Message from the President...

To All Students:

I am very pleased that you have chosen Manchester Community-Technical College. Our business is to help you succeed by helping you develop your skills and your self-confidence, as well as broadening your perspectives. We are dedicated to providing you with the opportunity for lifelong learning.

Manchester Community-Technical College has always tried to help people solve problems. We will continue to try to assist you in clarifying your options, enlarging your horizons, and building on your strengths. Our highly qualified faculty and staff remain deeply committed to helping all individuals - regardless of race, religion, sex, cultural or ethnic differences, or physical abilities - achieve their potential.

We believe that high motivation is a precious commodity. We urge you to be active in setting and achieving your goals. Use all our facilities; seek extra help from your professors; talk to counselors and other staff members. Do everything you can to make your stay at MCTC as productive and worthwhile as it can be. We, for our part, are here to serve you.

Jonathan M. Daube

Cover and catalog design by Paula Raum
Cover photos by Ann S. Montgomery
Digital graphics of new Learning Resource Building from Centerbrook Architects

Cover displays architects conception of the new Learning Resource Building that is scheduled to open in Fall 2000.
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Telephone Directory

Admissions ......................................................................................................................... (860) 647-6140
Continuing Education Division (credit-free courses, off-campus credit courses, seminars, intersession, summer session) (860) 647-6242
Continuing Education Information ................................................................................. (860) 647-6088
Counseling (academic, personal, vocational) ................................................................ (860) 647-6062
Financial Aid .................................................................................................................... (860) 647-6071
General Departments & Services .................................................................................... (860) 647-6000
INFO LINE .................................................................................................................... (860) 645-9330
Registrar (records, transcripts) ..................................................................................... (860) 647-6147

MCTC Web Site Address: http://www.mctc.commnet.edu/
### FALL SEMESTER 1999

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday</td>
<td>August 27</td>
<td>Fall semester begins</td>
</tr>
<tr>
<td>Monday</td>
<td>August 30</td>
<td>New Student Orientation/Convocation</td>
</tr>
<tr>
<td>Monday/Tuesday</td>
<td>August 30, 31</td>
<td>Professional Days</td>
</tr>
<tr>
<td>Wednesday</td>
<td>September 1</td>
<td>Classes begin</td>
</tr>
<tr>
<td>Monday</td>
<td>September 6</td>
<td>Labor Day (no classes)</td>
</tr>
<tr>
<td>Friday</td>
<td>October 29</td>
<td>Last day to make up incompletes</td>
</tr>
<tr>
<td>Monday</td>
<td>November 8</td>
<td>Last day to drop classes without penalty</td>
</tr>
<tr>
<td>Wednesday</td>
<td>November 24</td>
<td>Thanksgiving recess begins (no classes)</td>
</tr>
<tr>
<td>Monday</td>
<td>November 29</td>
<td>Classes resume</td>
</tr>
<tr>
<td>Monday</td>
<td>December 13</td>
<td>Classes end</td>
</tr>
<tr>
<td>Tuesday</td>
<td>December 14</td>
<td>Final exams begin</td>
</tr>
<tr>
<td>Monday</td>
<td>December 20</td>
<td>Final exams end</td>
</tr>
<tr>
<td>Thursday</td>
<td>December 23</td>
<td>Final grades due (by noon)</td>
</tr>
<tr>
<td>Thursday</td>
<td>December 30</td>
<td>Fall semester ends</td>
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### SPRING SEMESTER 2000

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</thead>
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<tr>
<td>Friday</td>
<td>January 14</td>
<td>Spring semester begins</td>
</tr>
<tr>
<td>Monday</td>
<td>January 17</td>
<td>Martin Luther King Day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(College closed)</td>
</tr>
<tr>
<td>Tuesday</td>
<td>January 18</td>
<td>New Student Orientation</td>
</tr>
<tr>
<td>Tuesday-Wednesday</td>
<td>January 18, 19</td>
<td>Professional Days</td>
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<tr>
<td>Thursday</td>
<td>January 20</td>
<td>Classes begin</td>
</tr>
<tr>
<td>Monday</td>
<td>March 20</td>
<td>Spring recess begins</td>
</tr>
<tr>
<td>Monday</td>
<td>March 27</td>
<td>Classes resume</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Last day to make up incompletes</td>
</tr>
<tr>
<td>Friday</td>
<td>April 7</td>
<td>Last day to drop classes without penalty</td>
</tr>
<tr>
<td>Thursday-Saturday</td>
<td>April 20, 21, 22</td>
<td>April recess</td>
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<tr>
<td>Saturday</td>
<td>May 6</td>
<td>Classes end</td>
</tr>
<tr>
<td>Monday</td>
<td>May 8</td>
<td>Final exams begin</td>
</tr>
<tr>
<td>Saturday</td>
<td>May 13</td>
<td>Final exams end</td>
</tr>
<tr>
<td>Thursday</td>
<td>May 18</td>
<td>Final grades due (by 12:30 p.m.)</td>
</tr>
<tr>
<td>Thursday</td>
<td>May 25</td>
<td>Commencement, Class of 2000</td>
</tr>
<tr>
<td>Wednesday</td>
<td>June 7</td>
<td>Spring semester ends</td>
</tr>
</tbody>
</table>
Mission and Objectives...

Manchester Community-Technical College is committed to these goals:

- Providing a broad range of educational opportunities which prepare the student for the world of work or for transfer to a baccalaureate institution. These opportunities focus upon

- career and technical education: developing contemporary job skills, training and retraining for changing technology, and maintaining the skills acquired, and

- general education: examining what it means to live, and through a full range of liberal arts and science offerings—preparing for a lifetime of learning;

- Creating an environment that stimulates learning by
  - establishing and maintaining instruction of the highest quality,
  - fostering mutual respect and understanding for different cultures, religions, and political beliefs, and
  - offering programs and services designed to overcome academic, financial, psychological, and social barriers;

- Meeting the diverse educational needs of the community by
  - opening doors to all who desire and can benefit from a college education,
  - offering encouragement and help to any who lack essential skills and resources, and
  - welcoming every student regardless of race, color, religious creed, political beliefs, sexual orientation, age, national origin, present or past history of mental disorder, and learning or physical disabilities;

- Expanding and deepening the college-community partnership by
  - providing a wide range of extracurricular activities for students and the community,
  - hosting conferences and seminars on academic, economic, political, religious, and social issues,
  - being a center for athletics, fine and performing arts, social-recreational events, and wellness, and
  - offering on- and off-campus programs for other educational institutions and businesses, tailored to their special needs.

Finally, and always, Manchester Community-Technical College is committed to Access, Excellence and Relevance.
College Profile...

**Founded:** 1963

**Located:** Manchester, Connecticut, seven miles from Hartford.

**Enrollment:** approximately 9,000 full and part-time students, credit and credit-free.

**Type of Institution:** state supported, non-residential, coeducational

**Campus:** The campus is located in a suburban setting immediately off Interstate 384 connecting with Interstate 84. The 160 acres with ample free parking and 14 buildings include general classrooms, science laboratories, art and music studios, reading laboratory, computer and desktop publishing laboratories, food preparation and dining laboratory, library with approximately 40,000 books and 500 periodicals, continuing education facilities, administrative and faculty offices, a multipurpose Program Center, a 146 seat Alumni Auditorium, Child Development Center, the Manchester Bicentennial Bandshell, Wellness/Fitness Center, Career Placement Center, Newspace Art Gallery, and facilities for soccer, baseball, softball and tennis. Also, the new Center for Student Development which includes the Academic Advising Center, Adults in Transition, Center for Minority Student Programs, Center for Students with Special Needs, College Learning Center, Counseling Center, and the Women’s Center.

**Programs:** 30 associate degree and 24 certificate programs with concentrations and options in career or transfer, liberal arts, professional or preprofessional.

**Demographic Distribution of Students:** The College has a primary service area of 15 towns located east of Hartford but enrolls students from throughout the state and elsewhere. Students range in age from 18 to 80 and attend classes full-time and part-time, days, evenings and weekends. In addition to courses offered at the College, instruction is provided off-campus in South Windsor, and at business and industry sites.

**Faculty:** approximately 250 full- and part-time.

**Academic Calendar:** two semesters (fall, spring), winter intersession, summer session and six-week weekend sessions. Classes are offered weekdays, evenings and on weekends.

**Degrees Granted:** Associate in Arts, Associate in Science.
Admissions

Matriculation of Students
All applicants must complete and submit an official admissions application to the College, pay a one-time, non-refundable $20 application fee and include an official copy of a completed high school transcript. FULL-TIME students carry at least 12 semester hours of credit and PART-TIME students carry less than 12 semester hours of credit.

Requirements for Admission
An applicant must be a graduate of an approved secondary school or hold a secondary equivalency diploma. Students are required to be in-state legal residents for a period of one full year from the date of the first class of the semester to receive benefits of the in-state tuition rate. Proof of residency may be required by the Admissions Office.

Students are admitted to the College for courses which begin in the fall semester (September) and in the spring semester (January). Persons wishing to study at MCTC are urged to apply for admission as early as possible before the semester in which they expect to begin. New students are encouraged to apply for new student advising and registration, prior to May 21 for the fall semester and prior to Nov. 19 for the spring semester. New students that apply after these dates can still register during walk-in registration. However, there is no guarantee that the courses students would like to register for will be available at that time. The College admits students on an “open admissions” basis for the majority of its programs.

Allied Health Applications: Students interested in pursuing an allied health career must fill out a separate Allied Health application in addition to the MCTC new student application. Allied Health applications are available in the Admissions Office. Applications for the Medical Laboratory Technician, Occupational Therapy Assistant, Respiratory Care and Surgical Technology Programs are available May 1-January 15; for the Physical Therapist Assistant Program, January 1-October 1. Completed applications should be returned to the Admissions Office.

Applications for the Pharmacy Technician Program, an articulation with Gateway Community-Technical College, are available May 1-Feb. 15 from the Mathematics, Science and Health Careers Division office and must be submitted by March 1 to Gateway Community-Technical College. No special application is required for the Therapeutic Recreation Program and Sport and Exercise Studies.

Foreign Student Application: Foreign students interested in applying to MCTC should do so before June 1 for the fall and October 30 for the spring. Students should contact the Admissions Office for an application and information.

Financial Aid and Deferment of Tuition and Fees: Tuition and fees may be deferred at the time of registration only for students who are Pell eligible and have all the necessary documents on file in the MCTC Financial Aid Office by May 15 for the fall semester and October 1 for the spring semester (refer to the Financial Aid section for details).

Transcript Evaluation
Students wishing to transfer course work completed at another college or university, or by CLEP (College Level Examination Program) or other standardized examination, must request that an official transcript of previous college work be sent to the Admissions Office at MCTC. Transcripts will be evaluated on a rolling basis. Transfer credit will not be awarded until the matriculation requirements listed above are met. Academic advisement will be available in the selection of courses. For further information, see Transfer Policies and Credit by Exam on page 14.

It is recommended that students planning to enroll in a college transfer program of study speak with a transfer counselor. It is especially important for students to be informed fully about the requirements of the transfer college or university because of differences in program requirements among institutions.

Application forms and other information about applying for admission can be obtained from the Admissions Office either by a personal visit to the office in the Lowe Building, or by request mailed to the Admissions Office, Manchester Community-Technical College, 60 Bidwell St., P.O. Box 1046, Manchester, CT 06045-1046. Applications must be accompanied by a high school transcript and an application fee of $20.00.

The Admissions Office staff is available to assist anyone needing further information. Program advising is available by calling 647-6140 for an appointment.
Placement Tests

English and math placement tests are required for all degree and certificate candidates after they have been accepted for admission. Tests must be taken prior to registration. Transfer students having mathematics and English credits will be exempted from taking placement tests in those subjects. For partial testing, the approved exemption form must be presented to the test administrator before testing. Those whose English or math placement test results indicate any serious deficiencies will be required to take one or more developmental courses. The results of the placement tests will be used to determine the individual’s level of achievement in math and/or English and will determine appropriate class placement. All students will be required to return on another day for test results and to complete the advising and registration process.

Students accepted into Allied Health Programs are required to meet with the specific Allied Health Program Coordinator to obtain test results and for planning course selection.

Business Careers Students: Placement examinations for beginning shorthand or keyboarding will be administered upon request to students who have successfully completed one or more years of shorthand or keyboarding in high school, or who have demonstrated considerable skills in these areas. Students who pass these placement examinations need not take introductory courses. For further information, speak with the Director of the Business and Social Sciences Division.

Advanced Placement Program

Advanced placement may be granted to entering students on the basis of scores on the College Entrance Examination Board Advanced Placement Examination as follows:

Scores of 3, 4 and 5 are granted degree credit for equivalent courses as determined by the academic divisions. All paperwork should be submitted to the Admissions Office. For questions referring to specific courses, please call the appropriate academic division.

Re-Enrollment

Students who have been accepted and enrolled in a degree or certificate program of study at MCTC should file with the Admissions Office a re-enrollment form by Nov. 1 for the spring semester and April 1 for the fall semester if progress towards completion of their program has been interrupted by an absence from the College for one or more semesters. (Please note: students applying for re-enrollment into Allied Health programs will be placed in the General Studies Allied Health pool pending reapplication and acceptance to the specific Allied Health program.) It is not necessary to submit a new set of credentials or another $20 application fee with the re-enrollment form. However, students who attend another college during an absence from MCTC, must submit an official transcript of those studies to the Admissions Office in order to receive credit at MCTC.

Cross-Registration Privilege

A cross-registration privilege exists for students who register for General Fund courses at multiple colleges within the state system of higher education. A student who has paid the maximum full-time tuition at their “home” institution is exempt from further charges at a state university, the University of Connecticut, or another community-technical college. A student who has paid the tuition and fees of a part-time student at their “home” institution and registers for additional courses at another college shall not exceed the amount charged for a full-time student, if the student’s combined registration at both institutions would classify them as a full-time student. If you are a financial aid recipient and you are attending another higher education institution at the same time please see the Financial Aid Officer. This exchange privilege is offered on a space available basis only. All students interested in this special cross-registration plan should contact the Registrar’s Office or the Assistant to the Dean of Student Affairs.

Measles and Rubella Immunization

Any student enrolled full-time or in a program, who was born after Dec. 31, 1956, must provide proof of adequate immunization against measles and rubella before enrollment in classes in state institutions of higher education. Allied Health students may be required to have additional immunization. Further information is available in the Registrar’s Office.

New England Regional Student Program

Manchester Community-Technical College is a member of the New England Regional Student Program. The program provides an opportunity for students to earn an undergraduate degree in certain programs not offered at a college near their home or in their home state. Under this program, an out-of-state student will be charged the regular resident tuition plus a 50 percent surcharge. Ask the Admissions Office for further information about this program.

High School Partnership Program

This program, developed by the Board of Trustees of Community-Technical Colleges, provides the opportunity for a high school junior or senior to enroll in college credit courses at MCTC at no cost. For students to participate, their high school must have a partnership contract signed with the college. Students must also have the written recommendation of the high school principal or counselor. Students are responsible for their books and transportation. Call the MCTC Admissions Office for further information.

Tech Prep/School to Career

The Tech Prep/School to Career program is a combined secondary and post secondary educational program which allows students in high school to obtain advanced standing in certain business, occupational and technology courses at MCTC. This is a formal articulation program between MCTC and a consortium of area high schools. High school students must follow guidelines for admission to the Tech Prep/School to Career program as established by their high school. Students will take the Tech Prep courses at their high schools in the 11th and 12th grades. Upon successfully completing the high school portion of the program and graduating from high school, the student then completes the program at the college.

The student has the opportunity to earn up to 14 college credits by the end of the student’s senior year of high school. The student must meet
the same college level standards that are expected of students attending MCTC.

Veterans

Veterans are served by the staff in the Financial Aid Office. The staff will assist eligible veterans in applying for monthly benefits, tuition waivers, and other educational benefits.

All veterans seeking monthly benefits must be matriculated into a degree or certificate program. Only courses that are directly applicable to their degree program will count towards eligibility for monthly benefits. Veterans that are transfer students must request an official transcript to be sent to our Admissions Office for evaluation of prior credit.

The College may award credit for certain courses completed in the service (including MOS proficiency). Veterans may submit course completion documents or other appropriate evidence of military training and/or qualifications to the Admissions Office for evaluation. Veterans are reminded that credit can also be earned through the College Level Examination Program (CLEP). Information about CLEP exams can be obtained from the Admissions Office.

Veterans who are eligible to receive educational benefits must submit their DD 214. If married, a notarized copy of the marriage certificate and birth certificates of any children must be submitted when applying for educational benefits.

Veterans are eligible for a full tuition waiver for general fund courses (fees not included and summer session and winter intersession courses are not covered) if they were:

a. honorably released from the service;
b. in active duty (at least 90 days) during specific periods of conflict, on active duty while engaged in combat, or a combat support role during peace-keeping missions. Please see the Veterans Affairs advisor in the Financial Aid Office to see if you qualify. (The Office of the State Attorney General has recently ruled that active duty, in this context, does not include active duty for training purposes, i.e., attending basic and related training, annual training and attendance at military schools. Therefore, while waivers for national guardspersons are otherwise covered by express statutory provisions, service in time of war for reservists requires actual mobilization for service in the military other than for training purposes, i.e., to perform a military job or function.)

In order to assure the uninterrupted flow of monthly VA benefits, Veterans must certify their ongoing class attendance by logging in once a month in Room L-131g in the Lowe Building. Failure to do so requires the college to promptly notify the Veterans Administration of non-attendance. This action will result in a termination of a student's benefits. Veterans are responsible for satisfactory pursuit of the courses in which they register and for notifying the Veterans' Affairs Office of any withdrawals from courses. For more information, please contact the Financial Aid Office at 647-6334.

MCTC Graduate Transfers

Manchester Community-Technical College students are able to transfer to many colleges and universities. Because requirements of baccalaureate institutions vary greatly, students should select a transfer institution early and consult with a counselor or program coordinator as to the transferability of their course selections.

Some of the colleges and universities that have accepted MCTC credits include the following:

- American International College
- Amherst College
- Antioch College
- Art Institute of Boston
- Assumption College
- Babson College
- Bentley College
- Boston University
- Bryant College
- California Polytechnic State University
- Central Connecticut State University
- Charter Oak College
- Columbia University
- Connecticut College
- Cornell University
- Eastern Connecticut State University
- Emerson College
- Fairfield University
- Fashion Institute of Technology
- Florida International University
- George Mason University
- Goddard College
- Howard University
- Johnson and Wales
- Lesley College
- Marietta College
- Massachusetts College of Art
- Mount Holyoke College
- New York University
- Northeastern University
- Oregon State University
- Parsons School of Design
- Quinnipiac College
- Rhode Island School of Design
- Roger Williams College
- Sacred Heart University
- Saint Joseph College
- Saint Leo College
- Smith College
- Southern Connecticut State University
- Springfield College
- State University of New York at Albany
- State University of New York at Stony Brook
- State University of New York at Binghamton
- Syracuse University
- Thomas Edison College
- Teikyo Post University
- Trinity College
- University of Arizona
- University of Bridgeport
- University of Chicago
- University of Colorado
- University of Connecticut
- University of Florida
- University of Hartford
- University of Hawaii
- University of Houston
- University of Illinois
- University of Maine
- University of Massachusetts
- University of Nevada
- University of New Hampshire
- University of New Haven
- University of North Carolina
- University of Rhode Island
- University of Virginia
- Wesleyan University
- Western Connecticut State University
- Western New England College
- Westfield State College
- West Virginia Wesleyan
- Williams College
- Worcester Polytechnic Institute
- Yale University
## Expenses and Financial Aid

### Tuition and Fees

Tuition and fees are payable in advance in accordance with deadline dates announced each semester.

The schedules below represent the tuition and fees students can expect to pay at MCTC. A complete schedule of tuition and fees, prepared by the Board of Trustees of Community-Technical Colleges, appears on page 124.

#### In-State Students

<table>
<thead>
<tr>
<th>FULL-TIME</th>
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<tr>
<td>Tuition, per semester</td>
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<tr>
<td>Fees</td>
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<td></td>
<td>2. Student activities fee</td>
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<td>1. College service fee</td>
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<td></td>
<td>2. Student activities fee</td>
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#### Out-of-State Students***

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<th>FULL-TIME (includes foreign students)</th>
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<td>2. Student activities fee</td>
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<td>37.00*</td>
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<td></td>
<td>2. Student activities fee</td>
<td>5.00**</td>
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</table>

#### New England Regional Student Program:

Each New England state has agreed to admit out-of-state New England residents for study at its public, degree-granting colleges, universities and institutions. At MCTC, these students pay the same fees as students from Connecticut, but tuition is $1,206 per semester for full-time students and $100.50 per semester hour for part-time students.

* includes library and laboratory fees and accident insurance
** supports co-curricular student activities
*** As of July 1, 1991, residency for in-state tuition purposes: an emancipated person must have resided in this state for a period of not less than one year.
**** Refunds of tuition paid by charge card will be processed directly through the student’s charge card account.

### Special Fees

1. Application fee for all students (full and part-time) ... $20.00
2. Graduation fee: payable at registration for the semester at the end of which a student expects to graduate - not refundable if the student fails to graduate ........................................ $30.00
3. Academic evaluation fee for Non-traditional Learning Program (NLP) ........................................ $15.00
4. Transcript Fee ................................................ $3.00
5. Installment Payment Plan Fee ........................................ $15.00
6. Late Tuition/Fee Payment ........................................ $15.00
7. Return Check Fee ........................................ $25.00

#### Installment Payment Plan

An Installment Payment Plan is available to students who are registered for a minimum of eight (8) credit hours. Students may apply for an installment payment at the time of registration. There is a $15 non-refundable fee for participation in the plan.

#### Waiver of Tuition

FOR THE ELDERLY, QUALIFIED VETERANS AND THE CHILDREN OF CERTAIN VETERANS. (General Fund Classes Only)

Students age 62 or older may register with a tuition and fee waiver on the last day of Walk-In Registration. Proof of age must be submitted to the Business Office to complete the eligibility requirements for this waiver.

Qualified veterans who are residents of Connecticut when accepted for admission to Manchester Community-Technical College, may be exempt from payment of tuition. Persons who believe they may qualify for this waiver of tuition should speak with the representative of Veterans' Affairs in the Financial Aid Office for further information about eligibility requirements.

The dependent children of veterans who have been declared missing in action or prisoners of war are eligible for a full or partial waiver of the tuition.

#### Registration and Non-Refundable Fee Deposit

Full-time and part-time students registering prior to six weeks before the first day of classes must pay a non-refundable deposit of all fees. The total tuition is payable in one installment and is due six weeks before the first day of classes. Failure to have made all payments not later than six weeks before the first day of classes will result in the cancellation of the student's registration. Failure to make payments in accordance with a deferred payment schedule shall also result in the withdrawal of the student's registration, following a fifteen day grace period.

Students presenting bad checks must replace them, or receive approval for a deferred payment schedule, within seven days (one week) of the College's receipt of such notification or the student's registration shall be immediately withdrawn.

#### Refunds of Tuition Only ****

Requests for the refund of General Fund (state supported) tuition must be made in person or in writing. Requests made by telephone will not be accepted. Fees will not be refunded (see single exception on page 124, General Fund Courses). First time students on financial aid should refer to page 10 for refund procedures.

**General Fund Courses:** Students who wish to withdraw from the College shall direct their requests in writing for refunds to the Registrar. Refunds are made according to the conditions and in the amount set forth below.
If notice of complete withdrawal from the College is received prior to the first day of classes of the semester, 100 percent of the tuition only for all courses in which one has registered will be refunded. If notice of withdrawal is received within the first 14 calendar days of the semester, a 50 percent refund of tuition only will be made.

If notice of a reduction in course load is received during the first 14 calendar days of the semester, a refund of 50 percent of the difference in tuition only between the original and revised schedules will be made.

No refunds will be granted beyond the 14th calendar day of the semester, except that a 100 percent refund of tuition and fees will be granted to students who enter the armed services before earning degree credit in any semester, provided that they shall have submitted in writing a notice of withdrawal and a certified copy of enlistment papers.

Continuing Education Courses: if the College cancels a Continuing Education course, students will receive a full refund of all tuition and fees.

A student who withdraws from a credit course prior to its first scheduled meeting will receive a full refund of tuition, provided that a written request for refund is received by the office of the Director of Continuing Education no later than 4 p.m. on the day before the first scheduled class meeting. (Requests must be made by 4 p.m. Thursday for a course starting on a Monday.) College Service fees and the Student Activity Fee for credit courses are non-refundable.

Students withdrawing from credit-free courses before the first class will receive a full refund of all fees paid. Refunds take approximately four weeks to process. Refunds are issued only for credit-free courses that MCTC cancels, or if you withdraw in writing no later than 4 p.m. on the day before the scheduled first class meeting. (Requests must be made by 4 p.m. Thursday for a course starting Friday-Monday.) Ordinarily, no refunds will be made once a class has met.

Exceptions that will be considered by the Director of Continuing Education are: severe illness of the student or an immediate family member as verified by a physician, or administrative error. Any exception must be submitted to the Director of Continuing Education in writing with a detailed description of the circumstances. Circumstances that will NOT be considered are: changes in work hours, commuting difficulties or dissatisfaction with course content. Regardless of circumstances, refund requests cannot be considered after the second class meeting.

Financial Aid
The Financial Aid Program at Manchester Community-Technical College is designed to provide access for as many eligible students as current funding will allow. The prime objective of our Financial Aid Program is to meet the basic expense of tuition. In addition, many recipients qualify for stipend checks that repay their initial expenses for books, supplies and transportation costs. Also, many other students add to their grant aid work study earnings and student loans to more fully meet their expenses for room, board, transportation, personal, health and child care costs.

Estimated Budgets for 1999-2000 Award Year

### Budget 1: Living with Parents

<table>
<thead>
<tr>
<th>Enrollment Status</th>
<th>Full-Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition &amp; Fees</td>
<td>$1,814.00 (Tuition &amp; Fees are subject to change)</td>
</tr>
<tr>
<td>Books &amp; Supplies</td>
<td>800.00</td>
</tr>
<tr>
<td>Transportation</td>
<td>1,479.00</td>
</tr>
<tr>
<td>Room &amp; Board</td>
<td>1,755.00</td>
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<tr>
<td>Personal Misc.</td>
<td>1,596.00</td>
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<tr>
<td>Total</td>
<td>$7,444.00</td>
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### Budget 2: Not Living with Parents

<table>
<thead>
<tr>
<th>Enrollment Status</th>
<th>Full-Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition &amp; Fees</td>
<td>$1,814.00 (Tuition &amp; Fees are subject to change)</td>
</tr>
<tr>
<td>Books &amp; Supplies</td>
<td>800.00</td>
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<tr>
<td>Transportation</td>
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<tr>
<td>Room &amp; Board</td>
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<tr>
<td>Personal Misc.</td>
<td>3,032.00</td>
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<tr>
<td>Total</td>
<td>$12,698.00</td>
</tr>
</tbody>
</table>

Basic Eligibility Criteria:
To be eligible for financial aid a student must:

- Be a citizen or eligible non-citizen of the United States;
- Be enrolled in an eligible degree or certificate program (audited courses do not count towards enrollment status);
- Have a high school diploma or GED on file at the Admissions Office;
- Be registered with Selective Service if male; and
- Be in good academic standing and maintaining satisfactory progress according to federal regulations.

How to Apply:
1) Complete the Free Application for Federal Student Aid (FAFSA) and mail it to the processor as soon as possible or apply through the internet (FAFSA on the web). In order for us to receive your application information from the processor, you must include MCTC as one of the colleges you plan to attend. Our Title IV code is 001392.

2) Submit an in-house MCTC Financial Aid Application to the Financial Aid Office.

3) Enroll in an eligible degree program through the Admissions Office.

4) Have a high school diploma or GED on file at the Admissions Office.

5) Submit tax returns, corrections and any other required documentation to the Financial Aid Office in a timely manner.

Deadlines

- Priority is given to early, accurate, financial aid applicants.
- To ensure timely consideration, you should have your paperwork on file in the Financial Aid Office by May 15 for the fall semester and Oct. 1 for the spring semester.
- After these dates, applications will be processed on a rolling basis throughout the year.

AT THE TIME OF REGISTRATION, ALL STUDENTS ARE REQUIRED TO PAY THEIR FEES.

Deferment of Tuition
Students who are Pell eligible and have met all the necessary requirements (steps 1 through 5 above) by May 15 for the fall semester and October 1 for the spring semester will be entitled to a deferment of their tuition.

A student who is entitled to a deferment of their tuition will not be required to pay by the tuition due date. Instead, both the student and the Business Office will be notified just before the tuition due date that the student is eligible for financial aid and that any tuition due the college can be deducted from their financial aid award.

Also, you should be aware that under certain conditions, you may have to pay the amount due at a later date. These conditions include but are not limited to:

- failure to respond in a timely manner to our requests for missing information;
- withdrawal from any or all of your courses;
- unsatisfactory academic standing;
- a final review of your application which results in your not being eligible for aid.
Expenses and Financial Aid (continued)

Student Loans
- Students are advised to wait for a complete review of their eligibility for other forms of financial aid before submitting loan applications.
- Students who are applying for a loan must also complete the application process.
- Student Loan Applications are available in the MCTC Financial Aid Office. This application must be completed and submitted to the Financial Aid Office.
- The deadline for submission of loan applications is March 15 of the current academic year.

Book Purchases
There is no financial aid book charge at MCTC. Students are responsible for paying for their books at the start of each semester. Students are advised to have “start up” money set aside for fees, books, supplies, and initial transportation costs.

Disbursement
All financial aid refunds take at least two months to process and the process cannot begin until the registration and course adjustment periods are over. The amount of the refund would equal a student’s financial aid award (excluding College Work Study and student loans), minus anything owed the College such as tuition, or Child Development Center expenses.

Sometime between the middle and the end of the semester checks will be mailed to students who are entitled to financial aid.

Title IV Federal Financial Aid: Policy for Refunds and Repayment of Cash Disbursements
1. Any student who is attending MCTC for the first time and is receiving student financial assistance under the federal Title IV Programs may be entitled to a pro-rata refund if they completely withdraw from their program. The pro-rata refund shall be that portion of tuition and fees assessed the student by the institution, in accordance with the Board of Trustees established Tuition and Fee rates, which is proportional to the weeks of the semester remaining on the last day of attendance as measured from the week of withdrawal, compared to the total weeks in the semester. No refund will be made from the point where sixty percent of the semester has passed; and the refund shall be less an administrative fee which is not to exceed the lesser of five percent (5%) of the tuition, fees and other charges assessed the student, or one hundred dollars ($100).

2. Any returning or readmitted community-technical college student who is receiving student financial assistance under the Federal Title IV Programs may be entitled to a refund.

The federal refund shall be that portion of tuition and fees assessed the student by the institution in accordance with Board of Trustees established tuition and fee rates, which is equal to the period of enrollment for which the student has been charged that remains, as of the last date of attendance, according to the following schedule:
- Through the first day of the semester ...... 100%
- Second day through 10% of the semester ... 90%
- Between 10% and 25% of semester ............ 50%
- Between 25% and 50% of semester .......... 25%

No refund will be made from the point where 50% of the semester has passed; and the refund shall be less an administrative fee which is not to exceed the lesser of five percent (5%) of the tuition, fees, and other charges assessed the student, or one hundred dollars ($100).

3. In addition, students who withdraw from a program are subject to a calculation which determines the amount of cash disbursement (i.e., the disbursement made to the student to meet necessary educational expenses beyond the payment of tuition and fees) that a student may be required to pay back to the College. This calculation will be in accordance with formula and guidelines established by prevailing federal regulations, and funds will be allocated in the following order (not to exceed the original allotment from each source): FFELP, Federal Direct, Federal Pell Grant, FSEOG, and other funds.

Verification Procedures
Your Student Aid Report (SAR) may be selected by the Department of Education for a process called verification, in which case you will be required to submit certain documentation in order for processing to continue on your financial aid application. Students will be notified of the documentation required and deadline dates when the information is received electronically by the Financial Aid Office.

Failure to submit completed verification documents to the Financial Aid Office can result in:
- Loss of financial aid for the semester or academic year;
- Loans not being approved; and
- Future applications for financial aid not being processed.

Helpful Hints for Applicants
1) Apply early.
2) Read instructions at the front of the booklet carefully before filling out the application. It is also helpful to have a copy of your previous year’s tax return before starting the FAFSA.
3) Have start-up money when beginning classes. There is no book charge available. Refund checks take at least two months to process and the process cannot begin until the course adjustment period is over for the semester.
4) Keep us informed of any changes in enrollment status. Remember that audited courses cannot be covered by federal aid programs and could put you in a repayment situation.
5) Keep your mailing address current with the Financial Aid Office.
6) Sign your award letter and return it to the Financial Aid Office promptly so that we can clear your account with the Business Office.

Financial Aid Programs
Financial Aid programs include grants, loans, and part-time jobs. Some of the major programs are: State of Connecticut Grants, Federal Family Education Loans, Federal Perkins Loans, Federal Pell Grants, FSEOG, and Federal Work Study. In addition, SFA funds are available for Study Abroad Programs.

Additional Information
Additional information about all federal programs and federal regulations is provided in the Financial Aid Office web page as well as in the annually updated Federal Student Aid Guide. This guide is available in the Financial Aid Office.

MCTC Foundation Scholarships
The MCTC Foundation provides scholarships for both full- and part-time students. This past year, the Foundation distributed 70 scholarships and over $40,000 to MCTC students. For information on Foundation scholarships, contact the Office of Institutional Development at 647-6020.
**Academic Policies**

**Academic Standing**

**Good Academic Standing**
In order to be considered in good standing, a student must meet both of the following requirements:

a. The student must attain an overall GPA minimum as indicated below.
   - 1.5 after 29 completed credits
   - 1.6 after 44 completed credits
   - 1.8 after 62 completed credits
   
   **2.0 QPA is necessary for graduation in degree programs and for certificates.**
   *Audited courses are excluded.*

b. Students must satisfactorily complete a minimum of 50 percent of the credit hours for which they registered. This standard will be applied for students who are registered for courses past the add/drop period in any semester. It will be applied when the student first completes 12 or more credits, and each semester thereafter in which he/she is registered. (Satisfactory completion includes grades of A, B, C and D. Grades of I, W and F indicate that the requirements for successful completion of the course have not been fulfilled.)

**Probation**

Students who do not achieve the necessary overall GPA and successfully complete the required number of credit hours to remain in good standing will be placed on academic probation. They will be notified in writing by the Dean of Student Affairs. Please note that Allied Health programs have additional academic standing requirements.

Students placed on probation will not be allowed to register for more than 10 credits for the next semester and cannot qualify for financial aid.

Evidence of special circumstances may be considered in applying this policy. “Special circumstances,” to be considered on an individual basis, may include but are not limited to: obligations of employment, military duty, or medical problems. Students who feel they might fall into this category should provide written documentation to the Dean of Student Affairs within 20 days of receipt of their notification letter.

