mary

**Trautman, Karl**, Instructor

Public Service & Social Sciences

B.A., Keene State College;

M.A., Northeastern University;

Ph.D., University of Hawaii

**Wallace, John**, Instructor

Mathematics and Physical Sciences

B.S., United States Naval Academy;

M.S., Naval Nuclear Power School; M.S., Naval War

College; M.A., San Diego State University

**Walsh, Matt**, Department Chairperson

Automotive Technology - Ford ASSET

A.A.S., Central Maine Community College;

B.S. University of Southern Maine,

FMC Senior Master Technician; ASE Master Certified; L1 Certified

**Watkins, Scott**, Chief of Security

Student Services

A.A.S. Southern Maine Community College;

B.S. University of Southern Maine

**Watson, Chelsea**, Assistant Director of Athletics

Student Services

M.S., Gonzaga University; B.S., Lyndon State College

**White, Albert**, Instructor

Automotive Technology

A.A.S., Central Maine Community College;

B.S., University of Southern Maine; ASE Master Certified, Automotive and Truck; L1 Advanced Engine Performance

**Williams, Grimes**, Associate Dean of Student Services

Student Services

B.A., University of North Carolina at Greensboro

M.A., Geneva College

M.A., St. John's College

**Zukowski, Tia**, Department Chairperson

Early Childhood Education

B.S., University of Maine Farmington;

M.S., University of Maine

## Adjunct Faculty

**Adams, Deborah**

Mathematics and Physical Sciences

B.S., University of Vermont

**Allen, Janie**

Public Service & Social Sciences

B.A., University of Maine Presque Isle;

M.A., University of Northern Colorado; PhD., Southwest University

**Armstrong, Rebecca**

Mathematics and Physical Sciences

B.,A., Hartwick College

**Boucher, Karen**

Life Sciences and Allied Health

M.S.Ed. University of Southern Maine

**Bowe, Michael**

Mathematics and Physical Sciences

M.Ed., Salem State University

**Baird, Gene**

Humanities

B.A., University of Maryland; M.A., University of Phoenix

**Barry, William**

Public Service & Social Sciences

M.S., B.S., Emerson College; J.D., Vermont Law School

**Barth, Barbara Reverend**

Public Service & Social Sciences

B.S., Niagara University; M.A., University of Connecticut;

Master of Divinity, Lutheran School of Theology

**Barlett, Jennifer**

Graphic Communications

B.A., University of Maine Farmington;

M.S. Ed, University of New England

**Blanchard, Michael**

Building Construction Technology

**Brann, Ronald**

Business Administration and Management

B.S., Franklin Pierce College; M.B.A., Plymouth State

College

**Brents, Amy**

Humanities

B.A., University of Maine Farmington;

M.A., University of Connecticut;

M.A., Bangor Theological Seminary

# Adjunct Faculty

## **Bridges, Richard**

Business Administration and Management  
B.A. M.P.A., University of Maine;  
J.D., Catholic University of America

## **Brito, Robert**

Humanities  
B.A., Pepperdine University; M.A., Northwestern University;  
Ph.D., Wayne State University

## **Brubaker, John**

Humanities  
B.A., M.A., Fairleigh Dickinson University

## **Bryant, Scott**

Mathematics and Physical Sciences  
M.B.A., The Ohio State University

## **Burke, Ruth**

Early Childhood Education/Social Science  
B.S., New Hampshire College; M.S., Wheelock College

## **Burns, Stephanie**

Humanities  
B.S., University of Maine at Augusta;  
M.S., University of Southern Maine

## **Bush, Aurelie**

Human Services  
B.S., M.S., Southern Connecticut State University

## **Camire, Dennis**

Humanities  
M.F.A. Wichita State University

## **Churchill, Catherine**

Humanities  
M.S.Ed., St. Joseph's College of Maine

## **Cinq-Mars Gisele**

Humanities  
B.A., American International College;  
M.Ed., University of Maine

## **Conley, Jennifer**

Mathematics and Physical Sciences  
B.S., Framingham State College; M.S., Wheelock College

## **Cote, Laurie**

Nursing  
B.S.N., University of Southern Maine; R.N.

## **Croteau, Norman**

Business Administration and Management/Public Service &  
Social Sciences  
J.D. Law, University of Maine Law School;  
B.A., College of the Holy Cross

## **Downs, Philip**

Business Administration and Management  
B.A., M.A., M.S., University of Maine;  
Ph.D., Vanderbilt University

## **Duffy, Mary-Therese**

Public Service & Social Sciences  
M.A., Lesley University

## **Eaton, Joanne**

Mathematics and Physical Sciences  
M.Ed., Antioch NE Graduate School

## **Edgecomb, Pamela**

Life Sciences and Allied Health  
M.A., University of Maine

## **Fisk, Deborah**

Humanities  
B.S., University of Maine; M.S., University of Southern  
Maine

## **Flavin, Nicholas**

Life Sciences and Allied Health  
B.S., Long Island University, M.P.H. University of Southern  
Maine