**Suspension**

Students who are on academic probation and who fail to achieve the minimums outlined in Academic Good Standing at the close of the next block of 10 or more credit hours will be placed on academic suspension for one full semester. When reinstated, students are restricted to a maximum of 10 credits per semester until the overall GPA is raised to the minimum and at least 50 percent of the credits attempted are completed successfully. Any special circumstances must be directed in writing to the Dean of Student Affairs.

**Fresh Start Option**

Students who are re-admitted to MCTC after an absence of three (3) or more years who have been suspended or are on probation, and who have an accumulative grade point average of less than 2.0 are eligible to elect the Fresh Start Option. Application must be made within one year of being readmitted to the College. A student re-admitting under this option will be given the equivalent of transfer credits for all courses taken at MCTC with a grade of 1.7 or higher. The student re-admitting under this option may obtain forms from the Office of the Dean of Student Affairs, Lowe Building, room L-252. The earlier grades and Grade Point Average will remain on the transcript, but all future calculations of GPA will only include courses taken after re-admission under the option. The Fresh Start Option may be used only once by the student and is subject to the existing residency requirement of 15 credits.

**Academic Honors**

To encourage academic excellence, Manchester Community-Technical College has established a President’s List and a Dean’s List.

**The President’s List** recognizes the exceptional scholarship of students who earn a 4.0 or “A” Grade Point Average in their courses. Full-time students who have taken at least 12 credits for the semester with no “W” or “I” grades are eligible for this honor.

The following policy governs the selection of Dean’s List students for any particular semester beginning fall 1986. Full-time students who have taken 12 or more credit hours and who have earned a GPA of 3.3 or higher with a minimum of “C” in any course in a given semester are eligible for the Dean’s List. No “W’s” will be allowed for that 12-hour unit. Students receiving an “I” grade will have their GPA calculated (for Dean’s List purposes) after they complete the “I.” Should they then qualify for the Dean’s List, the award will be made retroactive to the preceding semester.

**Part-Time President’s List and Dean’s List:** After a part-time student has accumulated 12 credits in residence, that student may be considered for the Part-Time President’s List or the Part-Time Dean’s List. Part-time students who have earned a 4.0 GPA with no “W” or “I” grades in that semester are eligible for the Part-Time President’s List. Part-time students who have earned a GPA of 3.3 or higher with a minimum of “C” in any course with no “W” grades in that semester are eligible for the Part-Time Dean’s List. Students receiving an “I” grade will have their GPA calculated (for Dean’s List purposes) after they complete the “I.” Should they then qualify for the Dean’s List, the award will be made retroactive to the preceding semester. *(3 credit minimum)*

**Valedictorian and Salutatorian:** Graduating students who have completed at least 30 credits at Manchester Community-Technical College are eligible for consideration as valedictorian or salutatorian. Among the eligible students, the student with the highest cumulative GPA will be designated the valedictorian and the student with the second highest cumulative GPA will be named the salutatorian. In the case of identical averages, the student with the larger number of credits will be the valedictorian. If the GPA’s and the number of credits taken at MCTC are the same for two students, the pair will be named co-valedictorians.

**Phi Theta Kappa:** Students who have established a GPA of 3.75 or above and have completed 12 hours of study are extended an invitation to join Phi Theta Kappa. Phi Theta Kappa is the only internationally acclaimed honor society for two-year colleges offering associate degree programs. Membership in Phi Theta Kappa offers students opportunities for leadership, fellowship, scholarship, and community service, as well as providing an intellectual climate for continued academic excellence.

**The Board of Trustees Medallion** is awarded at each of the twelve community-technical colleges to graduating students who have earned perfect 4.0’s and who have completed at least half of their requirements at the college where the degree is being awarded.

**Enrollment and Withdrawal**

**Changes in Schedule, Program, Status**

**Change of Schedule:** Students are permitted to add and drop courses during scheduled course adjustment periods in the Registrars Office.

**Change of Program:** Students who want to change their programs of study should consult a member of the counseling staff for the correct procedure. Prospective students who want to change their programs before registration should consult the Admissions Office.
Academic Policies (continued)

Change of Status: Special students may become degree students by applying for a change of status at the Admissions Office. An official application, a $20 application fee and a high school transcript reflecting date of graduation are required. In addition, official transcripts from college(s) attended should be sent directly to the Admissions Office. A copy of a secondary equivalency certificate or general education diploma should be submitted if an individual has one of these instead of a high school diploma.

Withdrawal from the College
A student who withdraws from the College must complete a withdrawal form at the Registrar’s Office. Failure to officially withdraw from the College may result in failing grades for uncompleted courses. See page 13 for procedures for withdrawing from a course.

Advanced Placement Program
Advanced placement may be granted to entering students on the basis of scores on the College Entrance Examination Board Advanced Placement Examination as follows:

Scores of 3, 4 and 5 are granted degree credit for equivalent courses as determined by the academic divisions. All paperwork should be submitted to the Admissions Office. For questions referring to specific courses, please call the appropriate academic division.

General Education Outcomes
MCTC offers a broad range of programs to meet the needs of its diverse student population.

General education courses make up a minimum of 25 percent of all degree programs at the College. These courses cover social concerns, environmental concerns, historical perspectives, and appreciation of the arts, other languages and cultures, and ethical issues.

In the context of these areas, all MCTC students are expected to:
1. demonstrate reading, writing, speaking and listening skills;
2. demonstrate the ability to locate, analyze, synthesize and interpret information and to express ideas logically;
3. demonstrate quantitative skills and familiarity with computers; and
4. demonstrate problem-solving skills.

Grades
Unit of Credit
A credit hour is the unit of credit students earn at MCTC. One credit hour usually corresponds to one 50 minute class meeting each week for 15 weeks. A course worth three hours of credit, therefore, usually requires three 50 minute class meetings plus additional work outside the class each week.

Grades and Grade Points
Letter grades are assigned to inform students how well they have learned the material in their course(s). For each letter grade there is a corresponding number called grade points. These are used to get a numerical expression of a student’s work. The table below shows the grades and their grade point equivalents.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Value</th>
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<tbody>
<tr>
<td>A</td>
<td>4.0 grade points</td>
</tr>
<tr>
<td>A-</td>
<td>3.7 grade points</td>
</tr>
<tr>
<td>B+</td>
<td>3.3 grade points</td>
</tr>
<tr>
<td>B</td>
<td>3.0 grade points</td>
</tr>
<tr>
<td>B-</td>
<td>2.7 grade points</td>
</tr>
<tr>
<td>C+</td>
<td>2.3 grade points</td>
</tr>
<tr>
<td>C</td>
<td>2.0 grade points</td>
</tr>
<tr>
<td>C-</td>
<td>1.7 grade points</td>
</tr>
<tr>
<td>D+</td>
<td>1.3 grade points</td>
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</table>

<table>
<thead>
<tr>
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<th>Value</th>
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<tbody>
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<td>D-</td>
<td>0.7 grade points</td>
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<tr>
<td>F</td>
<td>0.0 grade points</td>
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<tr>
<td>W</td>
<td>0.0 grade points</td>
</tr>
<tr>
<td>I</td>
<td>grade to be computed upon completion of course</td>
</tr>
<tr>
<td>N</td>
<td>no credit</td>
</tr>
</tbody>
</table>

The Grade Point Average (GPA) is computed by multiplying the point value of each grade earned by the number of semester hours of the course for which the grade is received and then dividing by the total number of hours of work attempted.

<table>
<thead>
<tr>
<th>Grades</th>
<th>Grade point value</th>
<th>Semester-hours of credit</th>
<th>Grade point hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C+</td>
<td>2.3</td>
<td>x 3</td>
<td>6.9</td>
</tr>
<tr>
<td>D</td>
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<tr>
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<td>16.0</td>
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<tr>
<td>F</td>
<td>0.0</td>
<td>x 3</td>
<td>0.0</td>
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<tr>
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<td>2.7</td>
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<td>16</td>
<td></td>
<td>34.0</td>
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</table>

34.0 grade points ÷ 16 semester hours = 2.125 GPA.

Reports of grades are issued at the end of the semester. Only those grades which are issued at the end of the semester are recorded on the student’s permanent record.

Repeating a Course
A student is permitted to enroll in a course only three times unless a waiver is granted by the instructor of the course section in which the student wishes to enroll. An appeal of the faculty member’s decision may be directed to the academic dean or his/her designee.

When a course is repeated, the last letter grade (A-F) earned will replace the previously earned grade(s) and count in the grade point average, even if the last grade is lower than the grades earned in the previous attempts at the course. A grade of W or I will not replace an earned letter grade. College transcripts will record all attempts at classes and the grades earned in each attempt. Students should note, that while MCTC will not use repeated grades in calculating GPA, colleges to which they are applying for transfer may use a different method to make such a calculation.

Incomplete Grades
“Incomplete” is appropriate when the student has completed most of the course requirements, and has contracted to make up the missing work. The grade of “incomplete” is given only at the discretion of the instructor if, in the instructor’s judgement, the student has furnished satisfactory evidence that the work cannot be completed because of illness or other extenuating circumstances.

When a faculty member decides that “I” is appropriate, the following will be put in writing, signed by the faculty member and, whenever it is physically possible, by the student, and left on file in the Division Office, within two weeks after semester grades are due:

1. the grade for completion of work to date.
2. the weight this grade counts toward the final grade.
3. a brief description of the work to be completed.
4. the date by which the instructor requires its completion.

The instructor may require the work to be completed in less than 60 days into the next semester. A grade of “incomplete” that is not changed within a period of 60 days, beginning with the first day of the next semester, will remain on a student’s record.
Audit
An audit permits a student to attend and experience the course without earning a letter grade and without earning college credit. The audit grade is given at the discretion of the instructor in consultation with the student.

Transcripts
Requests for official college transcripts must be made either by personally completing transcript request forms in the Registrar’s Office or in writing to the Registrar. No telephone requests will be accepted. A charge of $3 is required for each transcript issued.

Grade Transactions
Withdrawal from Courses
• Before two-thirds of the semester: A student who withdraws from any course(s) must obtain a withdrawal form from the Registrar’s Office, obtain the signature of the course instructor, and return the completed form to the Registrar. Grades for courses from which a student withdraws during the first two-thirds of the semester will be recorded as “W” at the end of the semester.
• After two-thirds of the semester: Instructors may record a “W” or an “F” in accordance with their written course outlines for students who:
  a. present a withdrawal form for signature before the last day of class, or
  b. discontinue regular class attendance, or
  c. register for the course but do not attend.

The “W” or “F” will be recorded by the instructor at the end of the semester.

Graduation Requirements
DEGREE PROGRAM AND CERTIFICATE STUDENTS: GRADUATION IS NOT AUTOMATIC. The Board of Trustees of Community-Technical Colleges, through Manchester Community-Technical College, is authorized by the Connecticut General Assembly to confer associate in arts and associate in science degrees to candidates who have met all requirements. The College also awards certificates upon successful completion of planned programs of study. Degrees and certificates are awarded to candidates who have met all requirements.

It is the student’s responsibility to follow through EARLY and to meet all requirements listed below. If you have any questions, meet with your program coordinator or a counselor.

• notify registrar if you are completing requirements at another college.
• submit official transcripts from other colleges to the Admissions Office for transfer of credit by application fee deadline date to insure participation. Exceptions for participation is subject to the approval of the President.
• matriculation (enrollment in credit-bearing courses applicable to the requirements of a degree or certificate program).
• satisfactory completion of the total credits required in major (60 credits minimum).
• completion of course requirements with a minimum QPA of 2.0 or better. (The College reserves the right not to recommend for transfer students with a QPA lower than 2.5.)
• satisfaction of all financial obligations (library, parking fines).
• completion of residency requirement for 25 percent of course work.
• submit a non-refundable $30 graduation fee and an application for degree or certificate by deadline date.
• filing of grades for all incompletes and approved course variances with the Registrar’s office.

General Education Requirements: For an associate’s degree, all students are required to complete a minimum of 20 credits of general education courses. At least one course must be taken in each of the following areas:

1. Communication (including composition and speech).
2. Humanities Electives: English, fine arts, foreign language, history, humanities, music, philosophy, speech, theatre.
3. Natural Sciences and Mathematics Electives: astronomy, biology, chemistry, earth science, environmental science, geology, mathematics (except MATH 098 and 101), meteorology, oceanography, physical science, physics.
4. Social Science Electives: anthropology, economics, geography, history, philosophy, political science, psychology, sociology, social science.

Application for Graduation (Degrees and Certificates): GRADUATION IS NOT AUTOMATIC. Each student who expects to graduate must submit a separate application and $30 graduation fee for each degree or certificate earned, even if you do not plan on participating in commencement. The graduation application is available in the Registrar, Counseling, Career, and Assistant to the Dean of Students offices. Students who will complete all academic work in the fall semester must complete a graduation application for a degree and/or certificate by Monday, Oct. 4, 1999. Students who will complete academic work during the spring semester must complete the application by March 6, 2000. Each student’s application will be reviewed and the student’s program of study will be checked and verified by the graduate auditor. There will be only one commencement ceremony in the spring of each year. Regardless of graduation completion dates, all graduates are invited to attend Spring Commencement.

Students who wish to earn a SECOND DEGREE from Manchester Community-Technical College will be required to: complete a minimum of 15 credits beyond the number required for the initial degree, fulfill all requirements of the second degree, and pay a second graduation fee of $30 if degrees are not received simultaneously. The Registrar’s Office will notify students of the results of the evaluation/audit.

Late Applicants:
1. If you apply but cannot meet the requirements by the established deadline, your name will be placed on the following year’s potential graduation list.
2. If you missed the March 2000 graduation deadline or are short four (or less) credits to graduate, you may request special permission to participate in the ceremony. Your name may not be printed in the program and your certificate/degree will not be ordered until all requirements have been met.
3. Students will be permitted to take part in the graduation exercises, provided they are within a maximum of four (4) credits of completion of their degree requirements; these credits are to be completed during the summer of that same year.
4. Students who file a graduation application after the March deadline will be considered on a case by case basis after submitting a detailed explanation and appearing before a review panel appointed by the Dean of Students, consisting of one faculty member and one staff member and the Dean of Students.
Academic Policies (continued)

Student Responsibilities

Attendance Policy
The faculty of Manchester Community-Technical College believe that regular and prompt attendance at classes is necessary for a student to benefit from the learning experience. Specific attendance requirements will be set by each individual instructor.

Academic Integrity
An academically honest student submits for evaluation only such work, including test performance, papers, reports, and other communication, ideas, or expression, that has been written, performed or formulated solely by that student. On those occasions when the stated rules of a course permit collaborative effort, the contributions of other individuals and sources should be appropriately acknowledged.

It is, at all times, the responsibility of the student to maintain conduct consistent with the concept and definition of academic integrity, including not only avoidance of plagiarism, but other actions further outlined under College Policies in the MCTC Student Handbook.

Plagiarism: Webster’s New Universal Unabridged Dictionary defines plagiarism as the act of taking someone else’s idea, writing, or work, and passing it off as your own. If you fail to give credit to the source of the material, whether directly quoted or put in your own words, such a lack of credit constitutes plagiarism.

Plagiarism: 1) is a serious violation of academic standards and has serious academic consequences for the student, 2) may result in failure of the submitted work or failure for the course, at the discretion of the instructor, and 3) as an act of academic dishonesty, may result in additional disciplinary action by the College, as indicated in the MCTC Student Handbook, College Policies, under the heading “Student Discipline,” section 2, number 9: Academic Dishonesty.

Students Rights

Review of Academic Decisions
Students are evaluated and awarded credit based upon academic performance and without regard to personality, race, gender, religion, personal beliefs or on the basis of a previous complaint/grievance.

A student may request review of a grade or other decisions affecting academic status in accordance with the Board of Trustees’ policies. (Complete texts of these policies are available in the office of the Dean of Student Affairs.) The informal procedure which follows is suggested as the way a student would begin.

A student who has an academic grievance may discuss it first with the instructor or staff person involved, with a counselor, or with an administrator (for example: division director, dean.) If this discussion does not resolve the matter, the student should discuss the complaint with the supervisor of the person towards whom it is directed.

Within 15 calendar days of the student’s awareness of the academic decision, if a satisfactory resolution still has not been achieved, the student should proceed in accordance with the grievance procedure in the Student Handbook titled “Student Rights,” Section 3: Review of Academic Standing. (A copy of the official text of “Review of Academic Standing” can be obtained from the office of the Dean of Student Affairs.)

Release of Personally Identifiable Student Records
The student’s permission is required for the release of any information other than “directory information”: name and address, major field of study, dates of attendance, full vs. part-time student status, and date of graduation. For the purposes of access by military recruiters only, telephone listings and, if known age, level of education and major are also designated as directory information. Students may request in writing that directory information concerning them not be released. (The only exception: information can be released to parents without student permission if the student is listed as a dependent on the parent’s tax return.) A complete statement about this subject is available for inspection in the office of the Dean of Student Affairs.

Transfer Policies and Credit by Exam

Credit by Transfer (Community-Technical College Board Policy)
Transfer into a Connecticut Community-Technical College: At all regional community-technical colleges, degree credit shall be granted for credit courses completed at all institutions within the Connecticut State System of Higher Education and at all other accredited collegiate institutions in accordance with the following:

1. Degree credit shall be granted for all credit courses which are applicable to the objectives of, or equivalent to the course requirements of, the curriculum in which the transferring student enrolls. Credit work which is not applicable or equivalent to curriculum requirements shall be accepted for credit at the discretion of the college. Degree credit shall also be granted on the basis of performance on examinations in accordance with standards and limits approved by the board of trustees.

2. Credit courses completed with a grade of “Pass” (P) shall be accepted only for degree credit; the “Pass” grade assigned by other institutions shall not be included in computation of grade point averages.

3. Degree credit shall be granted for credit courses completed with a passing letter grade of “C” or better. Such credit courses shall be accepted only for credit, and letter grades assigned by other institutions shall not be recorded or included in computations of student grade point averages.

4. At the option of a transfer student, degree credit shall be granted for credit courses completed at other institutions with a grade of “D,” subject to the following conditions:
   a. If the student’s grade point average from the transferring institution at the time of transfer is at least 2.0, the student shall be considered in good academic standing, and letter grades assigned by other institutions to courses for which credit is granted by the community-technical college shall not be recorded or included in computations of the student’s grade point average at the community-technical college.
   b. If the student’s grade point average at the time of transfer is less than 2.0, then the letter grade of “D” assigned by another institution to each course for which credit is granted by the Community-Technical College shall be recorded on the student’s transcript and included in computations of the student’s grade point average, and the student’s academic standing at the community-technical college shall be determined accordingly.

5. Notwithstanding the number of degree credits which shall be granted in accordance with the foregoing, the student must complete at least 25 percent of the minimum credit requirements for the degree through coursework at the college awarding the degree.

6. When a student seeks transfer credit for technical specialty courses into an ABET-accredited program, such technical specialty credits should be from ABET-accredited programs. In the case of a request for transfer credit for technical specialty courses from a non-ABET-accredited program, the college shall provide appropriate means for
the validation of the student's competency in the technical specialty course areas.

Transfer from a Connecticut Community-Technical College: It is the policy of the Board of Trustees for The Connecticut State University that graduates of the regional community-technical colleges in Connecticut shall be accepted for admission to the state universities, provided they have received either the associate in arts degree or the associate in science degree in transfer programs, and further provided they are recommended for admission by the President of the regional community-technical college granting the degree. Community-technical college graduates who meet these conditions will be given credit for two years of college work and will be treated exactly like students who have completed the sophomore year at a state university and are advanced to junior standing.

Transfer Opportunity: CSU Guaranteed Admissions Agreement Transfer from a Connecticut Community-Technical College: It is the policy of the Boards of Trustees for the Community-Technical Colleges and the Connecticut State University that graduates of the regional community-technical colleges in Connecticut shall be guaranteed admission to the state university of their choice and shall be treated without disadvantage, vis-a-vis native CSU students, with respect to admission to specific majors, registration for courses, applicability of grades of different levels, assignment to Junior status, and degree program requirements.

In the case of majors for which articulation agreements have been adopted, CTC students preparing for transfer should follow the terms of the articulation agreement regarding course prerequisites, grade point averages, and other requirements stated in the agreement.

Where there is no articulation agreement, students are guaranteed junior status and a minimum of 60 transfer credits applied toward a baccalaureate degree at the Connecticut State University, provided that they meet the following conditions:

• Graduate from the CTC with an associate's degree
• Maintain a GPA of 2.0 or higher
• Enroll in a comparable university degree program, with no subsequent change of major
• Meet course or grade requirements, as specified for some majors.

Students are encouraged to follow the General Education Transfer Pattern specified by the CSU to maximize credit transfer (see the CTC system web page: http://www.commnet.edu/co/academic/acamodel/csu.htm).

Transfer Opportunity: University of Connecticut (College of Arts and Science)
The Community-Technical Colleges of Connecticut (CCTC) and the University of Connecticut (UCONN) have entered into a Transfer Agreement in order to facilitate transfer between the two systems.

Under the agreement, students with a grade point average (GPA) of 2.5 who complete the requirements for the Liberals Arts and Sciences associate’s degree described on pages 48-53, will be admitted to the College of Arts and Sciences of the University of Connecticut. Graduates with a grade point average less than 2.5 average may apply for special consideration. With few exceptions, all course work listed in the Liberal Arts and Sciences degree will be accepted and applied to the bachelor’s degree at UCONN. This agreement also applies to liberal arts and sciences pattern on pages 48-53, with the exception of computer science. It is important for students to consult with a counselor or an academic advisor when choosing electives in order to ensure transfer of all credits.

Students interested in majoring in one of the fields offered by the UCONN College of Arts and Sciences are encouraged to consider the opportunities offered by this agreement. MCTC and UCONN have transfer agreements in Business and Early Childhood Education. Complete copies of all transfer agreements are available in the Dean of Student Affairs' office.

Credit by Examination
A student who has already studied the subject of a course offered by Manchester Community-Technical College may earn credit for the course by passing an examination which covers the material taught in the course.

Students wishing to gain credit for which a CLEP exam does not exist may take an exam, when available, which has been prepared by the MCTC division offering the course ($15 fee). Credit By Examination Forms may be obtained from the Admissions Office or an academic division office.

Academic Information

Library (647-6167)
The library is located on two floors in the southeast corner of the Lowe Building. It holds approximately 40,000 volumes, has a strong reference collection, subscribes to over 500 periodicals, has substantial backfiles of periodicals in microform and offers CD-ROM and on-line access to a wide range of databases and the Internet. An on-line catalog provides easy access to all library materials. The collection is directed toward supporting College programs of study and providing students with information and enrichment outside of course work.

Equipment for using audio-visual materials is available, as are microcomputers, coin-operated copy machines, and magnification devices to provide access to print materials and computer files by the visually impaired.

The library belongs to CONNECT, an automated system which connects, on-line, over 30 public and academic libraries in the Greater Hartford area and 24 multi-library systems throughout the United States. It is a member of the New England Library Network, with access to the books and periodicals owned by the major public and private academic libraries in the country through the On-line Computer Library Center (OCLC), a database of more than 12 million titles. Delivery of materials borrowed from other libraries in the state is made weekly.

Students are given both formal and informal instruction in library use. The library has printed and audiovisual materials to assist students in using its resources.

A room for group study, as well as individual study carrels and comfortable chairs on both floors of the library, contribute to an atmosphere conducive to quiet study and browsing.

Any state resident of high school age or older is welcome to register as a borrower at MCTC’s library.

Instructional Media Center (647-6228)
The Instructional Media Center provides comprehensive media services to students and faculty of the College. Students are encouraged to use the facilities of the Instructional Media Center to prepare for projects, reports or presentations. Also, the Center has viewing areas where students may see films or videos that were missed in class.
The Instructional Media Center is equipped and staffed to produce multi-media instructional materials, slides, videotapes, overhead transparencies, audio tapes, and other types of teaching materials. In addition, the Center distributes audiovisual equipment and materials throughout the campus, provides a consulting service to students and faculty, houses a full-color television studio with post production editing facilities, and is equipped to receive live video programming and teleconferences via satellite.

**Honors Program**

The Honors Program helps students demonstrate high levels of motivation and performance to prospective employers or transfer institutions. Students have a chance to investigate topics of interest, conduct research, work on special projects, and actively share in the learning process with other classmates and their teacher. Recognition of honors work will be designated on transcripts.

Honors options are listed beside the classes or sections where they are available. Students enroll for and meet all the requirements for a regular section of a class, but then meet with the instructor and develop an additional project which they complete for honors credit. Students have two weeks to decide if they will select the honors option.

**Eligibility:** To qualify for either honors courses or an honors option, students must have completed 12 semester credit hours with a cumulative GPA (grade point average) of 3.3 or they may obtain a written faculty recommendation and permission of the course instructor. For more information, call Professor Patrick Sullivan at 647-6263 or leave a voice mail message at 647-6399 ext. 6263.

**English as a Second Language at MCTC**

Manchester Community-Technical College offers the non-English speaker a variety of courses and levels of English classes to improve language proficiency in listening, speaking, reading, and writing. For more information on ESL classes at Manchester Community-Technical College call Diana Hossain at 647-6260.

**Cooperative Education and Work Experience Opportunities**

At Manchester Community-Technical College, students have the opportunity to earn credit, pay and work experience through the Cooperative Education Program. Academic credit is awarded for cooperative education and work experiences under the supervision of departmental faculty. Cooperative education and work experience opportunities allow students to bridge the gap between classroom theory and on-the-job training in an actual work environment.

Cooperative Education is available to students in the following programs of study:
- Accounting
- Business Administration
- Administrative Assistant
- Administrative Assistant, Legal
- Administrative Assistant, Medical
- Criminal Justice
- Communication
- Computer Information Systems
- Disabilities Specialist
- Early Childhood Education
- Educational Associate
- Foodservice Management
- General Studies
- Gerontology
- Graphic Design
- Hospitality Management
- Marketing
- Medical Laboratory Technician
- Occupational Therapy
- Paralegal
- Photography
- Respiratory Therapy
- Social Service
- Sport and Exercise
- Therapeutic Recreation

In some programs of study, Cooperative Education/Work Experience is a required course within the curriculum.

**Enrollment Requirements:** Students must have a GPA (grade point average) of 2.0 or better; completed 12-15 credit hours towards a program of study and received permission from the program coordinator and cooperative education director. Prior to registering for the course, students must: attend a Pre-Placement Workshop and complete a “Statement of Understanding Form” available at the Cooperative Education Office. During the semester, students are required to attend a weekly, one-hour seminar in which work-related issues are addressed.

**Placement:** For paid placements, students must complete 300 hours of employment during one semester. This includes 15-20 hours of work per week for 15-16 weeks. Positions that provide monetary compensation are paid by the Cooperative Education employer. There is no guarantee from the Cooperative Education Office that each student will receive a placement. Unpaid internships are for fewer hours and vary by program.

The Cooperative Education Office is located on the second floor of the Lowe Building, room L-219c. For more information and workshop dates, contact the Cooperative Education Office at 647-6077.

**Computer Facilities**

Manchester Community-Technical College students have access to personal computers throughout the campus, including: an open computer laboratory with Windows and Macintosh computers which allow access to a Digital Equipment Corporation Open VMS Cluster in the Community-Technical College Chancellor's Office; and to the University of Connecticut IBM mainframe; in the Library; in Continuing Education; in the College Learning Center; and in teaching labs which offer use of Windows and Macintosh computers.

Campus computers are connected to a Campus LAN (Local Area Network) and the Community College System WAN (Wide Area Network), which gives them access to the World Wide Web.

**International Studies (647-6318)**

As part of their formal course work, students may elect to study abroad. A student may earn college credit in as short a period of time as three weeks. A full semester or a year abroad are also options for earning college credit. College credit may also be earned through independent study as a participant in selected MCTC International Trips. MCTC is a member of the College Consortium for International Studies.
Activities and Services

Academic Organizations and Clubs
Manchester Community-Technical College sponsors many clubs and organizations of an academic and professional nature (some are affiliated with their area and national counterparts): Afrocentric Student Organization, Alpha Beta Gamma Business Honor Society, Alpha Mu Gamma, Arts Collective, Asian American Club, Association on Disability and Community Inclusion, Business Students Association, Criminal Justice Association, Cultural Programs Committee, Dance Club, Film Guild Association, Gay, Lesbian, Bisexual Alliance, Hispanic Cultural Club, Hospitality Industry Association, Le Circle Français, The Live Wire (student newspaper), Mock Trial Club, Occupational Therapy Assistant Club, Paralegal Association, Parents Club (CDC), Phi Theta Kappa Society, Photography Club, Professional Secretaries International Association, SARGAM, Spanish Club, Student Activities Committee, Student Activities Committee, Student Senate, Supported Education Club, Upper Room Christian Fellowship Club, the Voluntary Action Program, and the VOX Choral Club.

Accident Insurance (Health Services Office, 647-6154)
Enrolled students are carried automatically by group accident insurance while they are attending classes, or participating in and while traveling directly to or from an activity sponsored by the college. Students may purchase a 24-hour accident and sickness insurance through this policy. Students who wish to inquire about health insurance should contact the Health Services Office, Lowe Building, room L-101.

Alumni Association (647-6137)
The Alumni Association exists to promote and maintain an active interest in the College, to support its educational purposes, and to promote and maintain communications among alumni. Members do not have to be graduates to join. Among the Association’s on-going projects are an annual Crafts Fair, Alumni Reception, an Annual Appeal, awarding of scholarships, and the publication of Alumni News.

Art
Professional and student art exhibits are held in the Newspace Art Gallery in the Lowe Building and in the gallery area in the Art Building. Exhibits are also held in the Newspace Art Gallery in the Women’s Center in the Lowe Building.

Athletics (647-6060)
MCTC began its organized intercollegiate athletics program in 1963. Today, the Athletic Department provides intercollegiate athletic programs for men in baseball, basketball and soccer; and for women in soccer and softball. MCTC student athletes have the opportunity to compete in an educational environment where intrinsic values such as sportsmanship, discipline, cooperation, and leadership are emphasized.

The College's athletic facilities include a fully equipped Fitness Center, four tennis courts, a baseball field, softball field, two soccer fields, and the use of the gymnasiums at East Catholic High School and the Manchester Armory.

The MCTC Fitness Center is run by the Athletic Department and offers seminars, fitness testing and personal exercise program planning. The Center is equipped with a stairmaster, treadmill, rowing machine, upper body exerciser, exercise bikes, universal machine stations and free weights.

Manchester Community-Technical College is a member of the National Junior College Athletic Association (NJCAA) and the Connecticut Community-Technical College Athletic Association (CCTCAA).

Campus Safety and Security
In accordance with Connecticut Public Act 90-259, An Act Concerning Campus Safety, Manchester Community-Technical College’s Uniform Campus Crime Report (UCCR) is available, upon request, in the library and the campus police department.

Career Services (647-6061)
The Career Services Office provides comprehensive programs, activities and services that are designed to assist students at all levels of their education. Acquiring effective job search skills is a valuable part of the educational experience and students are encouraged to visit the Career Services Office to seek advice, support and information.

Services include regularly scheduled workshops on résumé and cover letter writing, job search skills and interviewing. Additionally, students can sharpen their job search skills by viewing the office’s comprehensive video library. The office offers a 24-hour Job Line (647-9024) listing full- and part-time positions. Other services include information on summer employment/internship information, alumni career panels, and on-campus recruiting.

Child Development Center (647-6075)
The Child Development Center is open 7:45 a.m.–4 p.m., Monday through Thursday and 7:45 a.m.–12 noon on Friday throughout the fall and spring semesters and operates on the same schedule as the College. The experienced, professional staff provides a model preschool program in a warm, safe, supportive atmosphere. Some students in MCTC’s Early Childhood Education, Developmental Disabilities, and Human Services Programs serve their internships in the Center with the guidance and support of the staff.

Children two years and nine months in September through five years of age are eligible to attend, with priority given to children of MCTC students. Children of community residents may register when space is available. Children may be registered for two, three or five half or full days to accommodate parents’ school or work schedules. Parents should enroll their children as early as possible in the office of the director, since space is limited. Registration for spring is in December; for the fall in May. A limited amount of financial assistance is available to eligible MCTC students.

The pre-school program is designed to stimulate and challenge curious, creative preschoolers. The environment is carefully prepared with a wide variety of activities, both group and individual. These include art, music, cooking and nutrition education, natural science, creative movement, outdoor play, story-telling, and the development of specific learning skills.
Activities and Services (continued)

Center for Student Development
The Center for Student Development provides comprehensive, group and individualized services that foster intellectual and personal development. The Center for Student Development is comprised of:
- Academic Advising Center
- Adults in Transition
- Center for Minority Student Programs
- Center for Students with Disabilities
- College Learning Center
- Counseling Center
- Women’s Center

Academic Advising Center (647-6062)
The College offers comprehensive Academic Advising services for all new, returning and transfer students. Students have the opportunity to discuss their specific academic goals, placement test results, planned programs of study and degree/certificate program requirements with trained academic advisors/counselors. In addition to assisting students in establishing a solid academic foundation, the Academic Advising Center offers students early access to academic division directors, program coordinators, and faculty to provide appropriate academic mentorship.

New students are scheduled for placement testing and academic advising appointments prior to their first registration experience. Further, the Advising Center assists new students with their registration/course selection process, and conducts information sessions during New Student Orientation. All students are encouraged to schedule appointments with the Academic Advising Center throughout the academic year.

The Academic Advising Center also coordinates the Course Selection Assistance Program during scheduled registration periods. Academic advisors/counselors and faculty advisors offer course selection assistance to ensure that course choices are consistent with students’ academic program requirements. For more information on how the Academic Advising Center can benefit your academic and career plans, call 647-6062.

Adults in Transition (647-6126)
Adults in Transition Program (AIT) is a one semester program that provides support for women and men who are resuming their education after a long absence. The program’s one-credit study skills class and two-credit Transition Development course help students develop the skills and knowledge necessary to be successful college students. Adults planning to start their first semester at MCTC should call 647-6126 for an appointment. For further information on the AIT program see page 20.

Center for Minority Student Programs (647-6333)
The Center for Minority Student Programs plans, promotes and implements programs designed to address issues and concerns of multiculturalism. It provides a comfortable environment for students of color by assisting them with academic and personal concerns, through programs, workshops and individual sessions. The center is committed to retention, by providing educational and cultural programs to address this area. The center also provides faculty and staff with information and activities related to diversity issues. Our goal is to empower students to take pride in themselves, their heritage and to achieve academic excellence.

Students are encouraged to visit, participate in programs, and to assist with the planning of programs designed to produce a more culturally diverse environment.

Center for Students with Disabilities (647-6062)
Students with disabilities are strongly encouraged to contact the Counseling Center in regard to their special needs and academic accommodations. A variety of services are available including priority registration, academic advisement, a full-range of counseling services, academic accommodations such as readers, testing accommodations, interpreters, notetakers, scribes, adaptive equipment and assistance in locating and acquiring services from community agencies.

An information exchange and support group D.A.N.C.E. (Disabilities Alternatives Not Crippling Excuses) meets throughout the fall and spring semesters. This group provides the opportunity to meet other students and staff, exchange interests and concerns, and gain support for goal achievement.

Students with identified or suspected learning disabilities are encouraged to seek support services. Individual services are consistent with Section 504 of the Rehabilitation Act of 1973 and The Americans With Disabilities Act and are provided to each eligible student. For more information, call 647-6062 or for the Learning Disabilities Specialist call 647-6160.

College Learning Center (647-6160)
The College Learning Center (CLC) offers many opportunities for academic support to students of all ability levels. Individual or small group tutoring, subject related review sessions, college survival skills workshops, and videos on strategies for succeeding in college are some of the services offered to students to enhance their understanding of classroom material. A variety of computers and basic training in Windows 95, Microsoft Word, Excel, PowerPoint, Access, and an Introduction to the Internet are available.

The Center provides students with strategies to improve learning and study skills, and encourages students to become actively involved in the learning process. An intensive Academic Support Program (ASP) which is an early academic intervention program is offered to help students succeed in the college environment.

CLC staff is available to collaborate with instructors on specific activities to complement or supplement classroom instruction.

Tutorial Assistance: Students may make day and/or evening appointments for coursework tutoring in the CLC (Lowe Building, room L-120) or by calling 647-6160.

Counseling (647-6062)
A staff of professional counselors provide a comprehensive developmental counseling program designed to assist students with academic, vocational and personal issues. Counselors are available by simply calling the Counseling secretary (647-6062) to schedule an appointment. Limited walk-in services are also available.

Group sessions and workshops are provided throughout the year on a wide range of topics and issues related to goal setting, motivation, self-assurance, stress management, career planning and transfer. Counselors also offer credit courses dealing with career life planning and creating your college success.

Any student planning to transfer and continue their studies at another college is advised to schedule an appointment with a counselor by the end of their first year (or 30 credits) regarding transfer opportunities, admissions requirements and targeted course planning.

Women’s Center (647-6056 or 647-6126)
The Women’s Center is located in the Lowe Building, room L-258, and provides a friendly, open atmosphere for women of all ages to meet, talk and study, as well as to exchange ideas and offer mutual support to one another. The Center’s library has books, reference materials, periodicals and newsletters on a wide variety of subjects. The Women’s Center offers information and referrals on many topics including health, sexual assault, battering, sexual harassment, legal issues, sexual orien-
tation, and careers as well as information on workshops and cultural events in the area.

A variety of workshops and programs are offered for students, faculty, staff, and the community on topics such as divorce, international issues, health, careers, violence against women, women and disabilities, lesbians, current events and other issues of sex equity. Events are publicized throughout the College.

Cultural Events (647-6047)
Throughout the year, the MCTC Cultural Programs Committee, composed of students, faculty and staff, sponsors a wide variety of cultural programs. Musicians, authors, speakers, poets and actors appear on campus to present examples of the diversity and richness within our culture. Programs include dinner theaters, poetry readings, and professional dance groups.

Health Services (647-6154)
The Health Services Office is open to all members of the College community for emergency care, treatment of minor illness, referrals, medical excuses, accident reports, student insurance, and counseling about health-related matters. Health Services also sponsors clinics and seminars for students, staff members and residents of the community. Hours during which the College nurse is on duty are posted outside the Health Office, room L-101 in the Lowe Building.

Housing
Manchester Community-Technical College is a non-residential college. Students are responsible for their own housing arrangements.

Institute of Local History (647-6272)
The Institute of Local History stimulates interest in and spearheads projects related to the history of the region the College serves. It performs as a service and resource center for local historical studies. Among its on-going projects are an oral history project for the town of Manchester, annual walking tour of the Cheney Brothers National Historic Landmark District, several non-credit courses and workshops, and a permanent exhibition of historic photographs. The Institute provides guest lecturers upon request. It also has cooperated in the publication of two books about the history of Manchester.

Institute on Disability & Community Inclusion (647-6313)
Established in 1992, the MCTC/Communitas Institute on Disability and Community Inclusion is a cooperative institute which works to eliminate negative attitudes toward children and adults with disabilities. The Institute conducts conferences, seminars and think tank sessions and augments the book, journal, video and computer holdings of the MCTC library. Visiting scholar programs, focused research projects, and visits by international leaders help to present new stories and research which will reduce fear and misunderstanding concerning the inclusion of children and adults with disabilities into everyday community life.

Music (647-6078)
The MCTC Chorus and Instrumental Ensembles give students the opportunity to develop their musical skill and to join others in presenting concerts on campus and in the community.

New Student Orientation (647-6156)
Research supports that when students participate in orientation programs they increase their chances of academic success. Therefore, all new students, transfer students, and students who are returning to school after a long absence are expected to attend new student orientation. Most first year students find college life and class expectations very confusing and uncertain. Consequently, the Orientation program is designed to help ease your transition into the college, to give you basic information on how to be successful during your first year, to familiarize you with your classes, campus facilities, resources, and policies, and to equip you for the beginning of a very exciting, productive and positive experience. Parents, spouses, and families are also invited. Entering students will have ample opportunity to meet and interact with other students from different backgrounds and cultures, as well as faculty/staff and administrators who are as excited as you are about your educational goals. Orientation encompasses convocation, academic advising, skill building workshops, and a guided campus tour. Program Coordinators, faculty and staff will be available to answer your questions. Orientation programs are held at the beginning of each semester. For more information regarding the date, time, and location of the orientation program, please contact the Office of the Assistant to the Dean of Student Affairs.

Newspaper (647-6057)
Students are encouraged to contribute to the newspaper. Published six to eight times each semester, The Live Wire is a student newspaper focusing on MCTC news and events. The staff welcomes volunteers who can write, edit, proofread, take photographs or help with layout and ad design. Stop in the Live Wire office, located in the Lowe Building, room L-253.

Student Activities Committee (647-6046)
The Student Activities Committee is responsible for the coordination, planning and implementation of diverse programs at Manchester Community-Technical College. The committee, composed entirely of students, is funded by the Student Senate through the activities fee. Any student may become a member of this committee, which sponsors dances, concerts, speakers, coffeehours, special events, and travel programs each semester.

Membership on the Student Activities Committee provides a unique opportunity for the development of many leadership skills necessary for a fulfilling education. Through involvement, students develop practical leadership skills while providing a diverse co-curricular activities program in response to student needs. The Student Activities Committee is located in the Lowe Building, room L-149.

Student Senate (647-6054)
The Student Senate is a governing body of elected and nonelected students who represent the entire student body. Funds collected via the student activity fee are used by the Senate to sponsor various clubs, organizations, activities and services. As the official voice of the student body, the Senate has the power to regulate the activity fund, member organizations and to make decisions that affect all students. Anyone may attend monthly meetings of the Senate. However, one needs a GPA of 2.5 and to have earned at least three credits at MCTC to become an executive officer. The office of the Student Senate is located in the Lowe Building, room L-149.

Theatre (647-6182)
Students, staff members, and people from the community participate in the active Theatre Wing program which includes experimental and traveling shows in the fall and a major production in the spring.
Adults in Transition

Adults in Transition Program (AIT) is a one semester program that provides support for women and men who are returning to school seeking a career change, because they have been laid off, or because their pursuit of further education was interrupted. The program was created to help students cope with the stress and changes involved in returning to school after a long absence.

AIT is open to students who plan to start their first semester at MCTC (including students who are returning to MCTC after a long absence). Students who enroll in MCTC through AIT are provided with special services which include:

• an individualized interview to determine personal needs
• personalized academic advising and registration services
• a required one-credit study skills class which meets before the semester begins
• a required two-credit transition development course that introduces all aspects of the college and provides assistance in career and curriculum planning
• staff and peer support

Students will take one or more courses in their degree or certificate program or field of interest along with the Transition Program Courses. The AIT program is offered in the daytime and evening.

Call 647-6126 for further information or to schedule an appointment for a personal interview.

Pre-Program Preparation

Pre-Program Preparation is designed for students who need special assistance in entering a regular program of study or who must complete specific courses or prerequisites. Students receive careful advice on course selection to ensure a smooth transition to a certificate or degree program. No degree or certificate is awarded for completion of pre-program preparation courses since the work is preparatory for entry into a regular degree or certificate granting program.

Pre-Allied Health Preparation

The Pre-Allied Health series of courses is designed to help students identify a specific allied health career choice as well as to academically prepare students for their choice. Students who have taken the college placement tests in math and English may select courses suited to level of ability from the list below. All developmental course work must be completed prior to enrolling in a specific allied health program. Other courses listed will help students with study skills.

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<thead>
<tr>
<th>Credits</th>
<th>Course</th>
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<tbody>
<tr>
<td></td>
<td>AH 090 Allied Health Study Skills 0</td>
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<tr>
<td></td>
<td>AH 101 Introduction to Allied Health 1</td>
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<td></td>
<td>BIO 112 Human Biology 4</td>
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<td></td>
<td>CHEM 110 Elements of Chemistry 4</td>
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<tr>
<td></td>
<td>ENG 096* Preparatory College Reading and Writing II 3</td>
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<tr>
<td></td>
<td>ENG 098* Preparatory College Reading and Writing III 0</td>
</tr>
<tr>
<td></td>
<td>ENG 103 Reading Dynamics and Study Skills 3</td>
</tr>
<tr>
<td></td>
<td>MATH 098 Mathematical Modeling I: Number Sense &amp; Geometry 0</td>
</tr>
<tr>
<td></td>
<td>MATH 101 Mathematical Modeling II: Algebraic Concepts 3</td>
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<tr>
<td></td>
<td>PSYC 120 Understanding Self and Others 3</td>
</tr>
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<td></td>
<td>SD 100 Creating Your Own College Success 1</td>
</tr>
</tbody>
</table>

*Based upon English placement test.

Pre-Technical Education Preparation

Pre-Technical Education is designed to prepare students to meet requirements for acceptance into an engineering or technology program of study. Through successful completion of one or more of the following suggested courses, the candidate may be able to meet basic admission criteria (see specific engineering and technology programs). All candidates should select Technical Education 101 to gain a better understanding of the program requirements and the duties and responsibilities necessary in each career before making a definite career choice. Students may be required to select courses from among the following list:

<table>
<thead>
<tr>
<th>Credits</th>
<th>Course</th>
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<tbody>
<tr>
<td></td>
<td>Tech Ed 101 Introduction to Engineering &amp; Technology 1</td>
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<tr>
<td></td>
<td>MATH 098 Basic Mathematics 0</td>
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<tr>
<td></td>
<td>MATH 101 Basic Algebra 3</td>
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<tr>
<td></td>
<td>MATH 102 Intermediate Algebra 3</td>
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<tr>
<td></td>
<td>MATH 110 Fundamentals of Mathematics 3</td>
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<tr>
<td></td>
<td>MATH 150 Precalculus 4</td>
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<tr>
<td></td>
<td>PHYS 110 Elements of Physics 4</td>
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<td></td>
<td>CHEM 110 Elements of Chemistry 4</td>
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<td></td>
<td>CIS 098 Exploring the Computer 0</td>
</tr>
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<td></td>
<td>CIS 111 Introduction to Computers 3</td>
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<tr>
<td></td>
<td>CS 110 Introduction to Computer Science 3</td>
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<tr>
<td></td>
<td>ENG 096* Preparatory College Reading and Writing II 3</td>
</tr>
<tr>
<td></td>
<td>ENG 098* Preparatory College Reading and Writing III 0</td>
</tr>
<tr>
<td></td>
<td>ENG 103 Reading Dynamics and Study Skills 3</td>
</tr>
</tbody>
</table>

*Based upon English placement test.

Candidates are encouraged to seek counseling before selecting courses. Students may contact the allied health counselor at 647-6062 or the coordinator of the desired allied health program directly. For admission information and application to a specific allied health program, including the admission selection criteria for that program, contact the Admissions Office at (860) 647-6140 or the Health Careers Office at 647-6236.
Continuing Education

The College’s Continuing Education Division provides timely programs relevant to changing community needs and promotes the College as a focus of life-long learning. Each year more than 8,000 area residents become involved in credit and credit-free courses, seminars and workshops, as well as the many cultural activities and special educational services offered through this division. The Division Offices are located in the Continuing Education Center (Founders Hall) on the East Campus.

Credit Courses (647-6088)

Special Sessions: The Continuing Education Division administers the Summer Session and Winter Intersession. The Summer Session includes three-week, five-week, six-week, and eight-week sessions which are offered from mid-May through July. Winter Intersession courses meet for a three-week period immediately after Christmas.

Weekend College: The Weekend College offers a schedule of classes to complete course requirements for the Associate of Science in General Studies on Friday evenings, and/or Saturday mornings, and/or afternoons. Students may also earn an Office Microcomputer Certificate through the Weekend College. New classes begin every six weeks, for a total of seven sessions per year. Courses offered through the Weekend College are open to all students who meet prerequisite requirements.

Credit-Free Courses (647-6088)

In addition to credit courses, the Continuing Education Division administers an extensive credit-free program. Each semester more than 200 credit-free courses are offered for career and personal development, cultural enrichment, and contemporary living. Most courses are offered on campus and meet one or two evenings per week. Some credit-free courses offer Continuing Education Units (CEUs), a recognized standard measure for continuing education activities. A transcript can be issued upon written request and payment of a $3.00 fee.

Excursions in Learning: Excursions in Learning is an enrichment program for children ages 4-14. Creative, academically-motivated students can explore the sciences, math, history, the arts, language arts, foreign languages and computers through hands-on, experiential learning. Special Saturday programs are offered in fall and spring semesters. A two-week summer program will be offered August 2-16. For further information, call Lynn Hoffman, program director, at 647-6204.

Credit-Free Certificates (647-6088)

The following series of credit-free courses have been developed by faculty and area professionals to provide a strong foundation of practical and up-to-date information which can assist students in developing skills for their current jobs or for new careers. These certificate programs are hands-on with a small student/teacher ratio and are taught by professionals in the field.

Current certificate programs include Travel Careers, Copy Editing, Bartending, Applied Foodservice Sanitation, PC Computer, Desktop Publishing, and Web Master/Designer for those seeking to develop marketable job skills in those fields.

Business and Industry Services Network (647-6065)

As part of the “Business and Industry Services Network,” a collaborative effort of the state’s 12 community-technical colleges, the division provides businesses with training and educational services. As such, it works closely with business and industry, as well as agencies and school districts, to provide both credit and credit-free, on-site instructional programs for employees. The College’s Director of Business and Industry Services serves as a liaison to the business community. Popular training areas include technical skills, desktop publishing, presentation skills, basic skills, English as a second language, management and supervisory skills and total quality improvement. For more information on these programs call 647-6065.

Off-Campus Sites

Off-campus courses are currently offered at South Windsor High School and the East Hartford Community Cultural Center. The course offerings are designed to meet the specific needs of the employees and residents of the area, and are a combination of credit and credit-free offerings. The credit courses may be applied towards associate degree requirements. The Division continually seeks to establish new off-campus sites to respond to business and community needs. For information, call 647-6080.

Grant and Training Funds

The Director Business and Industry works with area companies to seek funding for custom training. In addition, through the Office of Institutional Development, grant funds are sought to support special projects, expand services to specific groups in the communities we serve, and to allow the development of new curricula to meet changing technologies.

Older Adults Association

The MCTC Older Adults Association (MCTCOAA) is composed of adults 50 years of age or older who share common interests in educational and cultural opportunities. Short courses designed specifically for this age group are offered through the Continuing Education Division, and special social and cultural events are scheduled throughout the school year. While some Association members are students of the College, it is not a requirement for membership. For more information, contact the coordinator at 647-6084.

Information (647-6088)

Brochures are published periodically by the Continuing Education Division to provide schedules of educational offerings and registration information. These are available upon request from the Continuing Education Center on East Campus or by calling 647-6094. For other information relating to Continuing Education offerings, call 647-6088.

Registration (647-6242)

Registration for courses offered through the Continuing Education Division may be done in person, by fax or by mail. Credit-free courses are open to everyone, regardless of educational background, on a “first-come, first-served” basis. Courses may be taken individually or as part of a planned program of study. For registration information, call 647-6242.
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ASSOCIATE DEGREE PROGRAMS are intended primarily for students planning to transfer, in advanced standing, to colleges or universities where studies will be continued toward a bachelor’s degree. Associate degree programs lead to an associate in science degree upon graduation. An exception is the Liberal Arts and Sciences Program which also offers, for a student who completes the foreign language requirement, an associate in arts degree. Because MCTC is accredited by the New England Association of Schools and Colleges, credits earned in our courses can be transferred to colleges and universities all over the country. All associate degree programs are transfer programs.

COLLEGE OF TECHNOLOGY: PATHWAY TRANSFER PROGRAMS. Associate of science degree programs in engineering science, manufacturing engineering science, and industrial technology provide the pathways within the Connecticut College of Technology transfer programs into the University of Connecticut and the State University System Schools of Engineering and Engineering Technology. Students may enter university engineering and technology programs through the MCTC associate of science degree programs in engineering and technology, and upon successful completion of the programs, continue on at the University of Connecticut or the Connecticut State University System as third-year students with a full two years of credit towards a baccalaureate degree in engineering, engineering technology or industrial technology. MCTC also provides the opportunity for students who complete the engineering and technology programs to transfer full credit to baccalaureate degree programs at other colleges and universities with which the College has transfer agreements. For more information, call Robert Fortier at 647-6200.

CERTIFICATE PROGRAMS are specialized curricula designed to equip students with the skills and educational background needed to get a job after graduation. Although certificate programs include course work which can be transferred, those programs are not intended specifically for the purpose of transfer. Each certificate career program represents a briefer, concentrated period of study in a specific discipline. A student who successfully completes the program receives a certificate of completion for the work.

PART-TIME STUDIES. Almost all programs can be pursued part-time. The College has no minimum requirement for the number of courses for which a student must register. Courses are scheduled from 8 a.m. to 10 p.m. each day in order to provide students with a wide range of scheduling options. Many students complete our degree requirements in three or four years.

DOUBLE-DEGREE PROGRAM. An alternative to the customary single-degree program is the double-degree program which allows a student to combine two degrees at graduation. Application for the second degree is normally made after a student has completed 30 credits in the first program of study. A minimum of 15 additional credits is necessary for the second degree. Students wishing more information should speak with a counselor.

ELECTIVES are credit courses selected by a student to supplement the required courses in a program of study. When selecting electives, a student should seek the advice of a counselor or faculty member. The courses from which electives may be selected are limited by the kind of elective specified in a program of study. There are three kinds of electives: business, liberal arts and science (humanities, natural science, social science), and non-specified electives.

1. **Business Electives**: accounting, business, computer information systems, legal, hotel-tourism and foodservice, real estate, office administrative careers, finance, quantitative methods.

2. **Liberal Arts and Science Electives**: A liberal arts and science elective may be selected from subjects listed below under humanities, natural science and social science.
   - **Humanities Electives**: English, fine arts, foreign language, history, humanities, music, philosophy, speech, theatre.
   - **Natural Science Electives**: astronomy, biology, chemistry, computer science (except CS 105, 120 and 252), earth science, environmental science, geology, mathematics (except MATH 098, 101, 115 and 116), meteorology, oceanography, physical science, physics.
   - **Social Science Electives**: anthropology, economics, geography, history, political science, psychology, sociology, social science.

3. **Electives**: Any course completed for credit may be used as an elective. The arrangement of courses by semester in each program is, in most cases, only a recommendation. For most of the programs of study, courses can be taken in any order. Exceptions include courses with specific prerequisites and the five Allied Health programs.
Accounting, A.S. Degree

Program Design
The Accounting Associate Degree Program prepares students for employment as junior accountants or management trainees. Graduates will be able to maintain complete sets of accounting records and prepare financial statements and individual tax returns. Students have the opportunity to participate in MCTC’s Volunteer Income Tax Assistance (VITA) program, in which they gain practical experience in the preparation of tax returns. Students interested in transferring to earn a bachelor’s degree should enroll in the Accounting and Business Administration Transfer, A.S. Degree Program.

Employment Opportunities
The study of accounting emphasizes the decision-making process as well as the principles and procedures used to produce information required by decision makers. There are many career opportunities in private industry as well as federal, state and local government.

With additional education and accounting employment experience, graduates may become business managers, comptrollers, corporate officers, government accounting supervisors, and Public and Certified Public Accountants in private practice. Many graduates have developed lucrative tax practices.

Curriculum
Students may enroll full- or part-time. Since some courses are not offered in both the fall and spring semesters, see an advisor about your schedule. Students must achieve at least a C- or better in an accounting course to continue on to the next level. Note: To take a business course numbered 100 or higher, students must be eligible for ENG 111. To take an accounting course numbered 100 or higher, students must be eligible for ENG 111 and MATH 101 or higher.

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<th>Credits</th>
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<tr>
<td>ACCT 101</td>
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<td>BUS 101</td>
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<td>BUS 111</td>
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<td>ENG 111</td>
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<td>QM 110</td>
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<td>ACCT 102</td>
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<td>BUS 102</td>
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<td>CIS 106</td>
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<td>CIS 166</td>
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<td>CIS 167</td>
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<td>ECON 102</td>
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<td>Elective</td>
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<td>Elective</td>
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<td>Total Credits Required</td>
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</tbody>
</table>

ACCT 202 Intermediate Accounting II 4
ACCT 213 Cost Accounting 3
FNCE 241 Corporation Finance 3
Elective humanities 3
Elective social science 3

Total Credits Required 65-67

* Students must take CIS 106, and CIS 166 or CIS 167 before they can enroll in ACCT 201.

** ACCT 270 is offered as an option for students who have a GPA of at least 2.0 and 15 credits completed towards their degrees including ACCT 101, 102 and 201. Permission of Cooperative Education Director is required.

Accounting, Certificate

Program Design
The Accounting Certificate Program is designed for individuals who already have a bachelor’s degree and would like to change careers. This program also serves individuals currently employed who are not seeking a degree or career change but would like formal training or professional development.

Employment Opportunities
The certificate in accounting provides students with the skills to become junior accountants. The Occupational Outlook for the Hartford service delivery area projects accounting and auditing to be one of the fastest growing professional occupations in the area. With rapid occupational growth and an under supply of trained workers, job opportunities are excellent in this field in Connecticut. Many employers prefer graduates who have worked part-time in a business or accounting firm while in school.

Curriculum
Students may enroll full- or part-time. Students must achieve at least a C- or better in an accounting course to continue on to the next level. To take an accounting course numbered 100 or higher, students must be eligible for ENG 111 and MATH 101 or higher.

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<th>Credits</th>
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<tbody>
<tr>
<td>ACCT 101</td>
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<tr>
<td>ACCT 102</td>
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<tr>
<td>ACCT 201*** Intermediate Accounting I</td>
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<td>ACCT 202</td>
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<td>ACCT 213</td>
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<td>ACCT 223</td>
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<td>BUS 101</td>
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<td>CIS 106</td>
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<td>CIS 166</td>
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<td>CIS 167</td>
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<td>Elective</td>
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<td>Total Credits Required</td>
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*** Students must take CIS 106, and CIS 166 or CIS 167 before they can enroll in ACCT 201.
Accounting and Business Administration Transfer, A.S. Degree

Program Design
The Accounting and Business Administration Transfer Associate Degree Program is designed for students who plan to earn a bachelor’s degree in accounting, business administration or marketing. This program provides a broad liberal arts background consisting mostly of courses normally taken in the first two years at a baccalaureate college or university. In addition, students will take courses in accounting and business administration. Advanced courses should be taken at the institution to which you transfer.

Students should be familiar with the requirements of the institutions to which they will transfer. Therefore, we encourage selection of transfer institutions as early as possible. Students should see an advisor before choosing elective courses because each transfer institution may have specific requirements.

Transfer Opportunities
Students in this program can transfer to earn bachelor’s degrees in area colleges and universities such as Eastern Connecticut State University, University of Connecticut, Central Connecticut State University, University of Hartford, University of New Haven, American International College, University of Bridgeport, Western New England College, and Bay Path College.

Graduates with a bachelor’s degrees in accounting and business administration find employment as auditors, business managers, controllers, government supervisors, corporate officers, and positions in public and private accounting. Nationally and in the state of Connecticut, faster than average growth is expected in this field through the year 2005.

Curriculum
We recommend that students have a sound foundation in mathematics before entering this program. Take the assessment test early to determine your level of mathematical ability. Note: To take a business course numbered 100 or higher, students must be eligible for ENG 111. To take an accounting course numbered 100 or higher, students must be eligible for ENG 111 and MATH 101 or higher.

<table>
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<th>Credits</th>
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<tbody>
<tr>
<td>ACCT 101 Financial Accounting</td>
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<td>BUS 101 Business Law I</td>
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<td>ENG 111 College Reading and Writing</td>
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<td>PSYC 111 General Psychology</td>
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<td>Elective natural science</td>
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<tr>
<td>ACCT 102 Managerial Accounting</td>
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<td>ECON 101 Macroeconomics</td>
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<td>ENG 120 Introduction to Literature</td>
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<td>MATH 111 Elementary Statistics with Computer Applications</td>
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<tr>
<td>BUS 214* Managerial Communications or</td>
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<tr>
<td>Elective social science</td>
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<tr>
<td>BUS 121 Principles and Methods of Marketing I</td>
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<tr>
<td>ECON 102 Microeconomics</td>
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<tr>
<td>CIS 111* Introduction to Computers or</td>
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<tr>
<td>Elective social science</td>
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<tr>
<td>MATH 120 Topics in Modern Mathematics I: Functions, Graphs, Matrices</td>
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<td>COMM/SPCH 213 Effective Speaking</td>
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<tr>
<td>BUS 201 Business Management</td>
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<tr>
<td>FNCE 241 Corporation Finance</td>
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<tr>
<td>MATH 121 Topics of Modern Mathematics II: Applied Calculus</td>
</tr>
<tr>
<td>Elective social science</td>
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<tr>
<td>Elective liberal arts and science</td>
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</tbody>
</table>

Total Credits Required 63-64

* Students planning to attend UConn should take PSYC 112 and another social science elective.
Administrative Assistant—Business Office Technology, A.S. Degree

Program Design
The Administrative Assistant—Business Office Technology Associate Degree provides students with the skills necessary to excel in the office environment. Students become proficient in keyboarding, word processing, office communications skills, integrated office systems, and office procedures. Students are encouraged to develop individual areas of interest through elective courses and through part-time and summer employment.

Administrative assistants use technology to originate, access and manipulate information. In addition they function independently in initiating office communications, accessing and tracking records and information, and problem solving the various details of the day-to-day office operations. As members of management teams, they are able to assume responsibility and work independently to exercise initiative and judgment and to adapt to new concepts and products.

Employment Opportunities
A nationwide shortage of professional office workers continues to exist. According to the U.S. Bureau of Labor Statistics, the profession will continue to provide significant job growth.

Greater Hartford area insurance companies, banks, science and technology-based corporations, educational institutions, and other leading firms actively seek Manchester Community-Technical College graduates. Promotion and advancement opportunities are available in management, personnel, public relations, sales and marketing. Graduates enjoy professional success, job satisfaction, and attractive compensation and benefits.

Curriculum
Students may enroll in this program full- or part-time.

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<tr>
<th>Credits</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>3</td>
<td>ENG 111</td>
<td>College Reading and Writing</td>
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<tr>
<td>3</td>
<td>BOT 101</td>
<td>Shorthand I - Gregg</td>
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<tr>
<td>3</td>
<td>BOT 103</td>
<td>Office Writing Procedures</td>
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<tr>
<td>3</td>
<td>BOT 107</td>
<td>Beginning Keyboarding</td>
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<tr>
<td>3</td>
<td>SOC 101</td>
<td>Introduction to Sociology or</td>
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<tr>
<td>3</td>
<td>PSYC 111</td>
<td>General Psychology</td>
</tr>
<tr>
<td>3</td>
<td>ENG 112</td>
<td>Reading &amp; Writing for Academic Research or</td>
</tr>
<tr>
<td>3</td>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
</tr>
<tr>
<td>3</td>
<td>BOT 102</td>
<td>Shorthand II - Gregg</td>
</tr>
<tr>
<td>3</td>
<td>BOT 108</td>
<td>Advanced Keyboarding</td>
</tr>
<tr>
<td>3</td>
<td>BOT 124</td>
<td>Word for Windows</td>
</tr>
<tr>
<td>3</td>
<td>BOT 224</td>
<td>Office Accounting or</td>
</tr>
<tr>
<td>3</td>
<td>ACCT 101*</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>2</td>
<td>CIS 106</td>
<td>Windows 95</td>
</tr>
<tr>
<td>3</td>
<td>CIS 118</td>
<td>Presentation Software: PowerPoint or</td>
</tr>
<tr>
<td>1</td>
<td>CIS 156</td>
<td>Database Applications I: ACCESS</td>
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<tr>
<td>3</td>
<td>BOT 222</td>
<td>Administrative Office Procedures</td>
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<td>BOT 261</td>
<td>Document Production</td>
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<td>3</td>
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</tr>
<tr>
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<tr>
<td>3</td>
<td>BUS 101</td>
<td>Business Law I or</td>
</tr>
<tr>
<td>3</td>
<td>BUS 214</td>
<td>Managerial Communications</td>
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<td>3</td>
<td>ENG/BOT 203</td>
<td>Advanced Editing and Proofreading or</td>
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<tr>
<td>3</td>
<td>ENG 114</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>1</td>
<td>BOT 104</td>
<td>Introduction to Machine Transcription</td>
</tr>
<tr>
<td>3</td>
<td>BOT 262</td>
<td>Advanced Word Processing</td>
</tr>
<tr>
<td>3</td>
<td>Elective**</td>
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</tr>
<tr>
<td>3</td>
<td>Elective***</td>
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<td>3-4</td>
<td></td>
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</tr>
</tbody>
</table>

Total Credits Required 61-63

* Eligibility for MATH 101 and ENG 111 required.
** Suggested course: MATH 110, Quantitative Literacy.
*** Suggested course: BOT 270, Cooperative Education/Work Experience.
Administrative Assistant, Legal—Business Office Technology, A.S. Degree

Program Design
The Administrative Assistant, Legal—Business Office Technology Associate Degree provides students with a broad understanding of the Connecticut and U.S. court systems and the many fields of law. Students become proficient in keyboarding, word processing, legal terminology and legal transcription, office communication skills, integrated office systems, and office procedures. Students are encouraged to develop individual areas of interest through elective courses and through part-time and summer employment.

Legal administrative assistants use technology to originate, access, manage and manipulate information. In addition they may function independently in initiating office communications, accessing and tracking records and information, and problem solving the various details of the day-to-day office operations. They participate in the representation of and communication with clients and in the preparation of court papers, legal documents and correspondence.

Employment Opportunities
Graduates of this program are aggressively recruited by the Greater Hartford legal community. Employment opportunities include working with a single attorney or group of attorneys in private practice, in legal departments of corporations, in government agencies, and in state and federal courts. Areas of specialization involve personal injury, criminal law, family relations, real estate and business transactions. Promotion and advancement opportunities include office administration, litigation assistant, personnel supervision, and court calendar supervision. Career openings and compensation will continue to increase.

Curriculum
Students may enroll in this program full- or part-time.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
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</tr>
<tr>
<td>BOT 101</td>
<td>Shorthand I - Gregg</td>
<td>3</td>
</tr>
<tr>
<td>BOT 103</td>
<td>Office Writing Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BOT 107</td>
<td>Beginning Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology or PSYC 111</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112</td>
<td>Reading &amp; Writing for Academic Research or</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>BOT 102*</td>
<td>Shorthand II - Gregg</td>
<td>3</td>
</tr>
<tr>
<td>BOT 108</td>
<td>Advanced Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>BOT 124</td>
<td>Word for Windows</td>
<td>3</td>
</tr>
<tr>
<td>BOT 224</td>
<td>Office Accounting or ACCT 101**</td>
<td>3-4</td>
</tr>
<tr>
<td>ACCT 101**</td>
<td>Financial Accounting</td>
<td>3-4</td>
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</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 233</td>
<td>Legal Terminology I</td>
<td>3</td>
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<tr>
<td>BOT 261</td>
<td>Document Production</td>
<td>3</td>
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<td>liberal arts and science</td>
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<tr>
<td>Elective***</td>
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</tr>
<tr>
<td>Elective****</td>
<td>natural science</td>
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<table>
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<tr>
<th>Course</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>ENG/BOT 203</td>
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<td>ENG 114</td>
<td>Technical Writing</td>
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<td>BOT 104</td>
<td>Introduction to Machine Transcription</td>
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<td>BOT 231</td>
<td>Legal Office Procedures</td>
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<td>BOT 234</td>
<td>Legal Terminology II</td>
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<td>BOT 262</td>
<td>Advanced Word Processing Applications</td>
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</table>

Total Credits Required 61-63

* BOT 102 must be taken before, or at the same time as, BOT 233.
** Eligibility for MATH 101 and ENG 111 required.
*** Suggested course: MATH 110, Quantitative Literacy.
**** Suggested course: BOT 270, Cooperative Education/Work Experience.
Administrative Assistant, Medical—Business Office Technology, A.S. Degree

Program Design
The Administrative Assistant, Medical—Business Office Technology Associate Degree provides students with the skills necessary to excel in the medical office environment. Students become proficient in keyboarding, word processing, medical terminology and medical transcription, office communication skills, integrated office systems, and medical office procedures and recordkeeping. Sociology, psychology and biology courses are also included in this program.

Employment Opportunities
Medical administrative assistants are employed by doctors, dentists, veterinarians, hospitals, research laboratories, medical departments of corporations and government agencies, insurance companies, and organizations administering health insurance programs. Demand and compensation are increasing. Personnel supervision, records management, and medical office and department administration are among the meaningful career placement and promotion opportunities available to graduates.