## **Floyd, Jonathan**

Life Sciences and Allied Health  
B.S., Plymouth State College

## **Forgione, Ernie**

Mathematics and Physical Sciences  
A.S., University of New Hampshire;  
B.S., Johnson State University

## **French, Amy**

Public Service & Social Sciences  
M.S.W., University of Southern Maine

## **French, Jennifer**

Mathematics and Physical Sciences  
M.S., Thomas College

## **Gagne, Dominique**

Electromechanical Technology  
A.A.S., Central Maine Community College

## **Giammarco, Elizabeth**

Public Service & Social Sciences  
Ph.D., Capella University

## **Gosselin, Scott**

Public Service & Social Sciences  
B.A., St. Anselm College; Maine State Police Academy

## **Grinder, Matthew**

Humanities  
M.H., Tiffin University

## **Guy, Amanda**

Humanities  
B.A., University of Maine at Augusta;  
M.Ed., New England University

## **Hamel, Diane**

Mathematics and Physical Sciences  
B.S., M.S., Husson College



# Adjunct Faculty

## Hamlin, Kristen

Humanities  
M.L.S., University of Denver

## Hanish, Martin

Mathematics and Physical Sciences  
B.A., Brooklyn College; M.P.A., Bernard Baruch College;  
M.B.A., Thomas College

## Hanson, Kerry

Computer Technology  
A.A.S., Southern Maine Community College; B.A.,  
University of Maine; M.Ed., University of Maine

## Hawley, John

Business Administration and Management  
A.A.S., Central Maine Community College;  
B.A., University of Southern New Hampshire

## Hawley, Michelle

Business Administration and Management  
A.A.S., Central Maine Community College;  
B.S., M.S., University of Southern Maine

## Hays, Maria

Life Sciences and Allied Health  
M.S., University of Maryland

## Hopkinson, Richard

Mathematics and Physical Sciences  
B.A., University of Southern Maine

## Hughes, Rhonda

Human Services/Public Services & Social Sciences  
B.A., University of Southern Maine;  
M.S., University of New England

## Hunsicker, Kathleen

Public Services & Social Sciences  
B.S., University of Southern Maine;  
M.Ed., Plymouth State University College

## Jamo, Sherrill

Humanities  
B.S., Southern Connecticut State University;  
M.S., University of Connecticut

## Johnston, David

Building Construction Technology  
A.A.S., SMVTI; B.S., University of Southern Maine

## Kavanagh, Eugene

Public Service & Social Sciences  
B.S., Northeastern University

## Kennedy, Barbara

Life Sciences and Allied Health  
A.A.S., Andover College; B.S., DeVry University

## King, Rachel

Humanities  
B.A., University of Maine Augusta

## Larrabee, Richard

Human Services  
M.A., Liberty University

## Lessard, Marcella

Business Administration and Management  
M.S., Walden University

## Libby, Jason P.

Humanities  
B.A., M.A. University of Southern Maine

## Lindsay, Lori

Public Services & Social Sciences  
B.S., Fitchburg State College; M. Ed., University of Maine

## Maguire, Valarie

Mathematics and Physical Sciences  
B.A., University of Southern Maine; M.E., Plymouth State  
College

## Marcus, Libby

Humanities  
M.A., Emerson College

## McFadden, Brandy

Life Sciences and Allied Health  
B.S., University of Maine Machias; M.S., Georgia Southern  
University

## Michaud, Gilman

Culinary Arts  
A.A.S., University of Maine at Fort Kent

## Misner, Sashie

Architectural & Civil Engineering  
B.S., SUNY Stony Brook; M.L.A., SUNY FSF

## Moreau, Marissa

Humanities  
B.A., Shepherd College; M.S., Duquesne University; Ph.D.,  
Walden University

## Murphy, Jeb

Humanities  
B.A., Long Island University; M.A., Rowan University

## Nener-Plante, Derek

Mathematics and Physical Sciences  
B.S., University of Maine; M.S., University of Connecticut

## Nolin, Catherine

Life Sciences and Allied Health  
C.P.C., American Academy of Professional Coders

## O'Dell, Timothy

Humanities  
B.A., University of Iowa;  
M.S., New England Conservatory of Music;  
D.M., University of Iowa

## Peterson-Cyr, Amy

# Adjunct Faculty

## Humanities

B.A., University of Maine Augusta;  
M.S., University of Southern Maine

### **Post, John**

Humanities  
B.A., Gallaudet University

### **Ricker, Denise**

Early Childhood Education  
B.S., University of Maine at Farmington;  
M. Ed., University of Maine

### **Ritz, Jeff**

Public Service & Social Sciences  
B.A., University of California, Santa Barbara;  
M.A., University of Maine

### **Robichaud, Wendy**

Business Administration and Management  
B.A., University of Southern Maine  
Ed.D., Nova Southeastern University

### **Rogers, Heather**

Humanities  
M.A., University of Maine

### **Rousseau, Tina**

Graphic Communications  
B.A., University of Maine at Augusta

### **Russo-Ladd, Anne**

Life Sciences and Allied Health  
A.A.S., Andover College; B.A., University of New England,  
M.S., University of Southern Maine

### **Samson, Laurel**

Public Service & Social Sciences  
B.S.W., University of Maine; M.S.W., University of New  
England

### **Smith, Marilyn**

Life Sciences and Allied Health  
B.S.M.T., Fitchburg State College;  
M.S. University of Southern Maine

### **Snow, Brian**

Computer Technology  
M.S., University of Maine

### **Stevens, Nathan**

Humanities  
B.A., University of Maine; Ph.D., Edith Cowan University

### **Thoma, Christopher**

Mathematics and Physical Sciences  
M.S., College of William and Mary

### **Thomas, Mitchell Clyde**

Humanities  
B.A., University of Maine at Farmington;  
M.P.A., University of Maine

### **Toussaint, Chad**

Graphic Communications  
A.A.S., Central Maine Community College

### **Vitti, Joseph**

Humanities  
B.A., Assumption College; M.A., Fairfield University

### **Volock, Margaret**

Mathematics and Physical Sciences  
M.A., University of Maine University;  
M.A., University of Southern Maine

### **Wallace, Bryan**

Business Administration and Management  
B.S., Quinnipiac; M.B.A., Southern New Hampshire  
University

### **Walsh, Christopher**

Humanities  
B.S., Gallaudet University

### **Watkins, Scott**

Public Service & Social Sciences  
A.A.S., Southern Maine Community College;  
B.S., University of Southern Maine

### **Woodbury, Katherine**

Humanities  
B.A., Brigham Young University;  
M.A., University of Southern Maine

### **Zack, Carol**

Life Sciences and Allied Health  
A.A.S., Central Maine Community College;  
Certified Professional Coder; B.S., New England College

### **Zink, Julie**

Humanities  
B.A., University of Mississippi; M.A., University of South  
Carolina;  
Ph.D., University of Alabama

# College Support Staff

**Bransford, Karla**, Administrative Specialist III  
Office of the Registration

**Cary-Sanborn, Kris**, Payroll and HR Assistant  
Business Office

**Charest, Lenore**, Information System Specialist II  
Office of Information Technology

**Charlett, Basilio**, Information System Specialist II  
Office of Information Technology

**Daigle, Robert**, Senior Food Service Manager  
Department of Food Service

**Dexler, Patrick**, Facilities Maintenance Specialist I  
Maintenance Department

**Farmer, Tracey**, Accounts Receivable  
Business Office

**Fleming, Kyle**, Information Support Specialist II  
Office of Information Technology

**Gervais, Daniel**, Facilities Maintenance Specialist I  
Maintenance Department

**Graham, Dan**, Facilities Project Manager  
Maintenance Department

**Groleau, Paul**, Facilities Maintenance Specialist I  
Maintenance Department

**Hinkley, Linda**, Food Service  
Department of Food Service

**Landry, Brian**, Electrician III  
Maintenance Department

**Langlois, Fern**, Food Service Manager  
Department of Food Service

**Mello, Josh**, Master Carpenter  
Maintenance Department

**Morris, Kellie**, Facility and Central Services Manager  
Central Services and Maintenance Department

**Morris, Walter**, Systems Specialist III  
Office of Information Technology

**Nichols, Joan**, Administrative Specialist III  
Office of Admissions

**Paine, Megan**, Food Service Worker  
Department of Food Service

**Perkins, Michael**, Facilities Maintenance Specialist I  
Maintenance Department

**Prescott, Robert**, Director of Information Technology,  
Security, and Infrastructure  
Office of Information Technology

**Roy, Philip**, Facilities Maintenance Specialist I  
Maintenance Department

**Soto, Adam**, Central Services Technician  
Central Services

**Tetreault, Kevin**, Administrative Specialist I  
Business Office

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## Directions to the College

### ***From Maine Turnpike Exit 75, Auburn***

From the exit turn left on to Route 4 following signs toward Auburn (and directional signs for Central Maine Community College). Go north for about 6 miles which takes you to Center Street. Continue on Center Street through town, past fast food restaurants, etc. Just under the overpass and before the Auburn Mall, turn left at the signal on to Mt. Auburn Avenue. At the next traffic light bear right on to Turner Street. Bear left to stay on Turner Street after you pass St. Mary's health facility. The campus is about ½ mile ahead on your left.

### ***From Maine Turnpike Exit 80, Lewiston***

Go left on Alfred Plourde Parkway about .4 miles before taking the second exit onto Lisbon Street (Rt 196 West). Go toward Lewiston on Lisbon Street 1.2 miles to the 4th light and turn right on to East Avenue. Go about 1.4 miles and turn left at the 6th light on to Russell Street. Continue on Russell Street to the overpass. Take the overpass into Auburn and continue to the first traffic light (do not exit before the end). At the traffic light bear right on to Turner Street. Bear left to stay on Turner Street after you pass St. Mary's health facility. The campus is about ½ mile ahead on your left.