Curriculum
Students may enroll in this program full- or part-time.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
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<tr>
<td>ENG 111</td>
<td>3</td>
<td>College Reading and Writing</td>
</tr>
<tr>
<td>BOT 101</td>
<td>3</td>
<td>Shorthand I - Gregg</td>
</tr>
<tr>
<td>BOT 103</td>
<td>3</td>
<td>Office Writing Procedures</td>
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<tr>
<td>BOT 107</td>
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<td>Beginning Keyboarding</td>
</tr>
<tr>
<td>SOC 101</td>
<td>3</td>
<td>Introduction to Sociology or</td>
</tr>
<tr>
<td>PSYC 111</td>
<td>3</td>
<td>General Psychology</td>
</tr>
<tr>
<td>BUS 105</td>
<td>1</td>
<td>Applied Legal Medical Concepts</td>
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<tr>
<td>ENG 112</td>
<td>3</td>
<td>Reading &amp; Writing for Academic Research or</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>3</td>
<td>Effective Speaking</td>
</tr>
<tr>
<td>BOT 102</td>
<td>3</td>
<td>Shorthand II - Gregg</td>
</tr>
<tr>
<td>BOT 108</td>
<td>3</td>
<td>Advanced Keyboarding</td>
</tr>
<tr>
<td>BOT 124</td>
<td>3</td>
<td>Word for Windows</td>
</tr>
<tr>
<td>BOT 224</td>
<td>3</td>
<td>Office Accounting or</td>
</tr>
<tr>
<td>ACCT 101*</td>
<td>3-4</td>
<td>Financial Accounting or</td>
</tr>
<tr>
<td></td>
<td>15</td>
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<tr>
<td>BOT 210</td>
<td>3</td>
<td>Machine Transcription: Medical I</td>
</tr>
<tr>
<td>BOT 241</td>
<td>3</td>
<td>Medical Terminology</td>
</tr>
<tr>
<td>BOT 261</td>
<td>3</td>
<td>Document Production</td>
</tr>
<tr>
<td>Elective**</td>
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<td>Elective***</td>
<td>3-4</td>
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<tr>
<td>ENG/BOT 203</td>
<td>3</td>
<td>Advanced Editing and Proofreading or</td>
</tr>
<tr>
<td>ENG 114</td>
<td>3</td>
<td>Technical Writing</td>
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<td>BOT 104</td>
<td>1</td>
<td>Introduction to Machine Transcription</td>
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<tr>
<td>BOT 245</td>
<td>3</td>
<td>Medical Office Procedures</td>
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<td>BOT 262</td>
<td>3</td>
<td>Advanced Word Processing Applications</td>
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<td>Elective****</td>
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</tr>
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</table>

Total Credits Required 62-64

* Elgibility for MATH 101 and ENG 111 required.
** Suggested course: MATH 110, Quantitative Literacy.
*** Suggested course: BIO 112, Human Biology.
**** Suggested course: SOC 160, Medical Sociology.
***** Suggested course: BOT 270, Cooperative Education/Work Experience.
**Biotechnology Option**

**Environmental Science, A.S. Degree**

**Description**
The Biotechnology Option leads to an A.S. degree in Environmental Science. The program is designed to prepare students to join the growing biotechnology sector at the level of technician. Biotechnology is the manipulation of living organisms and/or biological processes to provide useful products. Students who complete this option may wish to further their education or seek employment as technicians in the pharmaceutical, agricultural or environmental industries.

**Program Design**
The program is offered through a collaborative arrangement between Middlesex Community-Technical College and Manchester Community-Technical College. The two year program will normally begin in the fall semester and will include a minimum of 62 credits in science, mathematics, social sciences and humanities. The applied courses in biotechnology techniques will be conducted at Middlesex Community-Technical College on transfer to that college. There is also the opportunity to carry out an internship with biotechnology companies located in the state.

For further information on this option please contact the Biotechnology Coordinator at Middlesex Community-Technical College, Jon Morris (860) 343-5880 or Philip Jones at Manchester Community-Technical College (860) 647-6198.

**Employment Opportunities**
Biotechnology is an exciting and rapidly growing field based on the application of biological processes to research, commercial and medical purposes. Both the federal government and the State of Connecticut have designated Biotechnology as one of the high technology areas that will receive increased funding as a “growth industry.” The future of biotechnology is optimistic with predictions of rapid expansion of employment opportunities. Some of the biotechnology companies currently in Connecticut include: Curagen, Bayer, Bristol-Meyers Squibb, Neurogen, Pfizer, and others.

**Transfer Opportunities**
Due to the agreement between Middlesex Community-Technical College and Manchester Community-Technical College, all designated courses taken at Manchester will transfer to Middlesex, provided a grade of “C” has been obtained.

---

**Curriculum**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101</td>
<td>General Biology I 4</td>
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<tr>
<td>CHEM 111</td>
<td>College Chemistry I 4</td>
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<tr>
<td>ENG 111</td>
<td>College Reading and Writing 3</td>
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<tr>
<td>MATH 102</td>
<td>Mathematical Modeling III: Advanced Algebraic Concepts 3</td>
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<tr>
<td>BIO 141</td>
<td>Microbiology 4</td>
</tr>
<tr>
<td>CHEM 104*</td>
<td>Allied Health Chemistry II 4</td>
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<tr>
<td>CHEM 112</td>
<td>College Chemistry II 4</td>
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<tr>
<td>ENG 114</td>
<td>Technical Writing 3</td>
</tr>
<tr>
<td>BIO 203*</td>
<td>Topics in Genetics 3</td>
</tr>
<tr>
<td>BIO 206*</td>
<td>Molecular Biotechniques 4</td>
</tr>
<tr>
<td>MATH 111</td>
<td>Elementary Statistics with Computer Applications 4</td>
</tr>
<tr>
<td>Elective</td>
<td>social science 3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>BIO 299*</td>
<td>Biotechnology Internship 3</td>
</tr>
<tr>
<td>CHEM 270*</td>
<td>Topics in Chemical Instrumentation 4</td>
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<td>humanities 3</td>
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<td>Elective</td>
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<td><strong>Total Credits Required</strong></td>
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</tbody>
</table>

* Indicates courses that are currently only available at MxCTC. These courses may have prerequisites that are only offered at Middlesex Community-Technical College campus. Students are encouraged to consult their advisor in planning their course of study.
Business Administration Career, A.S. Degree

Program Design
The Business Administration Career Program prepares graduates for employment as management trainees and for entry level positions in banks, insurance companies and governmental agencies. It is a general business program requiring students to take courses in accounting, business law, economics, management and corporation finance.

Although many courses in this program may be transferred, it is possible that they will transfer only as electives. Students planning to earn a bachelor’s degree should register in the Accounting and Business Administration Transfer Program.

This program is of considerable benefit to employed students looking for professional development or students who hold degrees in unrelated areas and are looking for a career specialty or career change.

Employment Opportunities
This major exposes students to the many opportunities in business administration. The occupation outlook for positions in the state of Connecticut through the end of this decade for entry level management trainees is projected to be about 4,000 workers per year.

Opportunities for promotion in the business community are limited only by an individual’s motivation and abilities.

Curriculum
Students may attend full- or part-time. Note: To take a business course numbered 100 or higher, students must be eligible for ENG 111. To take an accounting course numbered 100 or higher, students must be eligible for ENG 111 and MATH 101 or higher.

<table>
<thead>
<tr>
<th>Credits</th>
<th>ACCT 101 Financial Accounting</th>
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<tr>
<td>BUS 101 Business Law I</td>
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<tr>
<td>BUS 111 Business Environment</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111 College Reading and Writing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>QM 110 Quantitative Methods for Business</td>
<td>3</td>
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<tr>
<td>ACCT 102 Managerial Accounting</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BUS 102 Business Law II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIS 111* Introduction to Computers</td>
<td>3</td>
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<td>Elective natural science</td>
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<td></td>
</tr>
</tbody>
</table>

16-17

Total Credits Required 62-63

Business Office Technology Certificate Programs

Program Design
Business Office Technology Certificate Programs allow students to specialize in areas of interest and obtain entry-level office positions. Course credit may be applied toward an associate’s degree. Advanced placement in keyboarding is available for students with prior training. Students can modify their programs depending upon experience.

Employment Opportunities
The State Labor Department estimates that there will be a growing need for additional clerical workers. However, many of these jobs will not be filled because of a lack of qualified applicants.

Curriculum
These certificate programs may be taken on a full- or part-time basis. They are designed for high school graduates, persons desiring to reenter the office, and college graduates seeking employment.

Clerk/Typist, Certificate
Today’s automated office requires the ability to prepare documents from handwritten and recorded material. Graduates find employment opportunities in business organizations, government agencies, and professional offices.

<table>
<thead>
<tr>
<th>Credits</th>
<th>BOT 101 Shorthand I - Gregg or</th>
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</thead>
<tbody>
<tr>
<td>BOT 224 Office Accounting</td>
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<tr>
<td>BOT 103 Office Writing Procedures</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BOT 107 Beginning Keyboarding</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CIS 106 Windows 95</td>
<td>2</td>
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</tr>
<tr>
<td>CIS 167 Introductory and Intermediate EXCEL</td>
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<td></td>
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</table>

13

Total Credits Required 27

Medical Transcription, Certificate
A medical transcriptionist (medical language specialist) translates from oral to written form highly technical information summarizing medical histories, diagnoses, and treatments for patients and can find employment in a variety of health care settings: doctors’ offices, health maintenance organizations, medical transcription services, clinics, laboratories, radiology and pathology departments, insurance companies, medical libraries, government medical facilities, rehabilitation centers, legal offices, research centers, home health care agencies, medical associations, and public, private, and teaching hospitals.

<table>
<thead>
<tr>
<th>Credits</th>
<th>BOT 160A* WordPerfect or</th>
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</thead>
<tbody>
<tr>
<td>BOT 124* Word for Windows</td>
<td>3</td>
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</tr>
<tr>
<td>BOT 241 Medical Terminology</td>
<td>3</td>
<td></td>
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<tr>
<td>BOT 210* Machine Transcription: Medical I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIO 210* Human Pathology</td>
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</tbody>
</table>

12-13
Business Office Technology
Certificate Programs

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
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<td>BOT 103</td>
<td>Office Writing Procedures or</td>
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</tr>
<tr>
<td>ENG/BOT 203</td>
<td>Advanced Editing and Proofreading</td>
<td>3</td>
</tr>
<tr>
<td>BOT 108</td>
<td>Advanced Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>BOT 211</td>
<td>Machine Transcription: Medical II</td>
<td>3</td>
</tr>
<tr>
<td>BIO 201</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Applied Legal Medical Concepts</td>
<td>3</td>
</tr>
<tr>
<td>BOT 270</td>
<td>Cooperative Education/Work Experience</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits Required 28-29

▲ See BOT faculty for course selection.

* Course has prerequisite.

Office Skills Update, Certificate

This certificate is designed for individuals who wish to enhance and upgrade previously acquired office skills.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 106</td>
<td>Windows 95</td>
<td>2</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Presentation Software: Powerpoint or</td>
<td>1</td>
</tr>
<tr>
<td>CIS 167</td>
<td>Introductory and Intermediate EXCEL</td>
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</tr>
<tr>
<td>BOT 108*</td>
<td>Advanced Keyboarding</td>
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<td>BOT 222</td>
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<td>BOT 109 Machine Transcription</td>
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<tr>
<td></td>
<td>BOT 224 Office Accounting</td>
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</tr>
</tbody>
</table>

Total Credits Required 15-16

* Students must pass the BOT 107 placement exam to demonstrate adequate keyboarding skills.

Records Management, Certificate

The management and retention of records is an important office function. Graduates of this program work in centralized filing departments of business organizations, professional offices, and government agencies.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 106</td>
<td>Windows 95</td>
<td>2</td>
</tr>
<tr>
<td>CIS 156</td>
<td>Data Base Applications I: Access</td>
<td>1</td>
</tr>
<tr>
<td>CIS 167</td>
<td>Introductory and Intermediate EXCEL</td>
<td>2</td>
</tr>
<tr>
<td>BOT 103</td>
<td>Office Writing Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BOT 107</td>
<td>Beginning Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>BOT 224</td>
<td>Office Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BOT 108</td>
<td>Advanced Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>BOT 115</td>
<td>Records Management</td>
<td>3</td>
</tr>
<tr>
<td>BOT 124</td>
<td>Word for Windows</td>
<td>3</td>
</tr>
<tr>
<td>BOT 222</td>
<td>Administrative Office Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits Required 25

Word Processing, Certificate

The accurate entry and retrieval of data is essential in today’s business environment. Graduates of this program are trained for positions as data entry operators or as word processors. Many kinds of business organizations, government agencies, and professional offices recruit employees with this training.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 106</td>
<td>Windows 95</td>
<td>2</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Presentation Software: Powerpoint</td>
<td>1</td>
</tr>
<tr>
<td>BOT 103</td>
<td>Office Writing Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BOT 107</td>
<td>Beginning Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>BOT 222</td>
<td>Administrative Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CIS 167</td>
<td>Introductory and Intermediate EXCEL</td>
<td>2</td>
</tr>
<tr>
<td>BOT 108</td>
<td>Advanced Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>BOT 109</td>
<td>Machine Transcription</td>
<td>3</td>
</tr>
<tr>
<td>BOT 124</td>
<td>Word for Windows</td>
<td>3</td>
</tr>
<tr>
<td>BOT 160</td>
<td>WordPerfect</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits Required 26

Receptionist, Certificate

Receptionists enjoy contact with the public in many settings. Students who complete this program find employment opportunities in professional offices, business organizations, and government agencies.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 101</td>
<td>Shorthand I - Gregg or</td>
<td></td>
</tr>
<tr>
<td>BOT 224</td>
<td>Office Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BOT 103</td>
<td>Office Writing Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BOT 107</td>
<td>Beginning Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>BOT 108</td>
<td>Advanced Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>BOT 109</td>
<td>Machine Transcription</td>
<td>3</td>
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<tr>
<td>BOT 124</td>
<td>Word for Windows</td>
<td>3</td>
</tr>
<tr>
<td>BOT 222</td>
<td>Administrative Office Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits Required 24

Center for Business and Technologies: 860/647-6212
Communication, A.S. Degree
(formerly Media Associate)

Program Design
The Communication Degree Program prepares students for employment in television as reporters, production assistants, camera operators and videotape editors; in radio as on-air personnel and copywriters; in journalism as reporters, photographers and feature writers; and for entry-level positions in public relations.

After graduating, students will be able to write copy for radio and television; research and write newspaper and feature stories; operate still and video cameras, and related editing equipment; and possess a working knowledge of public relations and graphics techniques.

Students have the opportunity to participate in up to two semesters of media work experience with placement at area media outlets. Students are encouraged to take up to six credits of Cooperative Education/Work Experience. Any Cooperative Education/Work Experience beyond six credits will not be applied towards a degree.

Employment Opportunities
Potential employers for media students include area radio and television stations, cable TV systems, newspapers, advertising agencies, and government and corporate communication departments.

According to the U.S. Department of Labor, jobs in public relations, writing, photography and editing will increase faster than the job market as a whole. The media job market is competitive, but there will always be work for well-prepared, talented persons. The Communication Program provides the educational background needed for both entry and advancement. In general, entry level positions in this area pay in the $15,000-$20,000 range. Opportunities for employment are enhanced with a baccalaureate degree.

Transfer Opportunities
Graduates of the program often transfer to baccalaureate institutions such as Central Connecticut State University and Eastern Connecticut State University. Transfer to private schools such as the University of Hartford, Emerson College, Syracuse University, and New York University is also possible.

Students who are interested in specializing in TV production should inquire about the articulation agreement between Manchester and Middlesex Community-Technical Colleges. Students are able to take courses at both colleges and receive an associate’s degree in broadcast communications from Middlesex Community-Technical College.

Curriculum
Students may enroll in this program on a full- or part-time basis and attend classes during the day or evening. Note that to enter COMM 281 and continue the program you must receive a grade of at least B in ENG 111 or have permission from the instructor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>3</td>
</tr>
<tr>
<td>COMM/FA 176</td>
<td>3</td>
</tr>
<tr>
<td>COMM 210</td>
<td>4</td>
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<tr>
<td>PSYC 111</td>
<td>3</td>
</tr>
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<td>COMM/SPCH 213</td>
<td>3</td>
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<tr>
<td>Elective</td>
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<table>
<thead>
<tr>
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<tbody>
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<td>COMM 150</td>
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</tr>
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<td>COMM 281</td>
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<tr>
<td>ENG 120</td>
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</tr>
<tr>
<td>HIST 102</td>
<td>3</td>
</tr>
<tr>
<td>HIST 202</td>
<td>3</td>
</tr>
<tr>
<td>HIST 215</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 111</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 112</td>
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<tr>
<td>Elective</td>
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<td>15-16</td>
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<table>
<thead>
<tr>
<th>Course</th>
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<td>COMM 285</td>
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</tr>
<tr>
<td>COMM 218</td>
<td>3</td>
</tr>
<tr>
<td>COMM 270</td>
<td>3</td>
</tr>
<tr>
<td>COMM 290</td>
<td>3</td>
</tr>
<tr>
<td>COMM/FA 171</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3-4</td>
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<td>15-16</td>
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<table>
<thead>
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<td>COMM 208</td>
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<td>PSYC 131</td>
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<td>PSYC 240</td>
<td>3</td>
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<td>COMM 271</td>
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<td>Elective</td>
<td>3-4</td>
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<tr>
<td></td>
<td>15-16</td>
</tr>
</tbody>
</table>

Total Credits Required 60-62
Computer Information Systems,  
A.S. Degree

Program Design
The Computer Information Systems Associate Degree Program prepares graduates for employment as entry-level programmers. Students learn the principles of structured programming with a strong emphasis on COBOL. Other areas of study include Job Control Language, systems analysis and design, assembly language, and business application software.

In addition to the program’s varied software component, students interact with an IBM mainframe computer and IBM compatible microcomputers. Graduates will be able to program business applications using structured design methodology. An optional work experience course is also available.

Students interested in earning a bachelor’s degree in management information systems should enroll in our Management Information Systems Transfer Program.

Employment Opportunities
Graduates find employment opportunities in insurance companies, banks, manufacturing firms, data processing service organizations, government agencies, and educational institutions. Advancement opportunities for programmers include positions as systems analysts, staff specialists, team leaders, consultants and senior managers.

Curriculum
The curriculum may be completed on a full- or part-time basis. Students, especially those attending part-time, should work closely with a faculty member or advisor to insure they select courses most appropriate to their goals.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 106*</td>
<td>Windows 95</td>
<td>2</td>
</tr>
<tr>
<td>CIS 107</td>
<td>Advanced Windows 95</td>
<td>1</td>
</tr>
<tr>
<td>CIS 111</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>CIS 125</td>
<td>Programming Logic and Design with BASIC</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 101</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ENG 114</td>
<td>Technical Writing or</td>
<td></td>
</tr>
<tr>
<td>BUS 214</td>
<td>Managerial Communications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Presentation Software: PowerPoint</td>
<td>1</td>
</tr>
<tr>
<td>CIS 213</td>
<td>Computer Programming: COBOL I</td>
<td>4</td>
</tr>
<tr>
<td>BOT 125</td>
<td>Introductory Word for Windows</td>
<td>1</td>
</tr>
<tr>
<td>BOT 126</td>
<td>Intermediate Word for Windows</td>
<td>1</td>
</tr>
<tr>
<td>ECON 102</td>
<td>Microeconomics</td>
<td>2</td>
</tr>
<tr>
<td>CIS 156**</td>
<td>Data Base Applications 1: ACCESS</td>
<td>1</td>
</tr>
<tr>
<td>CIS 157**</td>
<td>Data Base Applications 11: ACCESS</td>
<td>1</td>
</tr>
<tr>
<td>CIS 158**</td>
<td>Data Base Applications 111: ACCESS</td>
<td>1</td>
</tr>
<tr>
<td>CIS 214</td>
<td>Computer Programming: COBOL 11 or</td>
<td>4</td>
</tr>
<tr>
<td>CIS 220</td>
<td>Assembly Language-IBM</td>
<td>4</td>
</tr>
<tr>
<td>CIS 226</td>
<td>MVS Operating Systems/JCL</td>
<td>3</td>
</tr>
<tr>
<td>MATH 111</td>
<td>Elementary Statistics with Computer</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>humanities</td>
<td>3</td>
</tr>
</tbody>
</table>

ACCT 101 Financial Accounting 4
ENG 114 Technical Writing or
BUS 214 Managerial Communications 3
CIS 118 Presentation Software: PowerPoint 1
CIS 213 Computer Programming: COBOL I 4
BOT 125 Introductory Word for Windows 1
BOT 126 Intermediate Word for Windows 1
ECON 102 Microeconomics 3
CIS 156** Data Base Applications 1: ACCESS 1
CIS 157** Data Base Applications 11: ACCESS 1
CIS 158** Data Base Applications 111: ACCESS 1
CIS 214 Computer Programming: COBOL 11 or
CIS 220 Assembly Language-IBM 4
CIS 226 MVS Operating Systems/JCL 3
MATH 111 Elementary Statistics with Computer 4
Elective humanities 3

Total Credits Required 68

* Students with no keyboarding experience should take BOT 100A Keyboarding concurrently.
** Students may take CIS 159 Database Management: Access (3 credits) in place of CIS 156, 157, and 158.

Note: Students may elect to substitute CIS 270 Cooperative Work Experience, for any equivalent CIS credit course with prior departmental approval.

Computer Information Systems, Certificate

Program Design
The Computer Information Systems Certificate Program is designed for students with a bachelor’s degree who are looking for a career change. This program is also of value to persons employed in the area of computer information systems who want formal training for job advancement.

Students will interact with the IBM mainframe computer IBM compatible microcomputers.

Employment Opportunities
This certificate program prepares you for an entry-level position as a programmer trainee. The U.S. Department of Labor projects a bright job outlook for computer programmers well into the next century.

Curriculum
The Computer Information Systems Certificate Program may be completed by enrolling full- or part-time. During designated periods, computer labs are open to students for practice and homework projects.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 106*</td>
<td>Windows 95</td>
<td>2</td>
</tr>
<tr>
<td>CIS 111</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>CIS 125</td>
<td>Programming Logic and Design with BASIC</td>
<td>3</td>
</tr>
<tr>
<td>CIS 201</td>
<td>Visual Basic for Windows I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 202</td>
<td>Visual Basic for Windows II</td>
<td>3</td>
</tr>
<tr>
<td>CIS 213</td>
<td>Computer Programming: COBOL I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 214</td>
<td>Computer Programming: COBOL II or</td>
<td></td>
</tr>
<tr>
<td>CIS 220</td>
<td>Assembly Language-IBM</td>
<td>4</td>
</tr>
<tr>
<td>CIS 226</td>
<td>MVS Operating Systems/JCL</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>computer information systems</td>
<td>4</td>
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</tbody>
</table>

CIS 106* Windows 95 2
CIS 111 Introduction to Computers 3
CIS 125 Programming Logic and Design with BASIC 3
CIS 201 Visual Basic for Windows I 3
CIS 202 Visual Basic for Windows II 3
CIS 213 Computer Programming: COBOL I 4
CIS 214 Computer Programming: COBOL II or
CIS 220 Assembly Language-IBM 4
CIS 226 MVS Operating Systems/JCL 3
Elective computer information systems 4

Total Credits Required 29

* Students with no keyboarding experience should take BOT 100A Keyboarding concurrently.
** Students may elect any 4 credit combination from the following courses: CIS 107, 114, 115, 118, 156, 157, 158, 159, 166, 167, 171, 191, 222, 225.

For more computer information systems programs see pages 54, 59, 60, and 65.
Criminal Justice, A.S. Degree

Program Design
This program offers the opportunity to prepare for work within the various fields of criminal justice in both the public forum and private agencies.

The curriculum consists of a strong liberal arts academic base supported by social science electives and criminal justice core courses. The latter are enhanced by electives in criminal justice, corrections and security services. The prescribed program also provides for free electives that may benefit the student’s educational awareness and career choice. Courses are available during the day and evening.

The program enjoys fine relations with many local and state agencies, colleges and universities. Students have been successful in transferring all program courses.

A strong element of the program is a cadre of local professionals who supplement the regular faculty, serving as guest lecturers, adjunct faculty and intern sponsors.

Credit for criminal justice core courses and electives may be obtained by students who submit police and criminal justice related training and work experience for evaluation.

Employment Opportunities
Graduates find employment opportunities in municipal, state, and federal law enforcement agencies; in state and federal correctional agencies; in the rapidly growing private security field; and in other criminal justice system related areas. Completion of the basic program prepares the student to take civil service exams that are the first step toward employment in the criminal justice field.

Criminal justice agencies actively seek MCTC Criminal Justice students to fill full-time, part-time, holiday and summer season positions. In addition, there are many internship and volunteer opportunities available.

Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 111</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 111</td>
<td>American National Government</td>
<td>3</td>
</tr>
<tr>
<td>Elective*</td>
<td>humanities</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>natural science</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15-16</td>
</tr>
<tr>
<td>CJ 112</td>
<td>Police Patrol Procedures or</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>humanities</td>
<td>3</td>
</tr>
<tr>
<td>CJ 122</td>
<td>Police Administration</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112</td>
<td>Reading &amp; Writing for Academic Research</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 112</td>
<td>State and Local Government</td>
<td>3</td>
</tr>
<tr>
<td>Elective**</td>
<td>natural science</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
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<td>15-16</td>
</tr>
<tr>
<td>CJ 211</td>
<td>Criminal Law</td>
<td>3</td>
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<td>CJ 221</td>
<td>Criminal Investigation</td>
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<td>SOSC 270</td>
<td>Cooperative Education/Work Experience or</td>
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<td>social science</td>
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<td></td>
<td></td>
<td>15</td>
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<tr>
<td>CJ 222</td>
<td>Evidence and Court Procedure</td>
<td>3</td>
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<tr>
<td>PLSC 212</td>
<td>Constitutional Law and Civil Rights</td>
<td>3</td>
</tr>
<tr>
<td>CJ 114</td>
<td>Introduction to Corrections or</td>
<td>3</td>
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<td>Elective</td>
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<tr>
<td>Elective***</td>
<td>social science</td>
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<td></td>
<td></td>
<td>15</td>
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</tbody>
</table>

Total Credits Required 60-62

* COMM/SPCH 213 is recommended.
** DARC 158 is recommended.
*** Of nine credits required, no more than six may be in one discipline. Recommended courses are PSYC 111 and 131; SOC 101, 203, 211 and 271; and GEOG 101 and 201.
**** One credit criminal justice art and skill courses in an area of interest are recommended.

Criminal Justice, Certificate
This certificate offers those employed in law enforcement a way to improve career opportunities through academic study.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ 111</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJ 211</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CJ 221</td>
<td>Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 111</td>
<td>American National Government</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td></td>
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<td>15</td>
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<tr>
<td>CJ 112</td>
<td>Police Patrol Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CJ 122</td>
<td>Police Administration</td>
<td>3</td>
</tr>
<tr>
<td>CJ 222</td>
<td>Evidence and Court Procedure</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 212</td>
<td>Constitutional Law and Civil Rights</td>
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<tr>
<td>SOC 221</td>
<td>Criminology</td>
<td>3</td>
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</tbody>
</table>

Total Credits Required 30
Culinary Arts, Certificate

Program Design
The Culinary Arts Certificate Program is designed for both full- and part-time students pursuing a career in commercial food preparation. Academic credits from this program may be transferred to MCTC’s associate degree programs in Foodservice Management or Hotel-Tourism Management. Our students have also earned advanced placement status in the Culinary Arts Program at Johnson & Wales University.

Classroom, laboratory and volume food experience are combined in the largest and most comprehensively equipped foodservice laboratory facility in Connecticut, including two commercial production kitchens and three dining rooms. The students participate in a 300-hour externship in a cooperative education environment which combines classroom theory with practical on-the-job training.

A physician’s examination is required before enrolling in food courses. Students are also required to purchase their own official kitchen and tableservice uniforms.

Employment Opportunities
The foodservice industry is one of the fastest growing industries in Connecticut and offers a wide variety of opportunities.

The Culinary Arts course of study is the only program in the state to be granted accreditation by the American Culinary Federation Educational Institute Accrediting Commission.

Graduates from this program may apply to the American Culinary Federation to become a “certified cook,” a nationally recognized certification.

Note: Students applying for American Culinary Federation certification must take HOSP 120.

Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HOSP 101*</td>
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<tr>
<td>Basic Foods</td>
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</tr>
<tr>
<td>HOSP 102</td>
<td>4</td>
</tr>
<tr>
<td>Quantity Foods I: Regional/American Cuisine</td>
<td></td>
</tr>
<tr>
<td>HOSP 112**</td>
<td>3</td>
</tr>
<tr>
<td>Sanitation and Safety</td>
<td></td>
</tr>
<tr>
<td>HOSP 115</td>
<td>3</td>
</tr>
<tr>
<td>Basic Baking and Pastry Arts</td>
<td></td>
</tr>
<tr>
<td>HOSP 270</td>
<td>3</td>
</tr>
<tr>
<td>Cooperative Education/Work Experience</td>
<td></td>
</tr>
<tr>
<td>BIO 104**</td>
<td>3</td>
</tr>
<tr>
<td>Applied Nutrition</td>
<td></td>
</tr>
<tr>
<td>HOSP 210</td>
<td>4</td>
</tr>
<tr>
<td>Buffet Catering and Garde Manger</td>
<td></td>
</tr>
<tr>
<td>HOSP 215</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Baking and Pastry Arts</td>
<td></td>
</tr>
<tr>
<td>HOSP 217</td>
<td>4</td>
</tr>
<tr>
<td>Quantity Food Production II: International Foods</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits Required 30</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Students taking HOSP 101 and 115 must be eligible for MATH 101.

** Students taking HOSP 112 and BIO 104 must be eligible for ENG 111.

Desktop Publishing, Certificate

Program Design
The Desktop Publishing Certificate Program develops students’ competency in computer-assisted design and production of brochures, flyers, newsletters and related materials. Students will attain the skills needed to perform desktop publishing duties in a variety of business and public relations settings. This program is ideal for those who work in public relations and advertising communications and wish to achieve computer fluency.

The program is taught with Apple Macintosh equipment and related software. Courses offered in the program will help students develop:

- Advanced writing skills.
- Journalistic writing techniques.
- Graphic arts and design techniques.
- Proficiency on the Apple Macintosh.

Desktop publishing students will take six credit hours on the Apple Macintosh, using software programs such as MacWrite, MacPaint, MacDraw, Aldus PageMaker and Adobe Illustrator and QuarkXPress to complete sophisticated projects. Students who wish to enter the program should have an interest in communications and/or graphics. Keyboard competency is necessary.

Employment/Transfer Opportunities
Most businesses, advertising agencies and government offices now use desktop publishing. The opportunities for growth in this field are extremely good.

Persons with academic training in desktop publishing enjoy a distinct advantage over those who have to learn on the job. There are also opportunities for free-lance work or setting up one’s own business. In general, entry level positions in this area pay $15,000-$20,000. Opportunities for employment are enhanced with associate’s and bachelor’s degrees.

Curriculum
The Certificate Program can be completed in two or more semesters by enrolling full- or part-time.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>3</td>
</tr>
<tr>
<td>College Reading and Writing</td>
<td></td>
</tr>
<tr>
<td>COMM 290 or FA 210</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Desktop Publishing or Computer Graphics I</td>
<td></td>
</tr>
<tr>
<td>COMM 291 or FA 211</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Desktop Publishing or Advanced Computer Graphics</td>
<td></td>
</tr>
<tr>
<td>FA 205</td>
<td>3</td>
</tr>
<tr>
<td>Graphic Design I</td>
<td></td>
</tr>
<tr>
<td>COMM 281</td>
<td>3</td>
</tr>
<tr>
<td>Basic Newswriting</td>
<td></td>
</tr>
<tr>
<td>ENG 114</td>
<td>3</td>
</tr>
<tr>
<td>Technical Writing</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits Required 18</strong></td>
<td></td>
</tr>
</tbody>
</table>

Division of Social Science & Hospitality: 860/647-6103

Division of Liberal Arts: 860/647-6272
Disabilities Specialist, A.S. Degree

Program Design
The Disabilities Specialist Associate Degree Program prepares students to work in a wide range of positions in private and public educational and human service agencies. Through individual consultation, each student will pursue a course of study with an emphasis upon the unique vocational goals he or she wishes to achieve. Every effort will be made to provide specific skill instruction; however, the focus of the curriculum is on building a strong knowledge base coupled with a positive value base which will prepare each student to assist children and adults with disabilities toward the goals of full community inclusion and participation and the attainment of their potential.

This program builds upon the Americans with Disability Act (ADA) of 1990, a landmark piece of legislation that provides basic civil rights to millions of people with disabilities in America. Students will become an important part of this dynamic movement and will recognize and enhance the dignity, respect and contribution of every child and adult with a disability.

Since most work settings are in the schools, workplaces, community associations, apartments and homes in the community, an understanding of “community-building” and “individual capacity-building” techniques and procedures is stressed. Creativity, sensitivity, and a capacity to concentrate on the abilities of the whole person, are essential characteristics of a disabilities specialist.

Employment Opportunities
The employment outlook for the ’90s and beyond is excellent. A wide variety of public and private service providers are continuing to seek qualified employees. Many companies will value an employee who understands how to work with and include men and women with disabilities into the work force of the ’90s. With the national and state policy emphasis on community inclusion, new job opportunities are being developed by professional service delivery agencies, by companies who wish to comply with the Americans with Disabilities Act and by individuals with disabilities who are employing men and women who provide personal assistance services.

Transfer Opportunities
Area colleges and universities accept most credits earned at MCTC for transfer into disability and human service bachelor degree programs. A personal interview with the coordinator of this program will aid in a smooth transfer to the college of your choice.

Curriculum
Because of the flexible nature of this program, students may select a full- or part-time plan of study for an associate degree or a certificate option. Each student is encouraged to seek field work in a variety of settings. These experiences assist in developing the student’s work competencies. These experiences assist in developing the student’s work competencies.

<table>
<thead>
<tr>
<th>Credits</th>
<th>ENG 111</th>
<th>College Reading and Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HS 101</td>
<td>Introduction to Human Services</td>
</tr>
<tr>
<td></td>
<td>PSYC 111</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td></td>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td></td>
<td>PSYC 163</td>
<td>Children with Disabilities and their Families</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>ENG 112</td>
<td>Reading &amp; Writing for Academic Research</td>
</tr>
<tr>
<td></td>
<td>HS 152</td>
<td>Work with Individuals and Families</td>
</tr>
<tr>
<td></td>
<td>PSYC 124</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td></td>
<td>PSYC 173</td>
<td>Adults with Disabilities</td>
</tr>
<tr>
<td></td>
<td>BIO 110</td>
<td>Human Biology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
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<td></td>
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<td>15</td>
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<tr>
<td></td>
<td>ENG 120</td>
<td>Introduction to Literature</td>
</tr>
<tr>
<td></td>
<td>HS 201</td>
<td>Work with Groups</td>
</tr>
<tr>
<td></td>
<td>HS 291</td>
<td>Human Services Field Experience I</td>
</tr>
<tr>
<td></td>
<td>PSYC 183</td>
<td>Children and Adults with Disabilities and the Learning Process</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>HS 252</td>
<td>Work with Agencies and Communities</td>
</tr>
<tr>
<td></td>
<td>HS 292</td>
<td>Human Services Field Experience II or</td>
</tr>
<tr>
<td></td>
<td>SOSC 270</td>
<td>Cooperative Education/Work Experience</td>
</tr>
<tr>
<td></td>
<td>PLSC 111</td>
<td>American National Government or</td>
</tr>
<tr>
<td></td>
<td>PLSC 112</td>
<td>State and Local Government</td>
</tr>
<tr>
<td></td>
<td>PSYC 193</td>
<td>Issues and Trends in Disability</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
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<td></td>
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</tbody>
</table>

Total Credits Required 60

Disabilities Specialist, Certificate
This provides a concentration in on-the-job training in direct-care situations, as well as specialized courses that relate to developmental disabilities.

<table>
<thead>
<tr>
<th>Credits</th>
<th>HS 101</th>
<th>Introduction to Human Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HS 201</td>
<td>Work with Groups</td>
</tr>
<tr>
<td></td>
<td>PSYC 111</td>
<td>General Psychology</td>
</tr>
<tr>
<td></td>
<td>PSYC 163</td>
<td>Children with Disabilities and Their Families</td>
</tr>
<tr>
<td></td>
<td>PSYC 183</td>
<td>Children and Adults with Disabilities and the Learning Process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>HS 152</td>
<td>Work with Individuals and Families</td>
</tr>
<tr>
<td></td>
<td>HS 252</td>
<td>Work with Agencies and Communities</td>
</tr>
<tr>
<td></td>
<td>PSYC 124</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td></td>
<td>PSYC 173</td>
<td>Adults with Disabilities</td>
</tr>
<tr>
<td></td>
<td>PSYC 193</td>
<td>Issues and Trends in Disability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
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<td>15</td>
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</tbody>
</table>

Total Credits Required 30
Drug and Alcohol Rehabilitation Counselor, A.S. Degree

Program Design
The Drug and Alcohol Rehabilitation Counselor (DARC) Associate Degree Program provides education and training for persons seeking employment or job advancement. Others transfer to upper level colleges to complete bachelor or graduate degrees in the field of substance abuse counseling or transfer opportunities. Students receive education and training in the professional techniques of counseling with a disciplined background in the environmental and psychological causes and effects of alcohol and other drug abuse and dependence.

Employment Opportunities
The employment record of DARC graduates has been excellent. Graduates seek employment as entry level substance abuse counselors in a wide variety of public and private settings such as hospitals, treatment facilities, public health agencies and prevention organizations.

Transfer Opportunities
Many DARC graduates have gone on to complete a higher degree. Some continue into graduate studies. Several in-state and out of state colleges and universities currently accept the DARC degree program in transfer toward a related bachelor degree.

Admissions Process
Formal admission to the DARC degree program is limited and selective through an application and screening process. Enrollment in DARC 101 and 111 is required before initiating an application to the degree program. Prospective applicants must seek advisement from the college DARC liaison or the DARC program director at Manchester Community-Technical College. Applications must be filed between Oct. 1 and Jan. 15 of the year prior to the September of the year in which you wish to enter the second year of the program.

Curriculum
The program consists of 24 semester hours of speciality courses and 36 semester hours of general education credits.

The DARC program is a system-wide program. Manchester Community-Technical College is the administrative base for the program. The DARC speciality courses listed are taught at Gateway Community-Technical College, Manchester Community-Technical College and Tunxis Community-Technical College. Students register at their “Home College” for one of the three class sites. The first year speciality courses, DARC 101, 111, 112, and 158 are available to any student wishing to enroll; however, students should seek advisement from the College DARC liaison person before registering.

Students may enroll full- or part-time.

Management of Substance Abuse Treatment Facilities, Certificate

Program Design
The Management of Substance Abuse Treatment Facilities Certificate Program is a 15 semester hour program that provides further education and training to professionals already working in the field of substance abuse and treatment.

Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DARC 101</td>
<td>Issues in Alcohol/Drug Abuse</td>
<td>3</td>
</tr>
<tr>
<td>DARC 158</td>
<td>Biology of Alcohol/Drug Abuse</td>
<td>3</td>
</tr>
<tr>
<td>DARC 230</td>
<td>Management of Human Service Facilities</td>
<td>3</td>
</tr>
<tr>
<td>CIS</td>
<td>3 credit hours of microcomputers</td>
<td>3</td>
</tr>
<tr>
<td>PSYC/BUS 240</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits Required 15

* Recommended BIO 101, 110, 114 or 152.
** Courses open only to students formally accepted into this program. Saturday Extension Fund sections on campus open to all students.
*** AH 270 is offered as an option for students who have a GPA of 2.0 and 15 credits completed towards their degree. Permission of Cooperative Education Director is required.
Early Childhood Education Option,  
Educational Associate, A.S. Degree

Program Design
The Early Childhood Education Program is designed to prepare qualified students to become teachers in the field of professional child care.

The program includes a liberal arts core in addition to specialized courses designed to increase the student’s understanding of young children, their care and education. Emphasis is given to the organization and teaching of preschool programs.

Employment Opportunities
Completion of the Educational Associate Degree Program qualifies students for employment as teachers, program managers and/or directors in child care centers and preschools.

Transfer Opportunities
The Early Childhood Program may be used for transfer into specialized majors at some baccalaureate colleges and universities. Students are advised to discuss with the program coordinator the requirements of the institutions to which they plan to transfer.

Curriculum
The Early Childhood Education curriculum focuses on the developmental needs of young children from birth to six years of age, and emphasizes a practical approach to facilitating growth and development. Course work in theory and methods is enhanced by participation in the field experience segment of the program.

The program is available to the student full- or part-time.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 102</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>3</td>
</tr>
<tr>
<td>MATH 106</td>
<td>3</td>
</tr>
<tr>
<td>MATH 110</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 111</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3-4</td>
</tr>
<tr>
<td>THEA 181</td>
<td>3</td>
</tr>
<tr>
<td>ED 111</td>
<td>3</td>
</tr>
<tr>
<td>ENG 120</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 124</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>3</td>
</tr>
<tr>
<td>ED 112</td>
<td>3</td>
</tr>
<tr>
<td>ED 200c**</td>
<td>3</td>
</tr>
<tr>
<td>SOSC 270</td>
<td>3</td>
</tr>
<tr>
<td>ED 211*</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 163</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 220</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3-4</td>
</tr>
<tr>
<td>ED 200c**</td>
<td>3</td>
</tr>
<tr>
<td>ED 212*</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
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<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3-4</td>
</tr>
</tbody>
</table>

Total Credits Required 60-61

Please Note: The CDA (Child Development Associate) Credential Training Program at Manchester Community-College is a two semester, 12 credit program for child care teachers who want to enhance their professional skills and learn more about the development of young children.

Successful completion of the CDA Credential Training Program fulfills the CDA hourly education requirement and enables you to apply for the nationally recognized CDA Credential. The 12 college credits can also be applied to an Associate Degree in Early Childhood Education.

* For ED 211 and ED 212, prerequisites are ED 111 and PSYC 111

** For Field Experience, ED 200c prerequisites are 30 hours (equal to 10 courses) of approved course work. Students must complete: ED 102, ED 111, ED 112, PSYC 111, and PSYC 124.
Educational Associate, A.S. Degree

Program Design

The Educational Associate A.S. Degree Program prepares students for employment as teachers' aides in preschool, elementary and secondary schools. Students planning to transfer into a bachelor's degree program in education should see education curriculum information for the General Studies degree on page 42.

The work of a teacher's aide is varied. Specific responsibilities are usually established by each employer. In general, a teacher’s aide assists individual students or small groups with learning activities, performs clerical work, maintains equipment and supplies, and assists in the preparation of instructional materials.

A graduate of this program should be able to:
- Demonstrate sufficient understanding of educational practices for entry level employment or advancement in the field.
- Implement the day-to-day work routine of the teacher.
- Understand developmental theories and learning techniques.
- Demonstrate competency by conducting small instructional groups, implement lesson plans that have specific goals and procedures, and operate standard support audio/visual equipment and office machinery.

Employment Opportunities

Information about job opportunities may be available from the program coordinator or the MCTC Placement Office.

Transfer Opportunities

The Educational Associate Program may be used for transfer into specialized majors at some baccalaureate colleges and universities. Students are advised to discuss with the program coordinator the requirements of the institutions to which they plan to transfer.

Curriculum

Students may enroll full- or part-time in the this program.

<table>
<thead>
<tr>
<th>Credits</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 112</td>
<td></td>
<td>Children’s Literature 3</td>
</tr>
<tr>
<td>ED 200c*</td>
<td></td>
<td>Field Experience in Early Childhood Education or</td>
</tr>
<tr>
<td>SOSC 270</td>
<td></td>
<td>Cooperative Education/Work Experience 3</td>
</tr>
<tr>
<td>PSYC 163</td>
<td></td>
<td>Children with Disabilities &amp; Their Families 3</td>
</tr>
<tr>
<td>PSYC 220</td>
<td></td>
<td>Educational Psychology 3</td>
</tr>
<tr>
<td>Elective**</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>humanities 3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>social science 3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>natural science 3-4</td>
</tr>
</tbody>
</table>

* For Field Experience, ED 200 prerequisites are 30 hours (equal to 10 courses) of approved course work. Students must complete: ED 102, ED 111, ED 112, PSYC 111, and PSYC 124.

** ED 111, CIS 111 or ED 211 are strongly recommended.

Educational Associate, Certificate

Program Design

The Certificate Program provides the opportunity for students, who have an interest and desire to work with young children, to gain knowledge and skills in professional child care. Also, for currently employed teacher assistants in a preschool or the public school system, the certificate program enhances professional skills.

Curriculum

Students may enroll in this program full- or part-time. All credits earned in this program can be applied toward the requirements of the Educational Associate Degree Program.

<table>
<thead>
<tr>
<th>Credits</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 102</td>
<td></td>
<td>Introduction to Education 3</td>
</tr>
<tr>
<td>ENG 111</td>
<td></td>
<td>College Reading and Writing 3</td>
</tr>
<tr>
<td>PSYC 111</td>
<td></td>
<td>General Psychology 3</td>
</tr>
<tr>
<td>PSYC 163</td>
<td></td>
<td>Children with Disabilities &amp; Their Families 3</td>
</tr>
<tr>
<td>Elective**</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>humanities 3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>social science 3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>natural science 3-4</td>
</tr>
</tbody>
</table>

*** ED 110 or ED 111 are recommended.
# Engineering Science, A.S. Degree

## Program Design
The Engineering Science Program prepares students for transfer to baccalaureate college and university programs in mechanical engineering, electrical engineering, civil engineering, chemical engineering, industrial engineering and engineering physics, as well as for immediate employment in engineering sciences and high technology fields. The program also offers students currently employed in technical positions in high technology industries the opportunity to retrain and upgrade their technical skills.

## College of Technology - Engineering Pathway Program
The Engineering Science Program, through the Connecticut College of Technology Pathways Program, provides for direct entry into baccalaureate engineering programs at the University of Connecticut. Students may enter UConn engineering programs through the Engineering Science A.S. Degree program at MCTC and, upon successful completion of the program, continue on to UConn as third-year engineering students with a full two years of credit towards a baccalaureate degree in engineering. For more information, call Robert Fortier at 647-6212.

## Employment Opportunities
Graduates may secure employment directly in local industries such as United Technologies, Pratt & Whitney Aircraft, Combustion Engineering, and many other high-technology Connecticut and New England industries.

## Transfer Opportunities
Graduates from the Engineering Science A.S. Degree Program have transferred to many colleges and universities throughout New England and nationally. MCTC has formal articulation and transfer agreements with the University of Connecticut, Western New England College, and the University of Hartford. MCTC is also in the process of establishing transfer agreements with other colleges and universities in the New England and New York areas. Because the requirements of baccalaureate institutions vary, students should select a transfer institution as early as possible. Students should then consult with an advisor regarding course selection and transferability.

## Curriculum
Students may enroll in this program full- or part-time. Courses are offered during daytime or evening hours. Preparation for the Engineering Science Program includes a high school diploma or equivalent with one year of physics and three years of mathematics including Algebra I and Algebra II followed by advanced algebra or precalculus mathematics. For students not prepared for the required mathematics and English courses, MCTC offers a wide range of developmental and preparatory courses. (See Pre-Technical Education, page 20.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 111</td>
<td>Introduction to Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus I or</td>
<td>5</td>
</tr>
<tr>
<td>MATH 191</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 131</td>
<td>University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>HIST 101</td>
<td>Western Civilization through the Reformation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17-18</td>
</tr>
<tr>
<td>ENG 120</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>MATH 192</td>
<td>Analytic Geometry/Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 132*</td>
<td>University Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CS 222**</td>
<td>Programming in C</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
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<tr>
<td>CHEM 111</td>
<td>College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 221</td>
<td>Introduction to Electrical Circuit Analysis</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 211</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 203</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 293</td>
<td>Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>ENGR 212*</td>
<td>Engineering Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>HIST 102</td>
<td>Western Civilization Since the Reformation</td>
<td>3</td>
</tr>
<tr>
<td>MATH 201*</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>College Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>** These courses must be included in the 25 percent minimum course requirements for the degree through course work at the College. (See page 13.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>** CS 120, CS 121 may be substituted for CS 222.</td>
<td></td>
</tr>
</tbody>
</table>
Foodservice Management, A.S. Degree

Program Design
This program provides an education and training in hospitality area subjects from food production to food protection, marketing and management. Students will also take general education courses to improve employability, job performance, and transferability to another college or university.

The Foodservice Management program is accredited by the American Culinary Educational Institute. In addition to classroom and laboratory study, students will participate in an individually planned 300-hour cooperative work experience program. Students earn credit toward graduation while employed at a work site.

Graduates have transferred and earned bachelor’s degrees at such colleges and universities as Central Connecticut State University, Cornell University, University of New Haven, University of Massachusetts, University of Nevada (Las Vegas), and the University of New Hampshire.

A physician’s examination is required before enrolling in food courses. Students are also required to purchase their own official kitchen and table service uniforms.

In addition to this degree, students may earn a second associate’s degree in hotel-tourism management by taking an additional 15 credit hours. Candidates interested in earning double degrees should see a hospitality management faculty member.

Employment Opportunities
According to the federal government, foodservice in the United States today is the second fastest growing industry. Foodservice is an expanding field, with numerous and varied opportunities.

Students completing this program can find employment in a wide variety of hospitality operations including restaurants, business and industry, hospitals, clubs and schools.

The National Restaurant Association estimates there will be a need for 250,000 foodservice employees a year through the year 2000.

Curriculum
Students may enroll in this program full- or part-time. This program has an active student club that provides a variety of activities to supplement the formal curriculum. Note: Students taking HOSP 101, and ACCT 101 must be eligible for MATH 101. Students taking HOSP 111, BIO 104 and HOSP 112 must be eligible for ENG 111.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 104</td>
<td>Applied Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 101</td>
<td>Basic Foods Preparation</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>MATH 102 or higher</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 111</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102*</td>
<td>Operating a Microcomputer or</td>
<td>1-3</td>
</tr>
<tr>
<td>CIS 111</td>
<td>Introduction to Computers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>16-18</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 102</td>
<td>Quantity Food Production I</td>
<td>4</td>
</tr>
<tr>
<td>HOSP 112</td>
<td>Sanitation and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 270</td>
<td>Cooperative Education/Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 101</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>HOSP 203</td>
<td>Food Controls and Purchasing</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 217</td>
<td>Quantity Food Production II:</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>International Foods</td>
<td></td>
</tr>
<tr>
<td>HOSP 231</td>
<td>Consumer Research and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 214</td>
<td>Managerial Communications</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>Introduction to Geography</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>HOSP 210</td>
<td>Buffet Catering and Garde Manger</td>
<td>4</td>
</tr>
<tr>
<td>HOSP 212</td>
<td>Equipment, Design and Layout</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 214</td>
<td>Hospitality Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 111</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ECON 102</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Total Credits Required 65-67

* Students planning to transfer for a bachelor’s degree should take CIS 111 instead of CIS 102.
General Studies, A.S. Degree

Program Design
The General Studies Program leads to an Associate in Science Degree. This program provides the broadest range of electives of any at the College; students can tailor a degree program to meet their individual needs.

Transfer Opportunities
The General Studies Program may be used for transfer into specialized majors at some baccalaureate colleges and universities. Students are advised to discuss with their advisors the requirements of the institutions to which they plan to transfer. After selecting a transfer institution, students should select their courses accordingly in the General Studies Program.

Curriculum
You may enroll in this program full- or part-time. For those students who are not prepared for the mathematics and English courses required in the program, the College offers a wide range of developmental classes.

A minimum of 60 semester hours of credit is required in this program as follows:

- **English 111**
- **Humanities**: 9 semester hours of credit elected from courses in English, fine arts, foreign languages, humanities, music, philosophy, photography, speech, reading and theatre.
- **Mathematics**: 3 semester hours of credit courses numbered 101 or higher.
- **Natural Sciences**: One course elected from each of the following two categories to total 7-8 semester hours.
  a) laboratory science - 4 semester hours of credit selected from any course in biology, chemistry, physics or other physical sciences which includes a laboratory.
  b) other - 3 or 4 semester hours of credit selected from mathematics courses classified N (natural science) or a course in biology, chemistry, physics or other physical sciences with or without a laboratory requirement.
- **Social Sciences**: 9 semester hours of credit elected from courses in at least two of the following disciplines: anthropology, economics, geography, history, political science, psychology, social science and sociology.
- **Electives**: 29 additional semester hours of credit.

Education
If considering a career in education, students need to select a transfer institution early and consult with a counselor. Elect HIST 201 and HIST 202 as part of your electives. Students should plan to take the PRAXIS I Examination.

Gerontology, Certificate

Program Design
The Gerontology Certificate Program is designed for persons who seek short-term academic and in-service professional development, and for those with experience working with senior citizens or who have an academic degree in a related area. Students working toward a certificate of completion in gerontology should consult with an advisor or counselor before planning the total program.

Employment Opportunities
Students are likely to find employment in the following areas/fields: nursing homes; retirement homes; outreach, counseling and service delivery related to senior citizens; pre- and post-retirement counseling for business and industry.

Transfer Opportunities
Gerontology Certificate courses may be used for transfer into specialized majors at some baccalaureate colleges and universities. Students are advised to discuss with their advisors the requirements of the institutions to which they plan to transfer.

Curriculum
Students may enroll in the certificate program full- or part-time.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 101</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HS 152</td>
<td>Work with Individuals and Families</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 117</td>
<td>Death, Grief and Loss</td>
<td>3</td>
</tr>
<tr>
<td>SOC 161</td>
<td>Aging in America</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 111</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introductory Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOSC 110</td>
<td>Introduction to Wellness</td>
<td>3</td>
</tr>
<tr>
<td>SOSC 270</td>
<td>Cooperative Education/Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>GERN 141</td>
<td>Dealing with Alzheimer’s Disease</td>
<td>1</td>
</tr>
<tr>
<td>GERN 142</td>
<td>Health and Nutrition for the Elderly</td>
<td>1</td>
</tr>
<tr>
<td>GERN 143</td>
<td>Legal Issues for Seniors</td>
<td>1</td>
</tr>
<tr>
<td>GERN 144</td>
<td>Aging and Mental Health</td>
<td>1</td>
</tr>
<tr>
<td>GERN 145</td>
<td>Work and Leisure Opportunities for the Elderly</td>
<td>1</td>
</tr>
<tr>
<td>GERN 146</td>
<td>Caring for the Elderly at Home</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Credits Required 24
Graphic Design, A.S. Degree

Program Design
The purpose of the Graphic Design Associate Degree Program is three-fold:
1. to provide a graphic design transfer program in the area of design, fine arts, art education, computer graphics, and advertising;
2. to offer a degree program for those considering an entry level position in related commercial art fields; and
3. to provide greater technical knowledge and awareness of the creative visual arts to the community.

The program is structured to equip students with a sound foundation in technical skills, graphic design concepts, aesthetics, terminology and vocabulary, and to provide an awareness of the application of acquired technical knowledge. Computer use will be an integral part of the program.

The course of study demands students’ time and dedication, and will provide them with transfer or career choices based upon their ability and achievement.

Employment Opportunities
Potential career opportunities for graphic design students in the commercial art field include work as graphic designers, advertising artists, printers, illustrators, presentation media artists, art directors, art educators, and computer graphic artists.

Transfer Opportunities
Successful graphic design students will be able to transfer to such institutions as: Southern Connecticut State University, University of Hartford, Rhode Island School of Design, Parsons School of Design, School of Visual Arts, and Pratt Institute.

Curriculum
Students may enroll in art and graphic design courses full- or part-time. There are no requirements or prerequisites for students wishing to take courses part-time or as electives for other programs.

Graphic design/fine arts faculty members are available for consultation with students who wish to enroll in the program and, thereafter, for course selection and transfer information.

<table>
<thead>
<tr>
<th>Credits</th>
<th>ENG 111: College Reading and Writing</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FA 105: History of 20th Century Art</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FA 121: Drawing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FA 201: Illustration I</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>social science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>ENG 120: Introduction to Literature</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA 131: Painting</td>
<td>3</td>
</tr>
<tr>
<td>FA 137: Water Color</td>
<td>3</td>
</tr>
<tr>
<td>FA 202: Illustration II</td>
<td>3</td>
</tr>
<tr>
<td>HIST 101: Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>Elective: natural science</td>
<td>3</td>
</tr>
<tr>
<td>Elective: studio</td>
<td>3</td>
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<tr>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

| FA 101: History of Art I or         | 3 |
| FA 102: History of Art II           | 3 |
| FA 205: Graphic Design I            | 3 |
| FA 210: Computer Graphics            | 3 |
| Elective: humanities                | 3 |
| Elective: studio                     | 3 |
|                                      | 15 |

| FA 206: Graphic Design II           | 3 |
| FA 211: Computer Graphics II or      | 3 |
| COMM 291: Advanced Desktop Publishing| 3 |
| Elective: liberal arts and science   | 3 |
| Elective: liberal arts and science   | 3 |
| Elective: studio or                  | 3 |
| FA 270: Cooperative Education/Work Experience | 3 |
|                                      | 15 |

Total credits required 63
Hotel-Tourism Management, A.S. Degree

Program Design
The Hotel-Tourism Program provides education and training for students who would like to work full-time after graduation. Students also may decide to continue their studies at another institution to earn a bachelor's degree.

In the first year, students study such areas as introduction to the hospitality industry, quantity foods production, and food protection. In the second year students focus on hotel management procedures, food, beverage, and labor cost controls, and geography and tourism development. Students must participate in an individually planned 300-hour cooperative work experience program. Students earn credit toward graduation while employed at the work site.

Students have matriculated to Central Connecticut State University with Junior status in their Hospitality and Tourism Studies Program. Graduates have also transferred and earned bachelors degree's from other colleges and universities such as: Cornell University, University of Massachusetts, University of Nevada (Las Vegas), University of New Haven, and the University of New Hampshire.

Students must submit to a doctor’s physical examination prior to enrolling in MCTC food courses. Students must purchase official kitchen and table service uniforms.

In addition to this degree, students may earn a second associate’s degree in foodservice management by taking an additional 15 credit hours. Students interested in earning a dual degree in Foodservice should see a counselor or a hospitality management faculty advisor.

Employment Opportunities
The Travel Tourism Industry is one of the leading employers in the United States. Graduates may find employment in a variety of positions including assistant managers, concierges, marketing and sales representatives, meeting planners, and executive housekeepers. Promotion depends on a person’s education, personal ability, and employment experience.

Curriculum
Students may attend full- or part-time. This program has an active student club that provides a variety of activities to supplement the formal curriculum. Note: Students taking HOSP 101 and ACCT 101 must be eligible for MATH 101. Students taking HOSP 111, BIO 104, HOSP 112 and ACCT 101 must be eligible for ENG 111.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 104</td>
<td>Applied Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 101*</td>
<td>Basic Foods Preparation</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>MATH 102 or higher</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 111</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102*</td>
<td>Operating a Microcomputer</td>
<td>3</td>
</tr>
<tr>
<td>CIS 111</td>
<td>Introduction to Computers</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16-18</td>
</tr>
<tr>
<td>HOSP 102</td>
<td>Quantity Foods Production I</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 101</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>HOSP 112</td>
<td>Sanitation and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 270</td>
<td>Cooperative Education/Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>ECON 102</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>HOSP 203</td>
<td>Food Controls and Purchasing</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 202</td>
<td>Introduction to Beverage Management</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 231</td>
<td>Consumer Research and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>Introduction to Geography</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>HOSP 214</td>
<td>Hospitality Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 241</td>
<td>Hotel Management Procedures</td>
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</tr>
<tr>
<td>BUS 214</td>
<td>Managerial Communications</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 111</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 204</td>
<td>Geography and Tourism Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Total Credits Required 63-65

* Those students planning to transfer for a bachelor’s degree should take CIS 111 instead of CIS 102.
Industrial Technology, A.S. Degree

Program Design
The Industrial Technology Program has five technical options designed to prepare students for technical careers in manufacturing or engineering technology. The program is designed to respond to the increasing demand by industry for operational, supervisory and management personnel who have a combination of technical and general education backgrounds. The program provides a basic knowledge of industrial processes and processing equipment, the operation and maintenance of manufacturing equipment, the planning for and the assurance of the quality of industrial manufacturing and provides students with opportunities to develop skills in tool, material and instrumentation usage in addition to a background in general studies. The program provides graduates with training and experiences which make them flexible and adaptable to many different types of industrial environments and organizations with a reasonable amount of in-service or job-specific training.

College of Technology - Technology Pathway Program
The Industrial Technology Program, through the Connecticut College of Technology Pathways Program, provides for direct entry into baccalaureate industrial and engineering technology programs at Central Connecticut State University. Students may enter CCSU technology programs through the Industrial Technology A.S. Degree program at MCTC and, upon successful completion of the program, continue on to CCSU with a full two years of credit towards a baccalaureate degree in industrial technology. For more information, call Robert Fortier at 647-6212.

Employment Opportunities
The Industrial Technology Program prepares students for careers in technical manufacturing as manufacturing engineering technicians, industrial engineering technicians, quality assurance technicians, machine and equipment service technicians, tool design technicians and supervisors or managers of technical manufacturing operations.

Transfer Opportunities
The Industrial Technology Program provides transfer opportunities for students to baccalaureate degree programs in industrial technology at Central Connecticut State University. MCTC is in the process of establishing transfer agreements with other colleges and universities in the New England area offering baccalaureate degree programs in industrial and engineering technology.

Curriculum
Students interested in the Industrial Technology Program may attend Manchester Community-Technical College full- or part-time. Part-time study permits a student to keep a full-time job and enroll in either day or evening classes. Full-time students may complete one of the six options of the program in two years.

Electronics Technology Option

<table>
<thead>
<tr>
<th>Credit Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 150</td>
<td>Precalculus Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus I or</td>
<td>5</td>
</tr>
<tr>
<td>MATH 191</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 121</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 122</td>
<td>General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>ELT 111</td>
<td>Circuit Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>ELT 112</td>
<td>Circuit Analysis II</td>
<td>4</td>
</tr>
<tr>
<td>ELT 113</td>
<td>Electrical Power Systems</td>
<td>3</td>
</tr>
<tr>
<td>ELT 201</td>
<td>Electronics I</td>
<td>4</td>
</tr>
<tr>
<td>ELT 202</td>
<td>Electronics II</td>
<td>4</td>
</tr>
<tr>
<td>ELT 213</td>
<td>Control Electronics</td>
<td>4</td>
</tr>
<tr>
<td>ELT 215</td>
<td>Microprocessors</td>
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</tr>
</tbody>
</table>

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Industrial Engineering Technology Option

<table>
<thead>
<tr>
<th>Credit Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 108*</td>
<td>Elementary Statistics or</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 111</td>
<td>Elementary Statistics with Computer Applications</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Technical Mathematics II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>Engineering Drawing Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>Elements of Physics</td>
<td>4</td>
</tr>
<tr>
<td>MFG 111</td>
<td>Manufacturing Materials and Processes I</td>
<td>3</td>
</tr>
<tr>
<td>MFG 112</td>
<td>Manufacturing Materials and Processes II</td>
<td>3</td>
</tr>
<tr>
<td>MFG 113</td>
<td>Production Control</td>
<td>3</td>
</tr>
<tr>
<td>MFG 114</td>
<td>Plant Layout</td>
<td>3</td>
</tr>
<tr>
<td>MFG 119</td>
<td>Productivity Improvement</td>
<td>3</td>
</tr>
<tr>
<td>CAD 101</td>
<td>Computer Aided Design I</td>
<td>3</td>
</tr>
<tr>
<td>CAM 101</td>
<td>Computer Aided Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>QA 100</td>
<td>Statistical Process Control</td>
<td>3</td>
</tr>
</tbody>
</table>

44-45

* Students transferring to colleges with a four-credit statistics requirement should take MATH 111 instead of MATH 108.

Continued on next page.
### Machine Tool Service Technology Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 108*</td>
<td>Elementary Statistics or Elementary Statistics with Computer Applications</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 111</td>
<td>Elementary Statistics with Computer Applications</td>
<td></td>
</tr>
<tr>
<td>MATH 115</td>
<td>Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Technical Mathematics II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>Engineering Drawing Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 121</td>
<td>Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 122</td>
<td>Electricity/Electronics I</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 123</td>
<td>Electricity/Electronics II</td>
<td>4</td>
</tr>
<tr>
<td>MFG 111</td>
<td>Manufacturing Materials and Processes I</td>
<td>3</td>
</tr>
<tr>
<td>MFG 112</td>
<td>Manufacturing Materials and Processes II</td>
<td>3</td>
</tr>
<tr>
<td>MFG 116</td>
<td>Hydraulics I</td>
<td>3</td>
</tr>
<tr>
<td>MFG 117</td>
<td>Hydraulics II</td>
<td>3</td>
</tr>
<tr>
<td>MFG 118</td>
<td>Pneumatics and Vacuum Systems</td>
<td>3</td>
</tr>
<tr>
<td>QA 100</td>
<td>Statistical Process Control</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 46-47**

### Quality Assurance Technology Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 108*</td>
<td>Elementary Statistics or Elementary Statistics with Computer Applications</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 111</td>
<td>Elementary Statistics with Computer Applications</td>
<td></td>
</tr>
<tr>
<td>MATH 115</td>
<td>Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Technical Mathematics II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>Engineering Drawing Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 102</td>
<td>Geometric Tolerancing/Dimensioning</td>
<td>3</td>
</tr>
<tr>
<td>MFG 111</td>
<td>Manufacturing Materials and Processes I</td>
<td>3</td>
</tr>
<tr>
<td>MFG 112</td>
<td>Manufacturing Materials and Processes II</td>
<td>3</td>
</tr>
<tr>
<td>MFG 115</td>
<td>Fundamentals of Tool Design</td>
<td>4</td>
</tr>
<tr>
<td>QA 100</td>
<td>Statistical Process Control</td>
<td>3</td>
</tr>
<tr>
<td>QA 110</td>
<td>Measurement and Measurement Systems</td>
<td>3</td>
</tr>
<tr>
<td>QA 120</td>
<td>Inspection and Gaging</td>
<td>3</td>
</tr>
<tr>
<td>QA 140</td>
<td>Layout Inspection</td>
<td>4</td>
</tr>
<tr>
<td>QA 150</td>
<td>Statistical Methods of Quality Improvement</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 45-46**

### Tool, Die and Gage Maker Technology Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 108*</td>
<td>Elementary Statistics or Elementary Statistics with Computer Applications</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 111</td>
<td>Elementary Statistics with Computer Applications</td>
<td></td>
</tr>
<tr>
<td>MATH 115</td>
<td>Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Technical Mathematics II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 117</td>
<td>Technical Mathematics III</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>Elements of Physics</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>Engineering Drawing Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>CAD 101</td>
<td>Computer Aided Design I</td>
<td>3</td>
</tr>
<tr>
<td>CAD 102</td>
<td>Computer Aided Design II</td>
<td>3</td>
</tr>
<tr>
<td>CAM 101</td>
<td>Computer Aided Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>QA 100</td>
<td>Statistical Process Control</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 45-46**

The following are required courses and electives in addition to the above core components:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>CIS 111</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC/BUS 240</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>Elective Humanities</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective Social Sciences</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Electives: 21**

*Students transferring to colleges with a four-credit statistics requirement should take MATH 111 instead of MATH 108.*
Journalism Option, Communication, A.S. Degree

Program Design
The Journalism Option is designed for students interested in pursuing careers in print journalism as correspondents, reporters or feature writers. Students will be expected to build strong writing and communication skills as well as a broad understanding of history, government, economics, social science and ethics, all areas critical to the practicing journalist. Cooperative Education/Work Experience is required.

Employment Opportunities
Graduates in the Journalism Option will be prepared to continue study of journalism or communications in a four-year institution. In general, entry level positions in this area pay in the $15,000-$20,000 range. Opportunities for employment are enhanced with a baccalaureate degree.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Macroeconomics or Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 102</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>PSYC 111</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Liberal arts and science</td>
<td>3-4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 112</td>
<td>Reading &amp; Writing for Academic Research</td>
<td>3</td>
</tr>
<tr>
<td>COMM 218</td>
<td>TV Writing</td>
<td>3</td>
</tr>
<tr>
<td>COMM 201</td>
<td>Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 203</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>COMM 270</td>
<td>Cooperative Education/Work Experience</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 282</td>
<td>Magazine and Feature Writing</td>
<td>3</td>
</tr>
<tr>
<td>COMM 208</td>
<td>Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>SOC 102</td>
<td>Contemporary Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Natural science</td>
<td>3-4</td>
</tr>
</tbody>
</table>

Total Credits Required 60-61
Liberal Arts and Science, A.A. Degree

Program Design
The Liberal Arts and Science Program offers either an associate in arts degree or an associate in science degree. In the Associate in Arts Degree Program, a broad liberal arts and science background is provided; students can choose from a wide range of humanities and science courses to meet their individual needs and interests.

The Liberal Arts and Science Program prepares students for two alternatives—either transferring to a bachelor’s degree program at another college or university, or moving directly into the work force.

Employment Opportunities
A broad liberal arts and science education opens a variety of career opportunities for students. Many employers in the Greater Hartford area seek students who have the ability to think, write and speak clearly and logically so they can be trained in more specialized skills.

Curriculum
Students may enroll in this program full- or part-time. For any student who is not prepared for the required mathematics and English courses, MCTC offers a wide range of developmental classes.

At least 62 semester hours of credit are required in this program:

■ **Humanities**
  Required: ENG 111, 112 and 120
  Elect one course: ENG 245, 246, 251, 252 or 271.
  Elect one course: FA 101, 102, 105 or 106; MUS 111, 112 or 113, or THEA 111.
  Required: 6 credits of either Japanese, French or Spanish.*

■ **Natural Science and Mathematics**
  Elect one pair of courses: BIO 101-102, CHEM 111-112; PHYS 121-122, PHYS 131-132, or CHEM 110 and PHYS 110 or PHYS 111.
  Elect one course: MATH 106, 208, 108 or 111, 190 or 191 (MATH 106 is recommended for all LAS majors, MATH 108 or MATH 111 is recommended for students concentrating in psychology).

■ **Social Science**
  Required: PHIL 201 and HIST 101-102.
  Elect one course: ANTH 101, PSYC 111 or SOC 101.
  Elect one course: ECON 101, GEOG 101 or PLSC 111.

■ **Electives**
  Choose a minimum of five LAS electives, or four LAS electives plus one free elective, for a total of 62 credits.

*  **NOTE:** The completion of three years of study in a single foreign language at the high school level fulfills the foreign language requirement for the Liberal Arts and Science, A.A. Degree. Some colleges (such as the University of Connecticut) have as a graduation requirement four semesters of study in a single language. (Check specific requirements where you wish to transfer). It is possible to complete those four semesters of language study at MCTC.
Liberal Arts and Science, A.S. Degree

Program Design
The Liberal Arts and Science Program offers either an associate in science degree or an associate in arts degree. In the Associate in Science Degree Program, a broad liberal arts and science background is provided; students can choose from a wide range of science and humanities courses to meet their individual needs and interests. The Liberal Arts and Science Program prepares students for two alternatives—either transferring to a baccalaureate institution or moving directly into the work force.

Curriculum
Students may enroll in this program full- or part-time. For any student who is not prepared for the required mathematics and English courses, MCTC offers a wide range of developmental classes.

At least 62 semester hours of credit are required in this program as follows:

- **Humanities**
  - Required: ENG 111, 112 and 120.
  - Elect one course: ENG 245, 246, 251, 252 or 271.
  - Elect one course: FA 101, 102, 105, or 106; MUS 111 or 112, THEA 111.

- **Social Science**
  - Required: PHIL 201 and HIST 101-102.
  - Elect one course: ANTH 101, PSYC 111 or SOC 101.
  - Elect one course: ECON 101, GEOG 101 or PLSC 111.

- **Natural Science and Mathematics**
  - Elect one pair of courses: BIO 101-102, CHEM 111-112, PHYS 121-122 or PHYS 131-132.
  - Elect either MATH 190 or 191 and 192, or elect two of the following MATH 106, MATH 208, either MATH 108 or 111.

- **Electives**
  - Choose a minimum of six LAS electives, or five LAS electives plus one free elective, for a total of 62 credits.

- **Foreign Language Requirements**
  - Although the Associate in Science Program does not require the study of a language, the college or university into which a student wishes to transfer may require two or four semesters of a foreign language. These requirements may be met at MCTC.

Transfer Opportunities
Any liberal arts and science student who intends to transfer to a baccalaureate institution and major in science, computer science, mathematics or engineering, is advised to take specific courses that apply to the area in which he or she chooses to concentrate.

Students following these suggested course of study plans should be able to transfer to area colleges and universities such as Central and Eastern Connecticut State Universities, and the University of Connecticut. Because the requirements of these institutions vary greatly, students should select a transfer college or university early. Students should then consult with a counselor regarding the choice of electives and the transferability of courses.

**Common transfer majors and the recommended courses appropriate for each are listed on pages 50-53.**

The suggested course sequences of biology, chemistry, computer science, mathematics, physics and women's studies are given as examples of course configurations which transfer to bachelor’s degree programs in those majors. You are advised to work closely with MCTC’s transfer counselors.
# Liberal Arts and Science, A.A. Degree

## African/American Studies

### Suggested Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>3</td>
</tr>
<tr>
<td>HIST 101</td>
<td>3</td>
</tr>
<tr>
<td>Elective*</td>
<td>3</td>
</tr>
<tr>
<td>Elective**</td>
<td>3</td>
</tr>
<tr>
<td>SOSC 201</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112</td>
<td>3</td>
</tr>
<tr>
<td>HIST 102</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>3</td>
</tr>
<tr>
<td>Elective***</td>
<td>3</td>
</tr>
<tr>
<td>MUS 113</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits Required 62

* Choose from PSYC 111, SOC 101 or ANTH 101.
** Choose from MATH 106, 108 or 191
*** Choose from ECON 101, GEOG 101, or PLSC 101.
**** Choose from BIO 101, CHEM 111, PHYS 121, PHYS 131 or PHYS 110.
***** Choose from BIO 102, CHEM 112, PHYS 122, PHYS 132 or CHEM 110.

---

# Liberal Arts and Science, A.S. Degree

## Biology Suggested Course Sequence

### Course of Study Plan

The Biology Suggested Course Sequence prepares students to enter various biology and biology-related programs of study leading to a bachelor’s degree. Such programs include professional studies leading to graduate level programs, ecology, human biology, biotechnology, secondary education, as well as premedical, predental and preveterinary studies. In addition, students may use the biology emphasis in order to access various medical-technology programs at the baccalaureate level. Baccalaureate programs vary widely in their requirements for entry and placement. Students should consult with institutions to which they may transfer as early as possible.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101</td>
<td>4</td>
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<tr>
<td>CHEM 111</td>
<td>4</td>
</tr>
<tr>
<td>ENG 111</td>
<td>3</td>
</tr>
<tr>
<td>HIST 101</td>
<td>3</td>
</tr>
<tr>
<td>Elective*</td>
<td>3</td>
</tr>
<tr>
<td>Elective**</td>
<td>3</td>
</tr>
<tr>
<td>Elective***</td>
<td>3</td>
</tr>
<tr>
<td>Elective****</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits Required 63

* Choose from FA 101, 102 or 105; MUS 111 or 112, THEA 111.
** Choose from PSYC 111, SOC 101 or ANTH 101.
*** Choose from PLSC 101, GEOG 101 or ECON 101.
**** Students should choose from MATH 190 or MATH 191 and MATH 192 or MATH 106 and either MATH 108 or Math 111.
***** Choose from ENG 232, 245, 246, 251, 252, 261 or 271.
Liberal Arts and Science, A.S. Degree

Chemistry Suggested Course Sequence

Course of Study Plan
The Chemistry Suggested Course Sequence prepares students for transfer into bachelor degree programs leading to vocations in fields such as industrial chemistry, chemical and pharmaceutical sales and service, dentistry and medicine.

Credits
CHEM 111 College Chemistry I 4
ENG 111 College Reading and Writing 3
CHEM 112 College Chemistry II 4
ENG 112 Reading & Writing for Academic Research 3
PHYS 131 University Physics I 4
PHYS 132 University Physics II 4
CHEM 211 Organic Chemistry I 4
CHEM 212 Organic Chemistry II 4
MATH 190 Analytic Geometry and Calculus I or MATH 191 Analytic Geometry and Calculus I 4
MATH 192 Analytic Geometry and Calculus II 4
MATH 199 Analytic Geometry and Calculus III 4
PHIL 201 Introduction to Philosophy 3
PHYS 121 General Physics I or PHYS 132 University Physics II 4
PHYS 122 General Physics II 4
PHYS 211 Organic Chemistry I 4
ENG 120 Introduction to Literature 3
ENG 120 Introduction to Literature 3
MATH 201 Differential Equations 4
MATH 201 Differential Equations 4
PHIL 201 Introduction to Philosophy 3
PHIL 201 Introduction to Philosophy 3
CHEM 212 Organic Chemistry II 4
ELECTIVE liberal arts and science 3
CHEM 212 Organic Chemistry II 4
MATH 108 Elementary Statistics or MATH 111 Elementary Statistics with Computer Applications 3
CHEM 212 Organic Chemistry II 4
MATH 201 Differential Equations 4
CHEM 212 Organic Chemistry II 4
ELECTIVE liberal arts and science 3
CHEM 212 Organic Chemistry II 4
ELECTIVE liberal arts and science 3
CHEM 212 Organic Chemistry II 4
ELECTIVE liberal arts and science 3
CHEM 212 Organic Chemistry II 4
ELECTIVE liberal arts and science 3
CHEM 212 Organic Chemistry II 4
ELECTIVE liberal arts and science 3

Total Credits Required 66-67

* Choose from PSYC 111, SOC 101 or ANTH 101.
** Choose from PLSC 101, GEOG 101 or ECON 101.
*** Choose from FA 101, 102 or 105; MUS 111 or 112.
**** Choose from ENG 232, 245, 246, 251, 252, 261 or 271.

Additional courses recommended for Chemistry Transfer Students:
MATH 108: Elementary Statistics or MATH 111: Elementary Statistics with Computer Applications 3
MATH 293: Analytic Geometry and Calculus III 4

Mathematics Suggested Course Sequence

Course of Study Plan
The Mathematics Suggested Course Sequence prepares students for transfer as juniors into bachelor’s degree programs with majors in mathematics, computer science, information services or related fields. Graduates are prepared for positions in the areas of actuarial science, operations research, computer programming, systems analysis and teaching.

Credits
ENG 111 College Reading and Writing 3
ENG 112 Reading & Writing for Academic Research 3
MATH 190 Analytic Geometry and Calculus I or MATH 191 Analytic Geometry and Calculus I 5
MATH 191 Analytic Geometry and Calculus I 4
PHIL 201 Introduction to Philosophy 3
PHYS 131 University Physics I 4
PHYS 121 General Physics I or PHYS 132 University Physics II 4
ELECTIVE liberal arts and science 3

Total Credits Required 66-67

* Choose from PSYC 111, SOC 101 or ANTH 101.
** Choose from PLSC 101, GEOG 101 or ECON 101.
*** Choose from ENG 245, 246, 251, 252, 261 or 271.
**** Choose from FA 101, 102 or 105; MUS 111 or 112.

Division of Math, Science & Health Careers: 860/647-6223
**Liberal Arts and Science, A.S. Degree**

**Physics Suggested Course Sequence**

**Course of Study Plan**

The Physics Suggested Course Sequence prepares students to enter the junior year of bachelor’s degree programs with majors in physics, engineering physics, physical science or other related fields in the physical sciences and earth sciences. Graduates are prepared to pursue a wide variety of employment opportunities in industry or the public sector, ranging from basic research and development to technical sales and services.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 191</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 131</td>
<td>University Physics I</td>
<td>4</td>
</tr>
<tr>
<td>Elective*</td>
<td>liberal arts and science</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits Required: 18-19

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 120</td>
<td>English Literature</td>
<td>3</td>
</tr>
<tr>
<td>HIST 101</td>
<td>Western Civilization through the Reformation</td>
<td>3</td>
</tr>
<tr>
<td>MATH 293</td>
<td>Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 132</td>
<td>University Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits Required: 15

- * Choose from PSYC 111, SOC 101 or ANTH 101.
- ** Choose from PLSC 101, GEOG 101 or ECON 101.
- *** Choose from FA 101, 102 or 105; MUS 111 or 112.
- **** Choose from ENG 245, 246, 251, 252, 261, 262, or 271

**Pre-Med/Pre-Professional Preparation**

*(Medical, Dental, Veterinary and Optometry)*

**Course of Study Plan**

Students may prepare for admission to medical school by majoring in any area but they must complete courses that meet the minimum requirements for entrance to most medical schools. The following courses meet these minimal requirements. Note that many of these courses are required by the MCTC Liberal Arts and Science Degree program.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101-102</td>
<td>General Biology I, II</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 111-112</td>
<td>College Chemistry I, II</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 211-212</td>
<td>Organic Chemistry I, II</td>
<td>8</td>
</tr>
<tr>
<td>PHYS 121-122</td>
<td>General Physics I, II</td>
<td>8</td>
</tr>
<tr>
<td>PHYS 131-132</td>
<td>University Physics I, II</td>
<td>8</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112</td>
<td>Reading &amp; Writing for Academic Research</td>
<td>3</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Precalculus Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 191</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>

It should also be noted that medical schools may vary in other additional requirements and it is strongly recommended that the student meet with the Pre-Med/Pre-Professional advisor. For more information call 647-6198.
Women’s Studies Suggested Course Sequence

**Course of Study Plan**

The Women’s Studies Suggested Course Sequence prepares students to transfer to bachelor’s degree programs with majors or minors in Women’s Studies or to move directly into the workforce. Women’s Studies programs are offered at the University of Connecticut, the University of Hartford, Southern Connecticut State University, Trinity College and Wesleyan. Because the requirements of these institutions vary greatly, students should consult with an advisor in Women’s Studies regarding transfer of courses. Graduates from these institutions have found employment both in nonprofit organizations and in the corporate sector. Women’s Studies classes are offered primarily at night.

Women's Studies electives are indicated where appropriate in the Liberal Arts curriculum.

- **Humanities**
  - Required: ENG 111, 112 and 120
  - Women's Studies English Elective: ENG 271, Women in Literature
  - Women's Studies Arts Elective: FA 106, Women in the Visual and Performing Arts
  - Required: 6 credits of either Japanese, French or Spanish.*

- **Natural Science and Mathematics**
  - Elect one pair of courses: BIO 101-102, CHEM 111-112; PHYS 121-122, PHYS 131-132, or CHEM 110 and PHYS 110 or PHYS 111.
  - Elect one course: MATH 106, 208, 108 or 111, 190 or 191 (MATH 106 is recommended for all LAS majors, MATH 108 or MATH 111 is recommended for students concentrating in psychology).

- **Social Science**
  - Required: PHIL 201 and HIST 101-102.
  - Elect: SOC 101, prerequisite for Women's Studies sociology courses
  - Elect one course: ECON 101, GEOG 101 or PLSC 111.

- **Women's Studies Electives**

  The LAS degree requires a minimum of five LAS electives, or four LAS electives plus one free elective, for a total of 62 credits. If you are considering transferring as a women's studies major, please talk with an advisor before choosing your electives.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 261</td>
<td>Survey of Women's Issues**</td>
<td>3</td>
</tr>
<tr>
<td>SOC 262</td>
<td>Women and Violence</td>
<td>3</td>
</tr>
<tr>
<td>BIO 155</td>
<td>Women’s Health</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 222</td>
<td>Gender and Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENG 220</td>
<td>Introduction to Contemporary Women Poets</td>
<td>3</td>
</tr>
<tr>
<td>HIST 251</td>
<td>History of Women in the U.S.A.</td>
<td></td>
</tr>
</tbody>
</table>

*See note regarding language requirements under the Liberal Arts and Science A.A. Degree.

**Strongly recommended for those who intend to take other women's studies courses.

---

* See note regarding language requirements under the Liberal Arts and Science A.A. Degree.

** Strongly recommended for those who intend to take other women's studies courses.
Program Design
The Management Information Systems Program is offered as an option to our Accounting and Business Administration Transfer Program for students who would like to continue their studies at another college or university to earn a bachelor’s degree. This program requires four courses in computer information systems as well as liberal arts and science courses that students would normally take the first two years at a baccalaureate institution. Students planning to transfer should consult a counselor or faculty advisor about their choice of electives before selecting specific courses.

You should be familiar with the requirements of the institution to which you will transfer credits. We encourage you to select your transfer college or university as early as possible. Also, you should see an advisor before choosing elective courses in this associate degree program because each institution may have specific degree requirements.

Employment Opportunities
Students who successfully complete a bachelor’s degree program will have many opportunities for employment in management information systems. Advancement is rapid and those who combine computer information systems education with a solid business background will have diversified opportunities in the corporate environment.

Students in this program may choose to transfer to and earn bachelor’s degrees in colleges and universities such as Central Connecticut State University, Eastern Connecticut State University, University of Hartford, and University of Connecticut.

Curriculum
Students may enroll in this program full- or part-time. Students should have a sound foundation in mathematics, problem solving and communication skills.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101*</td>
<td>4</td>
</tr>
<tr>
<td>CIS 111*</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>3</td>
</tr>
<tr>
<td>Liberal arts and science</td>
<td>3</td>
</tr>
<tr>
<td>Natural science</td>
<td>3-4</td>
</tr>
<tr>
<td>Total Credits Required</td>
<td>16-17</td>
</tr>
</tbody>
</table>

* Eligibility for MATH 101 or higher and ENG 111.
** Students must take CIS 125 as a prerequisite for this course.
*** Students may select a total of three credit hours from the following courses: CIS 106, 107, 114, 115, 118, 156, 157, 158, 159, 171, 191, 201, or 202.

For more Computer Information Systems programs see pages 33, 59, 60, and 65.
Manufacturing Engineering Science, A.S. Degree

Program Design
The Manufacturing Engineering Science Program is designed to be a broad-based engineering science transfer program which provides a foundation of mathematics and basic science, integrated with program components focusing on introductory manufacturing technology and general education. The program emphasizes the application of mathematics and principles of engineering science to technical manufacturing in order to prepare students for transfer to baccalaureate programs in engineering and engineering sciences with a manufacturing engineering focus. The program also prepares students for employment opportunities in entry and second-level positions in manufacturing and industrial technology fields requiring a combination of technical preparation and a strong general education background.

College of Technology - Technology Pathway Program
The Manufacturing Engineering Science Program, through the Connecticut College of Technology Pathways Program, provides for direct entry into baccalaureate industrial and engineering technology programs at Central Connecticut State University. Students may enter CCSU engineering technology programs through the Manufacturing Engineering Science A.S. Degree program at MCTC and, upon successful completion of the program, continue on to CCSU with a full two years of credit towards a baccalaureate degree in industrial technology or engineering technology. For more information, call Robert Fortier at 647-6212.

Employment Opportunities
The Manufacturing Engineering Science Program will prepare students for entry and second-level positions in manufacturing and industrial technology fields in positions where the basic technical and general education backgrounds attained through the program could be augmented with technical on-the-job specialized training (e.g. manufacturing technicians, engineering assistant, machine and tool design technicians, quality assurance technicians, manufacturing project managers, technical sales/marketing personnel, and supervisors or managers of technical manufacturing operations.)

Transfer Opportunities
The Manufacturing Engineering Science Program will provide transfer opportunities for students to baccalaureate degree programs in manufacturing engineering, industrial engineering or manufacturing engineering technology. Manchester Community-Technical College is in the process of reaching transfer agreements with other colleges and universities in the New England area.

Curriculum
Students may enroll in this program full- or part-time. Courses are offered during day time and evening hours. Preparation for the Manufacturing Engineering Science Program includes a high school diploma or equivalent with one year of physics and two years of mathematics including Algebra I and Algebra II. For students not prepared for the required mathematics and English courses, MCTC offers a wide range of developmental and preparatory courses. (See Pre-Technical Education Preparation, page 20.)

Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 108*</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>Engineering Drawing Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>MATH 150</td>
<td>Precalculus Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 121</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 111</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>QA 100</td>
<td>Statistical Process Control</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>MATH 190**</td>
<td>Analytic Geometry and Calculus I or</td>
<td>5</td>
</tr>
<tr>
<td>MATH 191**</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 122**</td>
<td>General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>MFG 111</td>
<td>Manufacturing Materials and Processes I</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>humanities/social sciences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td>ENGR 121</td>
<td>Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 122**</td>
<td>Electricity/Electronics</td>
<td>4</td>
</tr>
<tr>
<td>MFG 112</td>
<td>Manufacturing Materials and Processes II</td>
<td>3</td>
</tr>
<tr>
<td>CAD 101</td>
<td>Computer Aided Design</td>
<td>3</td>
</tr>
<tr>
<td>PSYC/BUS 240</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Total Credits Required 67-68

* Students transferring to colleges with a four-credit statistics requirement should take MATH 111 instead of MATH 108.

** These courses must be included in the 25 percent minimum course requirements for the degree through course work at the College. (See page 13.)
Marketing, A.S. Degree

Program Design
The Marketing Associate Degree Program is for students who wish to enter managerial or proprietary positions in marketing. To complete this program, you will take courses in marketing, business, accounting, and general education.

Students interested in transferring to earn a bachelor’s degree should register in the Accounting and Business Administration Transfer Program.

Employment Opportunities
Generally, marketing is the entire process of getting goods and services from producer to consumer to satisfy a need. Because marketing plays such an important role in our economic system, there are numerous job opportunities. Career opportunities in marketing include employment in sales, advertising, product management, marketing research, physical distribution and other areas. Salaries vary widely depending on the marketing function performed, the size of the company, and the person’s education and employment experience.

Curriculum
Students may enroll in this program full- or part-time. Note: To take a business course numbered 100 or higher, students must be eligible for ENG 111. To take an accounting course numbered 100 or higher, students must be eligible for ENG 111 and MATH 101 or higher.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS 101</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 111</td>
<td>Business Environment</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>QM 110</td>
<td>Quantitative Methods for Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS 102</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 214</td>
<td>Managerial Communications</td>
<td>3</td>
</tr>
<tr>
<td>ECON 102</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>natural science</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16-17</td>
</tr>
<tr>
<td>BUS 121</td>
<td>Principles/Methods of Marketing I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 221</td>
<td>Sales and Techniques of Selling</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 111</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CIS 111*</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>social science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>BUS 122</td>
<td>Principles/Methods of Marketing II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 231</td>
<td>Basic Advertising Principles</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>humanities</td>
<td>3</td>
</tr>
<tr>
<td>BUS 252</td>
<td>Retailing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits Required 62-63</strong></td>
<td></td>
</tr>
</tbody>
</table>

Marketing, Certificate
The Marketing Certificate Program is designed for students who are interested in a career change or who already have a degree and are looking for a career specialty.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 111</td>
<td>Business Environment</td>
<td>3</td>
</tr>
<tr>
<td>BUS 121</td>
<td>Principles/Methods of Marketing I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 122</td>
<td>Principles/Methods of Marketing II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 221</td>
<td>Sales and Techniques of Selling</td>
<td>3</td>
</tr>
<tr>
<td>BUS 231</td>
<td>Basic Advertising Principles</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 111</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits Required 21</strong></td>
<td></td>
</tr>
</tbody>
</table>

* CIS 106 and CIS 166 or CIS 106 and CIS 167 may be substituted for CIS 111.
Media Technology, Certificate

Program Design
The Certificate Program in Media Technology will provide an intensive exposure to a range of current communication technologies. It is intended for students who are technically oriented and wish to work in technical positions in the fields of radio, television, photography, desktop publishing and cable television. It will concentrate on teaching skills that are necessary for working behind-the-scenes in media and communications. Classes are highly practical and provide significant hands-on opportunity, allowing the student to apply classroom theory to real-life projects. In developing this Certificate Program, extensive effort was made to provide skills that are currently in high demand in the Connecticut labor market.

Employment Opportunities
Employment opportunities will be greatest in cable television, desktop publishing and commercial radio and television. In general, starting salaries will be in the $15,000-$20,000 range, with the chance for advancement based on ability, experience and talent.

Transfer Opportunities
Students who begin in the Media Technology Certificate program can also use these credits if they decide to pursue an Associate’s Degree in Communication at Manchester Community-Technical College. In recent years Communication Associate Degree holders have successfully transferred to public institutions such as Central Connecticut State University and Eastern Connecticut State University and private institutions such as the University of Hartford, Emerson College and Syracuse University. Capable students will be encouraged to transfer since employment options are significantly enhanced with a Bachelor’s Degree.

Curriculum
The program can be completed in two semesters of rigorous, full-time study, but will take longer for the student attending part-time.

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 150</td>
<td>Issues in Print, Broadcast, Photojournalism</td>
<td>3</td>
</tr>
<tr>
<td>COMM/FA 176</td>
<td>Video/Filmmaking</td>
<td>3</td>
</tr>
<tr>
<td>COMM 290</td>
<td>Introduction to Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>COMM 206</td>
<td>Broadcast Announcing or</td>
<td>3</td>
</tr>
<tr>
<td>COMM 210</td>
<td>Broadcast/TV Production</td>
<td>4</td>
</tr>
</tbody>
</table>

12-13

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 211*</td>
<td>Advanced Broadcast/TV Production</td>
<td>4</td>
</tr>
<tr>
<td>COMM 270</td>
<td>Cooperative Education/Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>COMM 291</td>
<td>Advanced Desktop Publishing or</td>
<td>3</td>
</tr>
<tr>
<td>COMM 218</td>
<td>Television Writing or</td>
<td>3</td>
</tr>
<tr>
<td>COMM 285</td>
<td>Television News Reporting</td>
<td>3</td>
</tr>
</tbody>
</table>

13

Total Credits Required 25-26

* Students can enroll in COMM 211 even if they have not taken COMM 210
Medical Laboratory Technician,  
A.S. Degree

Program Design
The Medical Laboratory Technician Associate Degree Program provides training for medical laboratory work concerned with the collection of information related to a patient’s health status. Even though they spend less time with the patient than other health professionals, laboratorians supply valuable service to patient care. MLT’s perform a wide variety of tasks including collection of blood specimens, performing analytical procedures on biological specimens while relating lab findings to common disease processes; preventative and corrective maintenance on automated equipment; monitoring of quality control procedures; communicating with patients and other health professionals and the public while exhibiting professional behavior. Lastly, in order to maintain competence in this profession, laboratory workers must have a lifelong commitment to continuing education.

Employment Opportunities
Graduates of the program are eligible to sit for the national certifying examinations offered by the Board of Registry of the American Society of Clinical Pathologists and the National Credentialing Agency for Laboratory Personnel.

Employment opportunities exist in hospitals, private laboratories, clinics, doctors’ offices, public health labs, industry and government agencies.

Scholastic Preparation and Admission Process*
All candidates must submit a college application and a separate Allied Health application. Applications must be filed between Oct. 1 and Jan. 15 of the year prior to the fall semester in which the students wishes to begin MLT classes. However, if space is still available, applications received after Jan. 15 will be accepted. Complete information on the admission procedures is available from the Admissions Office or by calling the program coordinator at 647-6190.

In addition, applicants must arrange to have an official high school transcript or a copy of a high school equivalency diploma sent to the Admissions Office as well as official transcripts for all studies in other schools or colleges. These transcripts will determine whether a candidate has met the required basic competencies in mathematics, biology and chemistry. Candidates who meet the basic competencies will be given an interview that will assess their knowledge of the laboratory field, measure their potential for working in a medical setting and discuss their course of study. Students will need to demonstrate the skills necessary to become an MLT. If students do not meet basic competencies, the College has personnel and courses available to assist them.

* Students who do not meet the program entrance requirements should select appropriate courses from the Pre-Allied Health Program, an access program that provides courses and guidance to prepare the student for a career in the health field. (See page 20.)

Accreditation
The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences which is located at 8410 W. Bryn Mawr, Suite 670, Chicago, IL 60631-3415. Telephone: (773) 714-8880.

Curriculum
The first year of the program is spent at the College and combines general education and clinical courses. The second year is a 12-month clinical year. The curriculum includes lectures as well as clinical training and practice under supervision. Clinical training is offered at Hartford Hospital. Students must have a physical, which includes drug testing, before beginning their clinical. During the clinical year students must pay for parking, uniforms and other miscellaneous expenses.

The first year may be done on a part-time basis. The second year must be done full-time. Those courses with an MLT designator are offered only during the day.

<table>
<thead>
<tr>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>CHEM 111 College Chemistry I</td>
</tr>
<tr>
<td>3</td>
<td>ENG 111 College Reading and Writing</td>
</tr>
<tr>
<td>2</td>
<td>MLT 142 Introduction to the Medical Laboratory</td>
</tr>
<tr>
<td>3</td>
<td>PSYC 111 General Psychology</td>
</tr>
<tr>
<td>3</td>
<td>Elective social science</td>
</tr>
<tr>
<td>1</td>
<td>CIS 102 Getting Acquainted with the IBM or</td>
</tr>
<tr>
<td>2</td>
<td>CIS 106 Windows 95 or</td>
</tr>
<tr>
<td>3</td>
<td>CIS 111 Introduction to Computers or</td>
</tr>
<tr>
<td>3</td>
<td>CS 110 Introduction to Computer Science</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>BIO 141 Microbiology</td>
</tr>
<tr>
<td>4</td>
<td>BIO 112 Human Biology</td>
</tr>
<tr>
<td>4</td>
<td>CHEM 112 College Chemistry II</td>
</tr>
<tr>
<td>1</td>
<td>MLT 182 Clinical Microscopy I</td>
</tr>
<tr>
<td>2</td>
<td>MLT 272 Parasitology/Mycology</td>
</tr>
<tr>
<td>3</td>
<td>Elective humanities</td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>MLT 201 Clinical Microbiology</td>
</tr>
<tr>
<td>4</td>
<td>MLT 211 Chemistry</td>
</tr>
<tr>
<td>3</td>
<td>MLT 221 Hematology</td>
</tr>
<tr>
<td>2</td>
<td>MLT 231 Immunology/Serology</td>
</tr>
<tr>
<td>2</td>
<td>MLT 251 Phlebotomy</td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>MLT 202 Clinical Microbiology</td>
</tr>
<tr>
<td>4</td>
<td>MLT 212 Chemistry</td>
</tr>
<tr>
<td>3</td>
<td>MLT 222 Hematology</td>
</tr>
<tr>
<td>3</td>
<td>MLT 262 Immunohematology</td>
</tr>
<tr>
<td>1</td>
<td>MLT 282 Clinical Microscopy II</td>
</tr>
</tbody>
</table>

Total Credits Required 64-66

Division of Math, Science & Health Careers: 860/647-6236
Microcomputer Option, Computer Information Systems, A.S. Degree

Program Design
The Computer Information Systems Associate Degree, Microcomputer Option Program prepares you for employment in entry-level positions where the emphasis in computing is the desktop environment. This program provides course work in hardware, varied system and applications software, and principles of programming as they relate to microcomputing.

Students interested in transferring to another institution to earn a bachelor’s degree in management information systems should enroll in our Management Information Systems Transfer Program.

Employment Opportunities
Computer information systems graduates find employment opportunities in small and large companies where the computer power is microcomputer oriented. Employers may include, computer information systems service organizations, insurance companies, retailing businesses, manufacturing firms, government agencies, educational institutions, and professional offices.

Curriculum
The following curriculum may be completed on a full- or part-time basis. We urge students, especially those attending part-time, to work closely with a faculty member or advisor to insure they are taking the correct computer information systems courses and selecting the electives most appropriate for their goals.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CIS 106*</td>
<td>Windows 95</td>
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<tr>
<td>CIS 107</td>
<td>Advanced Windows 95</td>
<td>1</td>
</tr>
<tr>
<td>CIS 111</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>BOT 125</td>
<td>Introductory Word for Windows</td>
<td>1</td>
</tr>
<tr>
<td>BOT 126</td>
<td>Intermediate Word for Windows</td>
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</tr>
<tr>
<td>BOT 127</td>
<td>Advanced Word for Windows</td>
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<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
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<tr>
<td>ENG 114</td>
<td>Technical Writing or</td>
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<tr>
<td>BUS 214</td>
<td>Managerial Communications</td>
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</tr>
<tr>
<td>CIS 114</td>
<td>Exploring the Internet</td>
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</tr>
<tr>
<td>CIS 125</td>
<td>Programming Logic and Design with BASIC</td>
<td>3</td>
</tr>
<tr>
<td>CIS 156**</td>
<td>Data Base Applications 1 ACCESS</td>
<td>1</td>
</tr>
<tr>
<td>CIS 157**</td>
<td>Data Base Applications 11 ACCESS</td>
<td>1</td>
</tr>
<tr>
<td>CIS 158**</td>
<td>Data Base Applications 111 ACCESS</td>
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</tr>
<tr>
<td>CIS 166</td>
<td>Application Software: EXCEL</td>
<td>3</td>
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<td>ECON 102</td>
<td>Microeconomics</td>
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<tr>
<td>ACCT 101</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Presentation Software: Powerpoint</td>
<td>1</td>
</tr>
<tr>
<td>CIS 171</td>
<td>Local Area Networks</td>
<td>3</td>
</tr>
<tr>
<td>CIS 191</td>
<td>PC Hardware, Maintenance &amp; Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td>MATH 111</td>
<td>Elementary Statistics with Computer Applications</td>
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<tr>
<td>Elective</td>
<td>humanities</td>
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</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>CIS 201</td>
<td>Visual Basic for Windows 1</td>
<td>3</td>
</tr>
<tr>
<td>CIS 202</td>
<td>Visual Basic for Windows 11 or</td>
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<tr>
<td>CS 222</td>
<td>Programming in C</td>
<td>3</td>
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<tr>
<td>CAD 101</td>
<td>Computer Aided Design</td>
<td>3</td>
</tr>
<tr>
<td>FA 210</td>
<td>Computer Graphics or</td>
<td></td>
</tr>
<tr>
<td>CIS 115</td>
<td>Building Web Pages</td>
<td>3</td>
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<tr>
<td>Elective</td>
<td>natural science</td>
<td>3</td>
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<tr>
<td>Elective</td>
<td>social science</td>
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<td></td>
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</tr>
</tbody>
</table>

Total Credits Required 68

* Students with no keyboarding experience should take BOT 100A Keyboarding concurrently.

** Students may take CIS 159 Database Management: Access (3 credits) in place of CIS 156, 157, and 158.

Note: Students may elect to substitute CIS 270 Cooperative Work Experience, for any equivalent CIS credit course with prior departmental approval.
Microcomputer Processing, Certificate

Program Design
The Microcomputer Processing Certificate is principally designed for persons who wish to obtain a well rounded background in microcomputer skills to enhance career opportunities or personal productivity.

The student population for this program is likely to include:

- Managers of small offices who must be knowledgeable in all facets of microcomputer operations.
- Computer information systems graduates who wish to specialize in the microcomputer.
- Liberal Arts graduates who wish to develop technical skills in the microcomputer field.
- Students and graduates from business programs who wish to strengthen their résumé with technical microcomputer skills.
- Secretaries who would benefit from additional microcomputer technical training.
- Individuals seeking a career change or increased career mobility.
- Individuals seeking to develop their microcomputer skills for personal use.
- Mature employees seeking a career change or increased career mobility.
- Adult learners returning to the labor force who are interested in developing expertise in the microcomputer field.

Employment Opportunities
Individuals completing the certificate program may use the certificate to enhance their present career or to begin a new career.

Curriculum
This program can be completed on a part-time basis over a two year period. It can be completed in one year through full-time attendance. Some courses may only be offered in the evening. Not all courses are offered each semester so students should plan their schedule carefully. It is recommended that students have previous keyboarding experience.

The following is a suggested curriculum arrangement for those wishing to complete the certificate within one year.

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 106*</td>
<td>Windows 95</td>
</tr>
<tr>
<td>CIS 107</td>
<td>Advanced Windows 95</td>
</tr>
<tr>
<td>CIS 111**</td>
<td>Introduction to Computers</td>
</tr>
<tr>
<td>CIS 114</td>
<td>Exploring the Internet</td>
</tr>
<tr>
<td>CIS 125</td>
<td>Programming Logic and Design with BASIC</td>
</tr>
<tr>
<td>CIS 166</td>
<td>Application Software: EXCEL</td>
</tr>
</tbody>
</table>

**Total Credits Required 14**

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CIS 118</td>
<td>Presentation Software: PowerPoint</td>
</tr>
<tr>
<td>CIS 156</td>
<td>Database Applications I: ACCESS</td>
</tr>
<tr>
<td>CIS 157</td>
<td>Database Applications II: ACCESS</td>
</tr>
<tr>
<td>BOT 125</td>
<td>Introductory Word for Windows</td>
</tr>
<tr>
<td>CIS 171</td>
<td>Local Area Networks</td>
</tr>
<tr>
<td>CIS 191</td>
<td>PC Hardware, Maintenance and Troubleshooting</td>
</tr>
<tr>
<td>CIS 201</td>
<td>Visual Basic I for Windows</td>
</tr>
</tbody>
</table>

**Total Credits Required 27**

* Students with no keyboarding experience should take BOT 100A Keyboarding concurrently.

** Students may take this course during the regular semesters, summer session, or winter intersession.

For more Computer Information Systems programs see pages 33, 54, 59, and 65.
Multimedia Option,
Graphic Design Degree, A.S. Degree

Program Design
The purpose of the Graphic Design Multimedia Option is:
1. to provide a multimedia transfer program in the area of digital design with an emphasis on the computer as a tool for the creation of animated and interactive presentation;
2. to offer a degree program for those considering an entry level position in fields related to digital composition (animation, interactive programming, digital illustration).
3. to provide greater technical knowledge of the creative visual arts as they apply to multimedia design and production.

The program is structured to equip students with a sound foundation in technical skills, graphic design concepts, aesthetics, terminology and vocabulary and to provide awareness of the application of creative and critical thinking in the use of technical knowledge. A strong emphasis has been placed on the use of the computer as a production and composing tool.

The course of study demands students’ time and dedication, and will provide them with transfer and career choices based upon ability and achievement.

Employment Opportunities
Potential career opportunities for multimedia specialists include positions as digital animators, three-dimensional modelers, project specialists and managers, content experts, digital sound engineers, CD-ROM and game developers, and computer graphics artists.

Transfer Opportunities
Successful Graphic Design/Multimedia students will be able to transfer to such institutions as: University of Hartford, Rhode Island School of Design, School of Visual Arts, University of Connecticut and Pratt Institute. Presently, greater opportunities to continue a multimedia training program exist outside the state of Connecticut.

Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
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</tr>
<tr>
<td>FA 210</td>
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<tr>
<td>FA 121</td>
<td></td>
</tr>
<tr>
<td>FA 125</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>Social Science</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
<tr>
<td>ENG 120</td>
<td>Introduction to Literature</td>
</tr>
<tr>
<td>FA 105</td>
<td>History of 20th Century Art</td>
</tr>
<tr>
<td>COMM 211</td>
<td>Broadcast/TV Production</td>
</tr>
<tr>
<td>HIST 101</td>
<td>Western Civilization</td>
</tr>
<tr>
<td>FA 211</td>
<td>Computer Graphics II</td>
</tr>
<tr>
<td></td>
<td>16</td>
</tr>
<tr>
<td>COMM 176</td>
<td>Video/Filmmaking</td>
</tr>
<tr>
<td>FA 205</td>
<td>Graphic Design I</td>
</tr>
<tr>
<td>Elective</td>
<td>Humanities</td>
</tr>
<tr>
<td>FA 251</td>
<td>Computer Animation</td>
</tr>
<tr>
<td>Elective</td>
<td>Studio</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
<tr>
<td>FA 206</td>
<td>Graphic Design II</td>
</tr>
<tr>
<td>FA 252</td>
<td>Advanced Computer Animation</td>
</tr>
<tr>
<td>Elective</td>
<td>Liberal Arts &amp; Science</td>
</tr>
<tr>
<td>Elective</td>
<td>Liberal Arts &amp; Science</td>
</tr>
<tr>
<td>Elective</td>
<td>Natural Science</td>
</tr>
<tr>
<td>Elective</td>
<td>Studio or</td>
</tr>
<tr>
<td>FA 270</td>
<td>Cooperative Education/Work Experience</td>
</tr>
<tr>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

Total Credits Required 64
Multimedia Studies, A.S. Degree

Program Design
The purpose of the Multimedia Studies Program is:

1. to provide a multimedia transfer program in the area of digital design with an emphasis on the computer as a tool for the creation of animated and interactive presentation;
2. to offer a degree program for those considering an entry level position in fields related to digital composition (animation, interactive programming, digital illustration, Three-dimensional modelling, digital video production);
3. to provide greater technical knowledge of the creative visual arts as they apply to multimedia design and production.

The program is structured to equip students with a sound foundation in technical skills, design concepts, aesthetics, terminology and vocabulary and to provide awareness of the application of creative and critical thinking in the use of technical knowledge. A strong emphasis has been placed on the use of the computer as a production and composing tool.

The course of study demands students' time and dedication, and will provide them with transfer and career choices based upon ability and achievement.

Employment Opportunities
Potential career opportunities for multimedia specialists include positions as digital animators, three-dimensional modelers, project specialists and managers, content experts, digital sound engineers, special effects producers, CD-ROM and game developers, and computer graphics artists.

Transfer Opportunities
Successful Graphic Design/Multimedia students will be able to transfer to such institutions as: University of Hartford, Rhode Island School of Design, School of Visual Arts, University of Connecticut and Pratt Institute. Presently, greater opportunities to continue a multimedia training program exist outside the state of Connecticut.

Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
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</tr>
<tr>
<td>HIST 101</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>FA 125</td>
<td>Design</td>
<td>3</td>
</tr>
<tr>
<td>FA 210</td>
<td>Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>COMM 176</td>
<td>Video/Filmmaking or</td>
<td>3</td>
</tr>
<tr>
<td>COMM 210</td>
<td>Broadcast/TV Production</td>
<td>4</td>
</tr>
<tr>
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<td></td>
<td>15-16</td>
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<tr>
<td>ENG 120</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>MATH 106</td>
<td>Elements of Modern Math</td>
<td>3</td>
</tr>
<tr>
<td>FA 105</td>
<td>History of 20th Century Art</td>
<td>3</td>
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<tr>
<td>FA 211</td>
<td>Computer Graphics II</td>
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<tr>
<td>FA 251</td>
<td>Computer Animation I</td>
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<td>social science</td>
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<td></td>
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<tr>
<td>MM 201</td>
<td>Introduction to 3D Modelling</td>
<td>3</td>
</tr>
<tr>
<td>FA 252</td>
<td>Advanced Computer Animation</td>
<td>3</td>
</tr>
<tr>
<td>MM 205</td>
<td>Digital Video/On-Line Editing</td>
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<tr>
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<td>humanities</td>
<td>3</td>
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<td>15-16</td>
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<tr>
<td>MM 299</td>
<td>Special Topics</td>
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<tr>
<td>Elective*</td>
<td>Studio (Computer)</td>
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<td>Elective*</td>
<td>Studio (Computer)</td>
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<tr>
<td>Elective*</td>
<td>Studio (Computer)</td>
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<tr>
<td>Elective</td>
<td>liberal arts &amp; science</td>
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</table>

Total Credits Required 63-65

* Computer studio courses include Computer Graphics, Advanced Computer Graphics, Computer Animation, Advanced Computer Animation, 3D Modelling and Digital Video. These electives will permit a student to continue their computer training in the direction of their choice.
Music Option, Liberal Arts and Science,
A.A. Degree, A.S. Degree

Program Design
The Music Option to the Liberal Arts and Science Program, has two goals: preparing students to meet the demands of the music profession and enabling the nonprofessional to enjoy a more rewarding life as a serious lover of music.

Courses in the music curriculum offer a thorough preparation in music fundamentals, jazz and popular theory, history (classical and jazz), and performance. Individualized study with professional instrumental and vocal instructors is an important part of the curriculum. Each student plans his/her selection of courses with a member of the music faculty.

Special arrangements afford students the option of earning course credits at MCTC or the Hartford Camerata Conservatory and apply that credit toward the A.S. Degree at Manchester Community-Technical College. While completing the degree requirements for the associate’s degree, students receive support and advisement should they choose to transfer to another college or university to earn a bachelor’s degree.

Employment Opportunities
There is a steady demand for skilled musicians in rock, jazz and classical field, either as vocalists or instrumentalists as well as instructors and educators. There is also a demand for specialists in technology fields (i.e., acoustical design, computer graphics, systems developers for music software and hardware) who would benefit from a foundation in music. The Music Option Degree offers the building blocks for the pursuit of further study in music technology, arranging, composition or education.

Curriculum
Music students must complete the following curriculum to earn the associate’s degree. Students may enroll full- or part-time.

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
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</tr>
<tr>
<td>MUS 111</td>
<td>History and Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 121</td>
<td>Chorus or</td>
<td></td>
</tr>
<tr>
<td>MUS 123</td>
<td>Instrumental Ensemble</td>
<td>2</td>
</tr>
<tr>
<td>MUS 131</td>
<td>Private Music Lessons</td>
<td>2</td>
</tr>
<tr>
<td>MUS 211</td>
<td>Fundamentals</td>
<td>3</td>
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<tr>
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<td>natural science</td>
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<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ENG 120</td>
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</tr>
<tr>
<td>MUS 112</td>
<td>History and Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 122</td>
<td>Chorus or</td>
<td></td>
</tr>
<tr>
<td>MUS 124</td>
<td>Instrumental Ensemble</td>
<td>2</td>
</tr>
<tr>
<td>MUS 132</td>
<td>Private Music Lessons</td>
<td>2</td>
</tr>
<tr>
<td>MUS 201</td>
<td>Music Harmony &amp; Ear Training I</td>
<td>3</td>
</tr>
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<td>Elective</td>
<td>social science</td>
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<table>
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<th>Course Title</th>
<th>Credits</th>
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</thead>
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<tr>
<td>MUS 113</td>
<td>Today’s Music</td>
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</tr>
<tr>
<td>MUS 202*</td>
<td>Music Harmony &amp; Ear Training II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 221</td>
<td>Chorus or</td>
<td></td>
</tr>
<tr>
<td>MUS 223</td>
<td>Instrumental Ensemble</td>
<td>2</td>
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<tr>
<td>MUS 225**</td>
<td>Keyboard Harmony</td>
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<td>MUS 231</td>
<td>Private Music Lessons</td>
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<td>Elective</td>
<td>social science</td>
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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<td>Music Harmony &amp; Ear Training III</td>
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<tr>
<td>MUS 222</td>
<td>Chorus or</td>
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<tr>
<td>MUS 224</td>
<td>Instrumental Ensemble</td>
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<tr>
<td>MUS 226**</td>
<td>Keyboard Harmony</td>
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<td>MUS 232</td>
<td>Private Music Lessons</td>
<td>1-2</td>
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<tr>
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<td>Elective</td>
<td>natural science</td>
<td>3</td>
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<tr>
<td>Elective</td>
<td>social science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>17-18</td>
</tr>
</tbody>
</table>

* For students interested in studying at Hartford Camerata Conservatory MUS 213 and MUS 214 may be substituted for MUS 202 and MUS 203.

** May be completed at MCTC or Camerata Conservatory.
Occupational Therapy Assistant, A.S. Degree

Program Design
The Occupational Therapy Assistant Associate Degree Program enables the graduate to treat patients who are impaired by a physical illness or injury, an emotional disorder, a developmental disability, or the aging process. An occupational therapy assistant uses activities and modalities as treatment to help people gain optimal function in their everyday life tasks. They work under the supervision of an occupational therapist. Specific services that an occupational therapy assistant provides may include training in activities of daily living, fabrication of splints, adapting home and work environments and tools, and therapeutic use of crafts and games.

Employment Opportunities
Employment opportunities for the occupational therapy assistant exist in a variety of settings including nursing homes, hospitals, public schools and mental health facilities.

Scholastic Preparation and Admission Process★
If you are a high school graduate or hold a state equivalency certificate, you may submit an official application to the College Admissions Office. However, admissions to the Allied Health Programs require a separate application. Applications must be filed between Oct. 1 and Jan. 15 of the year prior to the September of the year in which entrance is desired. Complete information on specific criteria for acceptance and the procedure to apply is available from the Admissions Office or by calling 647-6140 after May 1 of each year and before January 15.

Admissions to the Occupational Therapy Assistant Program is selective to ensure the student’s ability to succeed in the academic and clinical aspects of the program. Academic preparation, a writing sample, and interview are measures that will be used to determine a students understanding of the profession, academic ability, ability to communicate, to think critically and to use appropriate interpersonal skills for patient care.

Curriculum
Because of the flexible nature of the program, students may select a full-time or part-time plan of study. Courses with an OTA designator are offered only during the day. Students with prior college credit may complete the program in a three-semester sequence. All coursework must be completed with a grade of C or better and a GPA of 2.5 must be maintained throughout the program. The clinical semester, which is offered both semesters, provides a four-month, full-time, supervised learning experience with a focus on psychosocial, physical, and developmental areas of practice. The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA’s phone number is (301) 652-AOTA. Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). When you apply to sit for the certification exam, you will be asked to answer questions related to the topic of felony convictions. For further information on these limitations, contact NBCOT. Connecticut requires a license in order to practice occupational therapy and the license is based on the results of the NBCOT Certification Examination.

Employment Opportunities
Employment opportunities for the occupational therapy assistant exist in a variety of settings including nursing homes, hospitals, public schools and mental health facilities.

Scholastic Preparation and Admission Process★
If you are a high school graduate or hold a state equivalency certificate, you may submit an official application to the College Admissions Office. However, admissions to the Allied Health Programs require a separate application. Applications must be filed between Oct. 1 and Jan. 15 of the year prior to the September of the year in which entrance is desired. Complete information on specific criteria for acceptance and the procedure to apply is available from the Admissions Office or by calling 647-6140 after May 1 of each year and before January 15.

Admissions to the Occupational Therapy Assistant Program is selective to ensure the student’s ability to succeed in the academic and clinical aspects of the program. Academic preparation, a writing sample, and interview are measures that will be used to determine a students understanding of the profession, academic ability, ability to communicate, to think critically and to use appropriate interpersonal skills for patient care.

Curriculum
Because of the flexible nature of the program, students may select a full-time or part-time plan of study. Courses with an OTA designator are offered only during the day. Students with prior college credit may complete the program in a three-semester sequence. All coursework must be completed with a grade of C or better and a GPA of 2.5 must be maintained throughout the program. The clinical semester, which is offered both semesters, provides a four-month, full-time, supervised learning experience with a focus on psychosocial, physical, and developmental areas of practice. The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA’s phone number is (301) 652-AOTA. Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). When you apply to sit for the certification exam, you will be asked to answer questions related to the topic of felony convictions. For further information on these limitations, contact NBCOT. Connecticut requires a license in order to practice occupational therapy and the license is based on the results of the NBCOT Certification Examination.

Employment Opportunities
Employment opportunities for the occupational therapy assistant exist in a variety of settings including nursing homes, hospitals, public schools and mental health facilities.

Scholastic Preparation and Admission Process★
If you are a high school graduate or hold a state equivalency certificate, you may submit an official application to the College Admissions Office. However, admissions to the Allied Health Programs require a separate application. Applications must be filed between Oct. 1 and Jan. 15 of the year prior to the September of the year in which entrance is desired. Complete information on specific criteria for acceptance and the procedure to apply is available from the Admissions Office or by calling 647-6140 after May 1 of each year and before January 15.

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Curriculum
Because of the flexible nature of the program, students may select a full-time or part-time plan of study. Courses with an OTA designator are offered only during the day. Students with prior college credit may complete the program in a three-semester sequence. All coursework must be completed with a grade of C or better and a GPA of 2.5 must be maintained throughout the program. The clinical semester, which is offered both semesters, provides a four-month, full-time, supervised learning experience with a focus on psychosocial, physical, and developmental areas of practice. The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA’s phone number is (301) 652-AOTA. Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a Certified Occupational Therapy Assistant (COTA). When you apply to sit for the certification exam, you will be asked to answer questions related to the topic of felony convictions. For further information on these limitations, contact NBCOT. Connecticut requires a license in order to practice occupational therapy and the license is based on the results of the NBCOT Certification Examination.

PUBLIC SPEAKING 213 3
AH 090 Allied Health Studies 0

TOTAL CREDITS REQUIRED 65

OPTIONAL COOPERATIVE EDUCATION COURSE
AH 270 Cooperative Education/Work Experience 3

* Prerequisite course to spring OTA courses.

** OTA students must complete Level II Fieldwork within 18 months of completion of academic preparation.

*** AH 270 is offered as an option for students who have a GPA of 2.0 and 15 credits completed towards their degree. Permission of Cooperative Education Director is required.

★ Students who do not meet the program entrance requirements should select appropriate courses from the Pre-Allied Health Program, an access program that provides courses and guidance to prepare the student for a career in the health field. (See page 20.)

▲ Must have been taken within last five years.

■ Must have been taken within last ten years.
Office Microcomputer, Certificate

Program Design
The Office Microcomputer Certificate is designed for students who wish to upgrade their computer skills in the area of office software. This certificate uses the Microsoft Office 97 software package as the vehicle for this skill development. Students will develop proficiency in the Windows 95 operating system, word processing, spreadsheet use, database creation and reporting, presentation development and using the Internet. With the rapid expansion of microcomputers in the business world, individuals with microcomputer skills are essential at all levels of office management from the receptionist to the office manager. This certificate will provide an educational opportunity for the student who wants to obtain skill training but does not want to move into the programming level of computer use.

Employment Opportunities
Students completing the Office Microcomputer Certificate will find employment opportunities in all areas of the business world. The certificate will enhance previous degrees and experience in all work areas. This certificate will be beneficial to presently employed office workers who wish to upgrade skills for promotions or to increase productivity in their office. The certificate will add to a person's marketability regardless of the field.

Curriculum

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 106*</td>
<td>Windows 95</td>
</tr>
<tr>
<td>CIS 107</td>
<td>Advanced Windows 95</td>
</tr>
<tr>
<td>CIS 114</td>
<td>Exploring the Internet</td>
</tr>
<tr>
<td>BOT 124</td>
<td>Word for Windows or</td>
</tr>
<tr>
<td>BOT 125</td>
<td>Introductory Word for Windows</td>
</tr>
<tr>
<td>BOT 126</td>
<td>Intermediate Word for Windows</td>
</tr>
<tr>
<td>BOT 127</td>
<td>Advanced Word for Windows</td>
</tr>
<tr>
<td>Total Credits Required 15</td>
<td></td>
</tr>
</tbody>
</table>

* Students with no keyboarding experience should take BOT 100A or BOT 107 concurrently.

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 118</td>
<td>Presentation Software: PowerPoint</td>
</tr>
<tr>
<td>CIS 156</td>
<td>Database Applications I: ACCESS</td>
</tr>
<tr>
<td>CIS 157</td>
<td>Database Applications II: ACCESS</td>
</tr>
<tr>
<td>CIS 158</td>
<td>Database Applications III: ACCESS</td>
</tr>
<tr>
<td>CIS 166</td>
<td>Application Software: EXCEL</td>
</tr>
<tr>
<td>Total Credits Required 15</td>
<td></td>
</tr>
</tbody>
</table>

For more Computer Information Systems programs see pages 33, 54, 59, and 60.
Paralegal, A.S. Degree

Program Design
A paralegal or legal assistant is a person qualified through education, training or work experience, who is employed or retained by a lawyer, law office, governmental agency or other entity. The paralegal works under the direction and supervision of an attorney, performing specifically delegated, substantive legal work.

Paralegals may be asked to conduct research and prepare memoranda; to draft pleadings, deeds or contracts; to interview clients or witnesses; to prepare answers to interrogatories; or to digest depositions. They may prepare inventories, accounts and tax returns in connection with estates and trusts; perform real estate title searches and UCC searches; or perform general office management or administrative functions.

The Paralegal Associate Degree Program includes specialized courses in the paralegal profession as well as related courses in business and liberal arts. An option in the program is a cooperative education/work experience course in which students gain practical experience in a legal setting while earning academic credit.

The MCTC Paralegal Association is an active student club that offers seminars throughout the year and distributes a newsletter to members.

The Paralegal Program has been approved by the American Bar Association since 1984. It is a member of the American Association for Paralegal Education.

Employment Opportunities
Graduates of the Paralegal Program are employed in corporate legal departments, in state government and in private law firms. Entry level salaries are generally in the low to mid-$20,000 range. The salary range for a paralegal employed as a Paralegal Specialist I by the State of Connecticut is $30,938 to $37,280. The 1995 NFPA Survey of Compensation and Benefits reported that the average base paralegal salary in the United States is $34,514.

National data from the U.S. Labor Department indicate that the paralegal field is expected to be the second fastest-growing occupation for the period of 1990-2005, measured in percentage growth.

Curriculum
The Paralegal Program offers both day and evening courses. Many students work full time while attending classes at night. Students should also note that not all courses are offered every semester, and some courses are only offered in the evening. Part-time students should see a counselor for suggested course sequencing.

Note: All legal courses require students to be eligible for ENG 111, or permission of the instructor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEGL 109</td>
<td>Introduction to Paralegalism</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 110</td>
<td>Legal Ethics and Professional Responsibility</td>
<td>1</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 101</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 111</td>
<td>American National Government or</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 112</td>
<td>State and Local Government</td>
<td>3</td>
</tr>
<tr>
<td>BOT 160</td>
<td>Wordperfect or</td>
<td>3</td>
</tr>
<tr>
<td>CIS 106</td>
<td>Windows 95 and</td>
<td>2</td>
</tr>
<tr>
<td>BOT 125</td>
<td>Introductory Word for Windows</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>LEGL 112</td>
<td>Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 221</td>
<td>Litigation</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>humanities</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>MATH (not 098 or 101) or</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>Quantitative Methods for Business Careers</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>LEGL 207</td>
<td>Real Estate Transactions</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 231</td>
<td>Wills, Trusts and Estate Administration</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 101</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>social science</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 211</td>
<td>Business Organizations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Elective</td>
<td>legal*</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>social science</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>natural science</td>
<td>3-4</td>
</tr>
<tr>
<td>Elective</td>
<td>legal*</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15-16</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits Required 62-63</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Electives should be selected from the following Legal courses:
- LEGL 205: Administrative Law
- LEGL 212: Introduction to Bankruptcy Law & Practice
- LEGL 214: Computer-Assisted Legal Research
- LEGL 215: Environmental Law
- LEGL 222: Family Law
- LEGL 225/CJ 225: Trial Techniques
- LEGL 226/CJ 226: Mock Trial Practicum
- LEGL 270: Cooperative Education/Work Experience
Paralegal, Certificate

Program Design
The Paralegal Certificate Program is designed for students who have or are obtaining an associate or baccalaureate degree in a major other than paralegal or legal studies. The certificate program provides them with the opportunity to enroll in a paralegal studies program which meets standards set by the American Bar Association, the National Federation of Paralegal Associations, and the American Association for Paralegal Education.

Employment Opportunities
An increasing number of employers require both a college degree and paralegal studies courses as requirements for employment. The certificate program will provide opportunities for those who have previously received, or are concurrently receiving, a degree in a different major to access the specific paralegal education courses in a cost-effective and timely manner. The combination of a degree and certificate will enhance career opportunities for graduates.

Curriculum
A student who applies for graduation from the Paralegal Certificate Program must provide proof that he/she has received, or will concurrently receive, an associate or baccalaureate degree in a major other than paralegal or legal studies from an accredited institution.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 101</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 109</td>
<td>Introduction to Paralegalism</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 110</td>
<td>Legal Ethics and Professional Responsibility</td>
<td>1</td>
</tr>
<tr>
<td>LEGL 112</td>
<td>Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 207</td>
<td>Real Estate Transactions</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 211</td>
<td>Business Organizations</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 221</td>
<td>Litigation</td>
<td>3</td>
</tr>
<tr>
<td>LEGL 231</td>
<td>Wills, Trusts and Estate Administration</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>legal*</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>legal*</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits Required 28

* Electives should be selected from the following Legal courses:
  LEGL 205: Administrative Law
  LEGL 212: Introduction to Bankruptcy Law & Practice
  LEGL 214: Computer-Assisted Legal Research
  LEGL 215: Environmental Law
  LEGL 222: Family Law
  LEGL 270: Cooperative Education/Work Experience
**Personal Financial Planning, Certificate**

**Program Design**
The Personal Financial Planning Certificate Program is principally designed for individuals employed in financial planning or in areas related to the financial services industry. Students entering this program are assumed to have a business foundation gained either through college instruction or on-the-job learning.

Student population for this program is likely to include:

- Financial planning practitioners looking to update and strengthen their knowledge or broaden their base.
- Practitioners interested in earning the CFP® professional designation.
- Employees in financial institutions seeking professional development.
- Mature employees seeking a career change.
- Liberal arts college graduates seeking courses in financial planning.
- Students and graduates from business programs who are interested in financial planning courses not offered by their institutions.
- Adult learners returning to the labor force who are interested in working in the financial services industry.

Students who complete each course successfully and who meet all other certification requirements may be eligible to sit for the national Certified Financial Planner (CFP) exam, administered by the CFP® Board of Standards.

To sit for this comprehensive exam, a student must complete a minimum of 60 semester credit hours of college level education and a fee must be paid to the CFP. **Anyone considering seeking the CFP designation must meet individually with the program coordinator to be advised of CFP procedures and certification requirements.**

**Employment Opportunities***
Graduates find career opportunities as self-employed financial planners or in the fields of banking, insurance, investments, accounting, tax return preparation, employee benefits departments, trust management, portfolio management, and mutual fund sales.

**Curriculum**
The program may be completed on a part-time basis over three regular semesters. Evening courses will be offered during the fall and spring semesters.

Students should have a financial calculator capable of computing internal rate of return (IRR) to successfully complete the program.

Students are encouraged to take ACCT 101 (Financial Accounting) before taking the finance courses listed below. **Note: Students enrolled in the Personal Financial Planning Certificate Program may be interested in a dual certificate in Taxation. Please see the Taxation Certificate requirements in this catalog. People coming from a non-business background should seek the counseling of the department chairperson.**

**Credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNCE 210</td>
<td>Fundamentals of Personal Financial Planning</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 220</td>
<td>Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 230**</td>
<td>Investment Management</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 226</td>
<td>Introduction to Taxation &amp; Financial Planning</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 250</td>
<td>Retirement Planning and Employee Benefits</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 260</td>
<td>Estate Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credits required 18

* With the completion of two (2) additional courses, students may complete a dual certificate in taxation and sit for the Enrolled Agent Examination. Please see page 75 for more details.

**ACCT 101, Financial Accounting is a prerequisite for FNCE 230.**

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**Taxation, Certificate**

**Program Design**
The Taxation Certificate Program is designed specifically for students interested in taking the examination to become an Enrolled Agent. Such a designation allows one to represent tax clients at the first level of the Federal Tax Court. This program is of special interest to public accountants and other tax preparers.

**Curriculum**
Students may enroll full- or part-time. ACCT 101 (Financial Accounting) is a prerequisite for ACCT 223 and must be completed with a grade of C- or better.

**Credits**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 223</td>
<td>Federal Taxes</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 224</td>
<td>Advanced Federal Taxes</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 226</td>
<td>Introduction to Taxation and Financial Planning</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 210</td>
<td>Fundamentals of Personal Financial Planning</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 230</td>
<td>Investment Management or Retirement Planning &amp; Employee Benefits</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Credits Required 15
Physical Therapist Assistant,
A.S. Degree

Description
The Physical Therapist Assistant (PTA) Associate Degree Program prepares students to function in health care settings as an entry level practitioner within the boundaries and scope of practice of a physical therapist assistant and under the supervision of a physical therapist. PTA’s practice in hospitals, school systems, private offices, home health agencies, industry, rehabilitation hospitals and nursing homes.

Program Design
The program is offered through a collaborative arrangement between Capital Community-Technical College, Manchester Community-Technical College, Northwestern Community-Technical College, and Tunxis Community-Technical College. The two year course of studies begins in January and includes a minimum of 67 credits in science, mathematics, psychology, social sciences and humanities. Seven physical therapy courses, which have a strong foundation in the sciences and in professional practice standards are also required. Twelve credits are earned during the final semester in clinical practicums. These are done in physical therapy clinics which affiliate with this PTA program. All physical therapy classes are held during the day at Naugatuck Valley Community-Technical College in Waterbury and the clinical practicums require 40 hours of attendance weekly throughout that semester. Non-professional courses will be taken at Manchester Community-Technical College.

Employment Opportunities
The employment picture for the PTA is very optimistic. The American Physical Therapy Association reports that, while there are over 90,000 physical therapists practicing in the United States, there are an estimates 102,000 jobs available. Therefore, the demand for qualified physical therapy practitioners remains high. Job opportunities in Connecticut remain good.

Scholastic Preparation and Admissions Process*
The PTA Program relies on a selective admissions process which uses specific admissions criteria. These criteria are available through the admissions office in each college and include course work in algebra, chemistry or physics, and college level anatomy and physiology. Interested candidates will be expected to have a history of academic success, particularly with science courses. When the applications are evaluated, only the strongest candidates will be considered for an interview by the Admissions Committee. The student will need to demonstrate the skills necessary to become a PTA. The deadline for application is October 1 and the classes will begin in January each year. For more information about admission into this program, contact the Health Careers Office in the Faculty West building, (860) 647-6236.

Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 153 Human Anatomy &amp; Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>ENG 111 College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 111 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PT 101 Introduction to Physical Therapy</td>
<td>3</td>
</tr>
<tr>
<td>PT 102 Therapeutic Techniques in Physical Therapy</td>
<td>4</td>
</tr>
<tr>
<td>PT 106 Introduction to the Physical Therapy Clinic</td>
<td>1</td>
</tr>
<tr>
<td>COMM/SPCH 213 Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ENG 120 Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>Elective** mathematics</td>
<td>3/4</td>
</tr>
<tr>
<td>PT 110 Modalities in Physical Therapy</td>
<td>4</td>
</tr>
<tr>
<td>PT 111 Kinesiology</td>
<td>4</td>
</tr>
<tr>
<td>Elective arts/humanities</td>
<td>3</td>
</tr>
<tr>
<td>Elective social science</td>
<td>3</td>
</tr>
<tr>
<td>PT 201 Therapeutic Exercise</td>
<td>4</td>
</tr>
<tr>
<td>PT 202 Human Development and Pathology</td>
<td>3</td>
</tr>
<tr>
<td>PT 210 Physical Therapist Assistant Seminar</td>
<td>4</td>
</tr>
<tr>
<td>PT 211 Clinical Practicum I</td>
<td>4</td>
</tr>
<tr>
<td>PT 212 Clinical Practicum II</td>
<td>4</td>
</tr>
<tr>
<td>PT 213 Clinical Practicum III</td>
<td>4</td>
</tr>
<tr>
<td>** Total Credits Required 67-68</td>
<td></td>
</tr>
</tbody>
</table>

Accreditation
One requirement for registration or licensure to work as a PTA is graduation from a program of education accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association. Naugatuck Valley Community-Technical College has been granted full accreditation by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association, 1111 North Fairfax St., Alexandria, VA 22314, (703) 684-2782. The program has been licensed by the Connecticut Board of Governors Higher Education.

* Students who do not meet the program entrance requirements should select appropriate courses from the Pre-Allied Health Program, an access program that provides courses and guidance to prepare the student for a career in the health field. (See page 20.)

** MATH 102 or higher, MATH 110 or MATH 111 recommended.
Public Relations, Certificate

Program Design
The Certificate Program in Public Relations, bridging the disciplines of communications and business, is designed to appeal to several populations: new students considering a degree program in communications; employees in other areas of communications seeking retraining, and students with associate or bachelor degrees seeking rapid certification in the skills necessary for entry-level positions in public relations.

The program is designed for maximum flexibility. Students who are already proficient in specific areas of communication or technology will be able to fill in the voids in their training by customizing their courses to their individual needs. Similarly, students seeking a broad range of training in all areas relevant to public relations, including marketing, written and oral communications, videography, desktop publishing and graphics, will achieve a generalist's knowledge.

Employment Opportunities
The field of public relations, while competitive, remains an area of growth in Connecticut, according to the state Department of Labor. Work in public relations is generally more stable geographically than that in other media, making it attractive to older, established employees. Entry-level salaries are generally higher than those in other media; the annual median salary nationwide is $44,000.

Transfer Opportunities
Most courses in the certificate program would be transferable to a two- or four-year degree program and all are transferable to the MCTC Communication Degree program.

Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 201</td>
<td>Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>COMM 290</td>
<td>Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>COMM 291</td>
<td>Advanced Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>FA 205</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>COMM 281</td>
<td>Basic Newswriting</td>
<td>3</td>
</tr>
<tr>
<td>COMM 176</td>
<td>Film/Videomaking</td>
<td>3</td>
</tr>
<tr>
<td>COMM 270</td>
<td>Cooperative Education/Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>English composition elective (consult advisor) Choose from ENG 111, or ENG 112 or ENG 114</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 203</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>business elective: Choose from BUS 121, BUS 122 or BUS 240</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits Required 30
Respiratory Care, A.S. Degree

Program Design
The Respiratory Care Associate Degree Program provides training in respiratory care, a health care specialty that concentrates on the areas of prevention, treatment, management and rehabilitation of people with lung disorders. Respiratory Therapists are involved in a variety of life-saving situations, working side by side with nurses, doctors and other health care providers and treating patients ranging in age from the newborn to the elderly. Using sophisticated equipment, therapists help people with such diseases as asthma, bronchitis and emphysema. Therapists are regarded as experts on the respiratory and cardiac systems and are often called upon for advice and help in deciding which course of care to prescribe.

Employment Opportunities
The profession has grown since its inception in the late 1940s making the Respiratory Therapist a valuable staff member in medical institutions. Employment opportunities exist in a variety of settings including hospitals, skilled nursing facilities and patient homes. Starting salaries are $31,000-$35,000 depending on the shift worked and geographic area.

Scholastic Preparation and Admission Process*
Students seeking admission to the Respiratory Care Program should have completed one course each in algebra, biology and chemistry, either in high school or at the college level. A tour of one of the hospital affiliates is strongly recommended. Students will need to demonstrate the skills necessary to become a Respiratory Therapist. Admission to the Respiratory Care Program requires a separate application. Applications must be filed between Oct. 1 and Jan. 15 of the year prior to the September of the year in which you hope to be accepted. However, applications will be accepted after Jan. 15 provided openings are available. Complete information on specific criteria for acceptance and the admission process is available from the Admissions Office or by calling 647-6140 or the program coordinator at 647-6193.

Accreditation
The program is accredited by the Commission on Accreditation of Allied Health Education Programs.

** Students who do not meet the program entrance requirements should select appropriate courses from the Pre-Allied Health Program, an access program that provides courses and guidance to prepare the student for a career in the health field. (See page 20.)

*** AH 090 is recommended as a preparation for this program.

*** AH 270 is offered as an option for students who have a GPA of 2.0 and 15 credits completed towards their degree. Permission of Cooperative Education Director is required.

Curriculum**
The program begins each September and continues through two years, including the summer semester. Classes with an RC designation and clinical experience are offered during the day. Beginning with the second semester of the program, students will train at the hospitals every week in conjunction with classes held at the College. Beginning with the second year, the clinical component requires full time study. Hospital affiliates include Baystate Medical Center, Hartford Hospital, St. Francis Hospital and Medical Center, Manchester Memorial Hospital, New Britain General Hospital and the Hospital for Special Care. All hospital training is supervised by trained clinical instructors. After graduating from the program, students are eligible to take the entry level examination offered by the National Board for Respiratory Care. A physician's examination and an immunization record are required of all students prior to beginning clinical rotations. Students are responsible for hospital parking fees, uniforms, clinical supplies, e.g. stethoscopes, assessment examinations, and miscellaneous expenses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 152</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 110</td>
<td>4</td>
</tr>
<tr>
<td>ENG 111</td>
<td>3</td>
</tr>
<tr>
<td>RC 201</td>
<td>1</td>
</tr>
<tr>
<td>RC 221</td>
<td>3</td>
</tr>
<tr>
<td>RC 241</td>
<td>3</td>
</tr>
<tr>
<td>BIO 153</td>
<td>4</td>
</tr>
<tr>
<td>RC 202</td>
<td>1</td>
</tr>
<tr>
<td>RC 211</td>
<td>3</td>
</tr>
<tr>
<td>RC 222</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>BIO 141</td>
<td>4</td>
</tr>
<tr>
<td>RC 205</td>
<td>2</td>
</tr>
<tr>
<td>RC 261</td>
<td>3</td>
</tr>
<tr>
<td>RC 283</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>COM/SPCH 213</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 111</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 111</td>
<td>3</td>
</tr>
<tr>
<td>RC 204</td>
<td>2</td>
</tr>
<tr>
<td>RC 251</td>
<td>3</td>
</tr>
<tr>
<td>RC 282</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>BIO 141</td>
<td>4</td>
</tr>
<tr>
<td>RC 205</td>
<td>2</td>
</tr>
<tr>
<td>RC 261</td>
<td>3</td>
</tr>
<tr>
<td>RC 283</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

OPTIONAL COOPERATIVE EDUCATION COURSE
AH 270*** Cooperative Education/Work Experience 3

Total Credits Required 68
Social Service, A.S. Degree

Program Design
The Social Service Associate Degree program is designed to prepare students for diverse employment opportunities and to provide a foundation for further academic pursuit. Additionally, the program includes field placement opportunities which provide students with “hands on” exposure to the helping professions.

Employment Opportunities
Social service workers with earned associate degrees are employed in a multitude of areas including but not limited to residential treatment centers, shelters, group homes, and child guidance clinics. They work under a variety of titles such as job coach, shelter manager, child care worker and victim advocate.

Curriculum
Students may enroll in this program full- or part-time. They can begin the program any semester and include field work at off-campus sites as part of their program.

<table>
<thead>
<tr>
<th>Credits</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ENG 111 College Reading and Writing</td>
</tr>
<tr>
<td>3</td>
<td>HS 101 Introduction to Human Services</td>
</tr>
<tr>
<td>3</td>
<td>PSYC 111 General Psychology</td>
</tr>
<tr>
<td>3</td>
<td>SOC 101 Introductory Sociology</td>
</tr>
<tr>
<td>3-4</td>
<td>Elective* natural science</td>
</tr>
<tr>
<td>15-16</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>ENG 112 Reading &amp; Writing for Academic Research</td>
</tr>
<tr>
<td>3</td>
<td>HS 152 Work with Individuals and Families</td>
</tr>
<tr>
<td>3</td>
<td>PSYC 124 Developmental Psychology</td>
</tr>
<tr>
<td>3-4</td>
<td>Elective* natural science</td>
</tr>
<tr>
<td>3</td>
<td>Elective* social science</td>
</tr>
<tr>
<td>15-16</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits Required 60-62

* Students are to meet with the program coordinator before choosing electives.

Social Service, Certificate

Program Design
The Certificate Program is designed for students seeking short-term academic and in-service professional development, and for those with extensive social service experience or an academic degree.

Curriculum

<table>
<thead>
<tr>
<th>Credits</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>HS 101** Introduction to Human Services</td>
</tr>
<tr>
<td>3</td>
<td>HS 152 Work with Individuals and Families</td>
</tr>
<tr>
<td>3</td>
<td>HS 201 Work with Groups</td>
</tr>
<tr>
<td>3</td>
<td>HS 252 Work with Agencies and Communities</td>
</tr>
<tr>
<td>3</td>
<td>HS 292*** Field Experience II or SOSC 270 Cooperative Education/Work Experience</td>
</tr>
<tr>
<td>3</td>
<td>Elective* social science</td>
</tr>
<tr>
<td>3</td>
<td>Elective* social science</td>
</tr>
<tr>
<td>3</td>
<td>Elective* social science</td>
</tr>
<tr>
<td>3-4</td>
<td>Elective* natural science</td>
</tr>
<tr>
<td>15-16</td>
<td>Elective* social science</td>
</tr>
</tbody>
</table>

Total Credits Required 30

** Students with several years work experience in human services may request credit by examination for HS 101 or credit by experience for HS 291.

*** All students must complete HS 291: Field Experience I.

Division of Social Science & Hospitality: 860/847-6103
Sport and Exercise Studies, A.S. Degree

Program Design
This program is designed for students interested in transferring to a baccalaureate college or university in preparation for opportunities as physical education teachers, athletic trainers, corporate fitness coordinators, wellness coordinators, recreation majors and coaches. The program may be utilized by students who choose to complete an associate degree and then obtain employment.

Employment Opportunities
Sport and Exercise Studies (sport, health, fitness, exercise, wellness) is fast becoming an emerging career field with steady growth in the state and across the country. The program has been designed to allow students a choice in a number of career fields. The program will prepare students for transfer and job opportunities in areas such as:
- physical education (teaching)
- sports medicine/athletic training
- exercise physiology
- health/wellness management
- corporate fitness
- community fitness
- sport management
- health education
- health promotion
- recreation

Transfer Opportunities
The program may be utilized to complete a transfer into colleges such as Central Connecticut State University, University of Connecticut and Eastern Connecticut State University. These colleges were identified because of the programs they offer, their proximity to Manchester Community-Technical College and transfer articulation opportunities. Since the curriculum of colleges to which transfer is desired sometimes varies greatly, students who plan to transfer should select a transfer institution early, and consult with the program coordinator regarding their choice of electives and the transferability of courses.

Curriculum
Students may select a full- or part-time plan, attending day or evening. The program includes six core courses that apply specifically to sport and exercise studies, 11 liberal arts and science courses with an emphasis on the sciences, and seven elective courses. Students who complete the program will receive certificates in adult CPR, standard first aid, sport injury module, and coaching from the state of Connecticut.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 152</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Operating a Microcomputer</td>
<td>1</td>
</tr>
<tr>
<td>HPE</td>
<td>Skills Course</td>
<td>1</td>
</tr>
<tr>
<td>HPE 141</td>
<td>Principles and Practices of Sport</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>HPE 165*</td>
<td>Professional Practicum</td>
<td>1-3</td>
</tr>
<tr>
<td>HPE 160</td>
<td>First Aid and Safety</td>
<td>2</td>
</tr>
<tr>
<td>SOSC 110</td>
<td>Introduction to Wellness</td>
<td>3</td>
</tr>
<tr>
<td>HPE 120</td>
<td>Physiology of Fitness</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>liberal arts and science</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>social science</td>
<td>3</td>
</tr>
<tr>
<td>HIST 202</td>
<td>United States History II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 106</td>
<td>Elements of Modern Math</td>
<td>3</td>
</tr>
<tr>
<td>HPE</td>
<td>Skills Course</td>
<td>1</td>
</tr>
<tr>
<td>HPE 140</td>
<td>Medical Aspects of Sport</td>
<td>2</td>
</tr>
<tr>
<td>HPE 161</td>
<td>Physical Fitness and Exercise</td>
<td>2</td>
</tr>
<tr>
<td>Elective**</td>
<td>liberal arts and science</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>social science</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits Required 66-68

* Optional work experience. Prerequisite: 12 credit hours in HPE and permission of coordinator. May also be taken as SOSC 270: Cooperative Education/Work Experience.

** COMM/SPCH 213 recommended.
Surgical Technology, A.S. Degree

Description
The Surgical Technology Associate Degree Program prepares students to be a member of a surgical team, trained to work primarily in the operating room (OR) either as a scrub or circulating technologist. In either role, the surgical technologist is responsible for maintaining a sterile environment and for the observation and reporting of data.

A scrub technologist prepares the OR for use and hands instruments to the surgeon during surgery. A circulating technologist coordinates an OR, positions patients, secures necessary supplies, and assists in patient care.

Program Design
Surgical technology students spend several days each week taking academic courses at the College; other days in clinical training are full-time.

The Program begins each September and continues through 21 months, including a required full-time summer session. Surgical Technology (ST) classes and clinical rotations are scheduled only during the day. Various special expenses are associated with this program, such as uniforms, shoes, key deposit and parking.

Graduates are eligible and encouraged to take an examination given by the Association of Surgical Technologists to achieve the status of Certified Surgical Technologist.

Employment Opportunities
The employment outlook for surgical technologists is excellent. Graduates may be employed in a hospital OR, surgeon’s office, delivery room, emergency room or outpatient clinic. With experience a surgical technologist may also be employed as an instructor or scheduling supervisor in an OR department. Most surgical technologists work eight hours a day, five days a week, and may be on call for emergency work at other times. Some hospitals require shift rotations to insure adequate staffing for nights, weekends and holidays.

Starting salaries will vary with specific employers and geographic locations.

Scholastic Preparation and Admission Process*
Students seeking admission to the Surgical Technology Program should have completed one biology laboratory course at the high school or college level and two years of algebra or algebra and geometry in high school or a basic algebra course in college. Medically related experience either through employment or volunteering is strongly recommended. Students will need to demonstrate the skills necessary to become a surgical technologist. Admission to the Surgical Technology Program requires a separate application which must be filed between October 1 and January 15 prior to the fall semester in which the student wishes to be admitted to ST classes. A packet which contains further information and the application forms is available from the college Admissions Office or by calling 647-6236.

Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 141</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 153</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>ENG 120</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>ST 102</td>
<td>Operating Room Procedures II</td>
<td>4</td>
</tr>
<tr>
<td>ST 106</td>
<td>Seminar in Surgery</td>
<td>2</td>
</tr>
<tr>
<td>ST 220</td>
<td>Clinical Experience I</td>
<td>2</td>
</tr>
<tr>
<td>ST 222</td>
<td>Clinical Experience II</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>liberal arts and science</td>
<td>3</td>
</tr>
<tr>
<td>BIO 201</td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>COMM/SPCH 213</td>
<td>Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ST 224</td>
<td>Clinical Experience III</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>liberal arts and science</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Credits Required 66-68

Optional Cooperative Education Course

| AH 270** | Cooperative Education/Work Experience     | 3       |

Accreditation
This program is accredited by the Accreditation Review Committee on Education in Surgical Technology and the Commission on Accreditation of Allied Health Education Programs.

* Students who do not meet the program entrance requirements should select appropriate courses from the Pre-Allied Health Program, an access program that provides courses and guidance to prepare the student for a career in the health field. (See page 20.)

** AH 270 is offered as an option for students who have a GPA of 2.0 and 15 credits completed towards their degree. Permission of Cooperative Education Director is required.
Taxation, Certificate

Program Design
The Taxation Certificate Program is designed specifically for students interested in taking the examination to become an Enrolled Agent. Such a designation allows one to represent tax clients at the first level of the Federal Tax Court. This program is of special interest to public accountants and other tax preparers.

Employment Opportunities
The Occupational Outlook projects job openings in Connecticut for tax preparers and examiners to increase through 2005. The earnings of tax preparers vary and depend on the number of clients served and fees charged.

Curriculum
Students may enroll full- or part-time. ACCT 101 (Financial Accounting) is a prerequisite for ACCT 223 and must be completed with a grade of C- or better.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 223</td>
<td>Federal Taxes</td>
</tr>
<tr>
<td>ACCT 224</td>
<td>Advanced Federal Taxes</td>
</tr>
<tr>
<td>ACCT 226</td>
<td>Introduction to Taxation and Financial Planning</td>
</tr>
<tr>
<td>FNCE 210</td>
<td>Fundamentals of Personal Financial Planning</td>
</tr>
<tr>
<td>FNCE 230</td>
<td>Investment Management or</td>
</tr>
<tr>
<td>FNCE 250</td>
<td>Retirement Planning &amp; Employee Benefits</td>
</tr>
</tbody>
</table>

Total Credits Required 15

Note: Students enrolled in the Taxation Certificate Program may be interested in a dual certificate in Personal Financial Planning. Please see the Personal Financial Planning Certificate Program requirements in this catalog. Please see page 68 for more details.

Personal Financial Planning, Certificate

Curriculum
The program may be completed on a part-time basis over three regular semesters. Evening courses will be offered during the fall and spring semesters.

Students should have a financial calculator capable of computing internal rate of return (IRR) to successfully complete the program.

Students are encouraged to take ACCT 101 (Financial Accounting) before taking the finance courses listed below. Note: Students enrolled in the Personal Financial Planning Certificate Program may be interested in a dual certificate in Taxation. Please see the Taxation Certificate requirements in this catalog. People coming from a non-business background should seek the counseling of the department chairperson.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNCE 210</td>
<td>Fundamentals of Personal Financial Planning</td>
</tr>
<tr>
<td>FNCE 220</td>
<td>Risk Management</td>
</tr>
<tr>
<td>FNCE 230**</td>
<td>Investment Management</td>
</tr>
<tr>
<td>ACCT 226</td>
<td>Introduction to Taxation &amp; Financial Planning</td>
</tr>
<tr>
<td>FNCE 250</td>
<td>Retirement Planning and Employee Benefits</td>
</tr>
<tr>
<td>FNCE 260</td>
<td>Estate Planning</td>
</tr>
</tbody>
</table>

Total credits required 18

** ACCT 101, Financial Accounting is a prerequisite for FNCE 230.
Program Design
The Theatre Option under the Liberal Arts and Science Program, prepares students to transfer as theatre majors to a baccalaureate institution, to pursue theatre as lifelong avocation, or to enter a career in theatre.

Courses in acting, play production, and playwriting emphasize practical skills useful in the theatre, and in life beyond. Introduction to Theatre, and Survey of Drama show the evolution of present practices and literature. General education courses in the theatre curriculum are designed to enrich the degree student. All theatre students test and extend their skills by participating in Theatre Wing productions.

Employment Opportunities
Competition for jobs in theatre is heavy. A few MCTC students have gone directly to work in the theatre, acting in semi-professional companies, or stage managing in off-Broadway or regional theatres. Most students pursuing theatrical careers transfer to baccalaureate institutions and often continue their studies in advanced degree programs.

But a theatrical career is not the program’s major goal. Theatre is the most wide-ranging of the liberal arts disciplines, reaching from the self-awareness and persuasiveness learned in acting class to the carpentry skills learned in stagecraft class, from insights into human psychology gained in dramatic literature class, to writing skills practiced in playwriting, or personal management learned under fire in the heat of a production. The Theatre Program is aimed at producing the well-rounded, tested individual with good communication skills that employers increasingly prefer over the specialist.

Curriculum
Theatre students must complete the following curriculum to earn the Associate in Science Degree. (If a full year in a foreign language is substituted for the humanities electives, the degree awarded will be the Associate in Arts.) Students may enroll in this program full- or part-time.

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 College Reading and Writing</td>
</tr>
<tr>
<td>THEA 111 Introduction to Theatre</td>
</tr>
<tr>
<td>THEA 181 Acting I</td>
</tr>
<tr>
<td>COMM/SPCH 213 Effective Speaking</td>
</tr>
<tr>
<td>Elective</td>
</tr>
<tr>
<td>Elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 120 Literature</td>
</tr>
<tr>
<td>THEA 195 Play Production</td>
</tr>
<tr>
<td>THEA 182* Acting II</td>
</tr>
<tr>
<td>Elective humanities</td>
</tr>
<tr>
<td>Elective natural science</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

In addition to the above, students must take 3 credits of THEA 201: Theatre Practicum during their tenure in the program. This course may be repeated for up to a maximum of six credit hours.

Total Credits Required 60-63

* Majors must take either THEA 182 or THEA 281, or they may take both.
Therapeutic Recreation, Certificate

Program Design
The Therapeutic Recreation Certificate program is designed for persons who seek academic and in-service professional development in the field of therapeutic recreation. This program enables the student to meet standards established in the Public Health Code of the state of Connecticut to work in chronic and convalescent nursing homes and other facilities with nursing supervision.

Therapeutic recreation is a specialized allied health field within the recreation profession. Associated with leisure aspects of medical treatment, therapeutic recreation attempts to physically and socially rehabilitate patients who have chronic physical, psychological, and social handicaps. It involves recreation services that give the patient an opportunity to participate in recreational, leisure and group activities specifically designed to aid in the recovery or adjustment to illness, disability or a specific social problem.

Employment Opportunities
The certificate enables students to be eligible for employment as a therapeutic recreation program director in a skilled and/or intermediate care facility within the state of Connecticut. Other employment opportunities include adult daycare centers, assisted living facilities, group homes and senior centers. The certificate provides a foundation for future professional training and education in the field of therapeutic recreation.

Curriculum
Students may enroll in this certificate program full- or part-time and attend classes days or evenings.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRC 115</td>
<td>Introduction to Principles of Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>THRC 116</td>
<td>Processes and Techniques in Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>THRC 215</td>
<td>Therapeutic Recreation Programs: Planning and Implementation</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 111</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 124</td>
<td>Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOSC 270</td>
<td>Cooperative Education/Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>Choose from Human Service, Psychology or Sociology</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>Choose from Fine Arts, Music, Theatre, Health and Physical Education or SOSC 110: Introduction to Wellness</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits Required 30
Visual Fine Arts, A.A. Degree

Program Design
For those students seeking a professional career, the Visual Fine Arts Program offers a transfer-oriented course of studies that leads to enrollment in an art school or other baccalaureate institution. Careers in commercial art, art education and fine arts are open to graduates with bachelor’s degrees.

The Visual Fine Arts Program also serves an ever expanding population of students seeking personal enjoyment in the creative process. Technical expertise and aesthetic theory are offered to those who pursue art as an avocation.

Employment Opportunities
Potential career opportunities for fine arts students include positions in the commercial field, in art education, and in fine arts fields. Commercial artists are highly sought after in the competitive profession of advertising. Other commercial opportunities range from computer graphics to illustrator or sign painter.

Transfer Opportunities
Fine arts students have transferred to art schools, colleges and universities from Maine to California. Our students have been accepted with advanced standing at the Rhode Island School of Design, Pratt Institute, San Francisco Art Institute, Syracuse University, Massachusetts College of Art, and Chicago Art Institute as well as the University of Connecticut and University of Hartford.

Our fine arts graduates are now working as professional commercial artists, teaching at every level from elementary school to college, operating their own pottery studios, and exhibiting as fine artists.

Curriculum
Students may enroll in this program full- or part-time. There are no requirements or prerequisites for students wishing to take art courses part-time or as electives for other programs.

Fine arts faculty members are available for consultation with students who wish to enroll in the program and thereafter for course selection and transfer information.

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<th>Course Code</th>
<th>Course Name</th>
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<td>ENG 111</td>
<td>College Reading and Writing</td>
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<td>FA 105</td>
<td>History of 20th Century Art</td>
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<td>FA 121*</td>
<td>Drawing or Drawing</td>
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<td>FA 127</td>
<td>Figure Drawing</td>
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<td>FA 125</td>
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<td>ENG 120</td>
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<td>FA 101***</td>
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<td>FA 131</td>
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<td>FA 151</td>
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<td>FA 102***</td>
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Total Credits Required 60

* At least two semesters of Drawing are strongly recommended.
* * Social science electives may not exceed two courses in a subject.
*** Either FA 101 or FA 102 is required, but not both.
Courses

The courses in this section are grouped by subjects which are listed alphabetically. Within each subject group, the courses are listed in numerical order, the lowest first and the highest last.

Courses with numbers 099 and below are non-credit courses. Courses with numbers in the 100-199 range are considered first-year courses. Courses numbered 200 or higher are considered second-year courses.

The semester in which a course is generally offered is indicated by the codes: Fa = Fall, O = Occasional, Sp = Spring, and Su = Summer. Students and their advisors may use these designations in determining course selection for any particular semester.

Electives are credit courses selected by the student to supplement the required courses in a program of study. There are five kinds of electives and are indicated by the codes: business = B, humanities = H, liberal arts and sciences = L, natural science = N, and social science = S.

A complete list of the courses being offered is published each semester in the class schedule which is available in the Registrar’s Office. A list of current Continuing Education courses is available in the Continuing Education Office. Course offerings are subject to change.

Accounting

All accounting courses numbered 100 or higher require students to be eligible for ENG 111 and MATH 101 or higher.

ACCT 098: Introduction to Accounting
This course is designed to introduce students to accounting theory. Emphasis in the course includes the accounting cycle, bank checking accounts, and payroll. [O] no credit

ACCT 101: Financial Accounting
Theory and practice of accounting applicable to the accumulation, external reporting, and internal uses of financial accounting information. [B] (Fa,Sp) 4 credits

ACCT 102: Managerial Accounting
Basic concepts and practice of Accounting’s role in providing information to managers to assist in their planning, control and decision-making activities. Topics include cost accounting, cost behavior relationships, analyses for managerial decisions, and the budget process. Prerequisite: C- or better in ACCT 101. [B] (Fa,Sp) 4 credits

ACCT 110: Accounting Software Application
Includes software application for a complete accounting cycle and other areas covered in ACCT 101. Prerequisite: C- or better in ACCT 101 and CIS 111. [B] (O) 1 credit

ACCT 201: Intermediate Accounting I
This course covers fundamental processes of accounting, working capital, investments: plant and equipment acquisition, depreciation and disposal; intangibles will be taught. Prerequisite: C- or better in ACCT 102, CIS 106, CIS 166, and CIS 167. [B] (Fa) 4 credits

ACCT 202: Intermediate Accounting II
This course covers plant and equipment depreciation, reevaluations, intangibles, long-term liabilities, stockholder’s equity, analytical processes, statement of cash flows; pensions, leases, publicly held companies. Prerequisite: C- or better in ACCT 201. [B] (Sp) 4 credits

ACCT 213: Cost Accounting
This course covers principles of cost accounting for manufacturing and business. Prerequisite: C- or better in ACCT 102. [B] (Sp) 3 credits

ACCT 223: Federal Taxes
Theories and laws of individual income tax returns will be taught. Prerequisite: C- or better in ACCT 101. [B] (Fa) 3 credits

ACCT 224: Advanced Federal Taxation
Corporation, partnership, estate and trust taxation including tax administration and practice will be taught. Prerequisite: ACCT 223. [B] (Sp) 3 credits

ACCT 225: Practical Taxation
Researching and solving taxation problems for individuals, partnerships, corporations, S Corporations, estates, trusts, state capital gains, state successions, and fiduciaries using actual tax forms and simulated financial situations will be taught. Prerequisite: ACCT 224. [B] (O) 3 credits

ACCT 226: Introduction to Taxation & Financial Planning
This course focuses on the provisions of current tax laws and the business and investment decisions they affect. Prerequisite: ACCT 223 or permission of the department chairperson. [B] (Sp) 3 credits

ACCT 227: Taxation and Financial Planning
This course focuses on tax problems and sets out the multiple alternatives that must be analyzed. Prerequisite: ACCT 226. [B] (O) 3 credits

ACCT 270: Cooperative Education/Work Experience
This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including corporations, small businesses and state offices. Prerequisites: 15 completed credit hours in the Accounting program including ACCT 101, 102, and 201. [B] (Fa,Sp) 3 credits. Please refer to page 16 for more information and general prerequisites for Cooperative Education/Work Experience.

Allied Health

AH 090: Allied Health Study Skills
A pass/fail study skills course for Allied Health Students to learn how to effectively study using various learning strategies. Prerequisite: Required prior to beginning Allied Health Program courses. Exception granted for those who have a grade point average of 3.2 or better, or have taken ENG 103 or equivalent study skills course. Class: 15 hours. (Su) 0 credits

AH 101: Introduction to Allied Health
A course that will allow students to gain an understanding of Allied Health Programs and the duties and responsibilities necessary to each profession before making a definite career choice. They will also gain information about the assistance available at the College, to overcome deficiencies that prevent them from acceptance or carrying out career goals. Class: 1 hour per week. (Fa,Sp) 1 credit

AH 270: Cooperative Education/Work Experience
This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including hospitals, nursing homes, laboratories. Prerequisites: 15 completed credit hours in Allied Health programs. (Fa,Sp) 3 credits. Please refer to page 16 for more information and general prerequisites for Cooperative Education/Work Experience.

American Sign Language

ASL 101: American Sign Language I
American Sign Language, commonly abbreviated ASL, is the sign language most deaf people use when communicating among themselves. This course utilizes six unit sequences. Students will learn grammatical features, vocabulary and conversational skills including expressive and receptive skills of ASL. In addition, students will learn the culture of the deaf community, the history of ASL and the relationship of ASL to other forms of signing. Class: 3 hours per week. (LS) (Fa,Sp) 3 credits.
ASL 102: American Sign Language II
This course is a continuation of American Sign Language I. This course utilizes six different unit sequences. Students will learn grammatical features, vocabulary and conversational skills including expressive and receptive skills of ASL. In addition, students will learn the culture of the deaf community, the history of ASL and the relationship of ASL to other forms of signing. Class: 3 hours per week. Prerequisite: ASL 101. [L,S] (Fa,Sp) 3 credits.

ASL 103: American Sign Language III
This course is a continuation of American Sign Language II. Students continue to learn the grammatical features, vocabulary and conversational skills including receptive and expressive skills of ASL. In addition, students will learn the culture of the deaf community, the history of ASL and the relationship of ASL to other forms of signing. Class: 3 hours per week. Prerequisite: ASL 102. [L,S] (Fa,Sp) 3 credits

ASL 104: American Sign Language IV
This course is a continuation of American Sign Language III. Students will learn grammatical features, vocabulary and conversational skills including receptive and expressive skills of ASL. In addition, students will learn the culture of the deaf community, the history of ASL and the relationship of ASL to other forms of signing. Class: 3 hours per week. Prerequisite: ASL 103. [L,S] (Fa,Sp) 3 credits.

Anthropology
ANTH 101: Introduction to Anthropology
This course tries to untangle the evolution of the human species through fossil discovery and genetic insight; it seeks the similarities and differences between humans and the other primates; it takes the student from cave paintings in southern France to a “dig” in the Sinai Desert, from an extinct volcanic crater in Africa to a shamanistic dance in Nepal and a political feast in the Amazon. It does all this in search of answers to the question: What does it mean to be human? [L,S] (Fa,Sp) 3 credits

ANTH 150: Cross Cultural Issues
Anthropology helps us to understand people whose ways of life are different from our own but with whom we share common needs, planet earth and a common destiny. This course will help further the understanding of cultures that are currently immigrating to the U.S. from Southeast Asia, Latin America, South America, and the Caribbean. Class: 3 hours per week. [L,S] (O) 3 credits

Astronomy
ASTR 110: Introduction to Astronomy
This is an introductory descriptive astronomy course with emphasis on the earth and its motions, the moon and planets, the sun, and stars and galaxies. Observation sessions will be required. Class: 3 hours per week. [L,N] (Fa,Sp,Su) 3 credits

ASTR 110L: Astronomy Laboratory
A process oriented laboratory experience in selected topics in elementary astronomy. Students will develop appropriate qualitative and quantitative models and understandings for the physical and dynamical characteristics of celestial bodies - the moon, planets, asteroids, comets, meteors, stars, star associations and clusters, galaxies and galactic clusters - through the use of direct observation and measurement as well as the use of star globes, charts, catalogues, graphs, photographs and CCD images. A scientific calculator will required. Laboratory: 2 hours per week. Prerequisite: MATH 101. [L,N] (Fa) 1 credit

Biology
BIO 100: Principles of Biological Science
This course is a survey of introductory biology, including such topics as cells, plants and animal systems, genetics, and ecology. This lecture/lab course is intended to fulfill the natural science lab requirement. Some dissection is included. Class: 3 hours per week. Lab: 2 hours per week. Prerequisite: eligibility for ENG 111. [N] (Fa,Sp) 4 credits

BIO 101: General Biology I
This course is a study of the fundamental principles of biology concerning the evolution, structure and function of cells. Recommended for LAS and/or transfer students. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (Fa,Sp) 4 credits

BIO 102: General Biology II
This course is a study of multicellular organisms. Both plants and animals are discussed. Class: 3 hours per week. Laboratory: 2 hours per week. Some dissection is required. Prerequisite: BIO 101. [L,N] (Fa,Sp) 4 credits

BIO 104: Applied Nutrition
Offered is an introduction to the study of nutrition as it relates to the establishment and promotion of wellness in everyday life. This course focuses on an understanding of basic principles and concepts of nutrition with applications towards examples drawn from the hospitality industry. Recommended for HOSP and culinary arts students. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [N] (Fa,Sp) 3 credits

BIO 110: Human Biology
This course is a survey of the various organ systems of the human body, stressing anatomic and physiologic interrelationships. Not open for credit to students who have passed any higher-numbered anatomy or physiology course. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (Fa,Sp) 3 credits

BIO 111: Human Biology
This course is BIO 110 plus a two-hour laboratory. Not open to students who have passed another human anatomy and physiology course. For those students who have taken BIO 110, BIO 112 will be considered a repeat and will be awarded 4 credits. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (Fa,Sp) 4 credits

BIO 114: Principles of Nutrition
An introduction to the study of human nutrition with emphasis on the scientific bases of facts and controversies surrounding issues of foods and diets will be taught. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (Fa,Sp,Su) 3 credits

BIO 115: Biological Aspects of Human Sexuality
This course includes: anatomy and physiology of human reproductive systems and the nature of human sexual responses, dysfunctions and diseases. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (Fa,Sp) 3 credits

BIO 121: General Zoology
Offered is a study of the animal kingdom and evolutionary trends that resulted in a diverse array of animals. Recommended for general studies and transfer students. Some dissection is required. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (O) 4 credits

BIO 141: Microbiology
The morphology, physiology and pathology of microbial organisms will be taught. Class/laboratory: 5 hours per week. Prerequisites: any biology laboratory course or enrollment in an Allied Health Program, and eligibility for ENG 111. [L,N] (Fa,Sp,Su) 4 credits

Next Semester Offered Designations: Fa = Fall, O = Occasional, Sp = Spring, Su = Summer
BIO 152: Human Anatomy and Physiology I
The anatomy and physiology of the integumentary, skeletal, muscular, nervous and endocrine organ systems are discussed and explored in appropriate laboratory investigations. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisites: any biology laboratory course or enrollment in an Allied Health Program, and eligibility for ENG 111. Students are strongly advised to take a college level biology course prior to this course. [L,N] (Fa,Sp) 4 credits

BIO 153: Human Anatomy and Physiology II
The anatomy and physiology of the special senses, digestive, respiratory, cardiovascular, lymphatic, urinary and reproductive organ systems are discussed and explored in appropriate laboratory investigations. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: BIO 152. [L,N] (Fa,Sp,Su) 4 credits

BIO 155: Women’s Health
This course is a study of current issues and practices related to women's health. Emphasis will be placed on female anatomy and physiology, the changes encountered in a woman's body over the lifetime and related aspects of health and disease. Upon successful completion of the course, the student should be scientifically and medically knowledgeable about the female body and be an “informed consumer” of medical information and practices concerning today's female population. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (Fa,Sp) 3 credits

BIO 160: People and the Environment
This course is an introduction to basic principles of ecology and the evaluation of some of the major environmental issues. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [L,N] (Fa,Sp) 3 credits

BIO 201: Pharmacology
Offered is an introduction to the effects of drugs on human organ systems. Class: 3 hours per week. Prerequisites: Any human biology or an anatomy and physiology course, and eligibility for ENG 111. [L,N] (Sp) 3 credits

BIO 203: Topics in Genetics
This course deals with classical principles of human genetics as well as advances in research in areas such as recombinant DNA, biotechnology and mapping and diagnosis of human genetic diseases. Emphasis will be placed on understanding the origin and extent of genetic diversity in humans and the role of evolution in shaping human genotypes. This course is required for the Biotechnology Option and is offered at Middlesex Community-Technical College, Middletown, CT. Prerequisites: BIO 101, BIO 152 and BIO 105* or permission of the instructor. 3 credits. Please *Note: prerequisite course BIO 105 is offered at the Middlesex Community-Technical College campus.

BIO 206: Molecular Biotechniques
A laboratory course designed to introduce molecular biology techniques such as plasmid and chromosomal DNA isolation, restriction enzyme mapping, agarose gel electrophoresis, and manipulation of DNA fragments. Three hours of lecture and three hours of laboratory per week. This course is required for the Biotechnology Option and is offered at Middlesex Community-Technical College, Middletown, CT. Prerequisites: BIO 141 and CHEM 104* or permission of the instructor. 4 credits. Please *Note: prerequisite course CHEM 104 is offered at the Middlesex Community-Technical College campus.

BIO 210: Human Pathology
This course is an introduction to the study of human disease. Class: 3 hours per week. Prerequisites: Any human biology or human anatomy and physiology course, and eligibility for ENG 111. [L,N] (Fa) 3 credits

BIO 299: Biotechnology Internship
Student will work a minimum of 10 hours per week in an industrial biotechnology laboratory. This course is required for the Biotechnology Option and is offered at Middlesex Community-Technical College, Middletown, CT. Prerequisite: permission of the instructor. 3 credits.

Business
All business courses numbered 100 or higher require students to be eligible for ENG 111 except BUS 111.

BUS 099: Introduction to Business, Survey of Business I
This course is the first of a two-course sequence (BUS 099 and BUS 100), offering an introductory survey of American business. Students receive practical instruction, a first-hand look at business through field trips, and experience in study skills including reading, writing, critical thinking, and discussion. Areas of business covered are: business structures, management, plant production, human resources and labor relations. (O) No credit* *No credit for BUS 099 until both courses (BUS 099 and BUS 100) are successfully completed. Three credits are earned for this two-course sequence. This two-course sequence may be taken as an alternative to BUS 111.

BUS 100: Introduction to Business, Survey of Business II
This course is the second of a two-course sequence (BUS 099 and BUS 100), continuing an introductory survey of American business. In addition to skills learned in BUS 099, this course will focus on: marketing, accounting, corporate finance, the banking system, and the securities markets. Also covered are the legal and ethical influences on business as well as the international business environment. (O) 3 credits* *Credit for BUS 100 is given only when both courses (BUS 099 and BUS 100) are successfully completed. Three credits are earned for this two-course sequence. This two-course sequence may be taken as an alternative to BUS 111. Prerequisite: BUS 099.

BUS 101: Business Law I
This course is an introduction to the law, including crimes and torts, contracts, agency and sales law. [B] (Fa) 3 credits

BUS 102: Business Law II
Partnership and corporation law, property, wills and estates, commercial paper, the bank collection process, secured transactions and creditors' rights and government regulation of business. Prerequisite: BUS 101. [B] (Fa,Sp) 3 credits

BUS 111: Business Environment
A survey of major business topics such as management, marketing, accounting, finance, computer science, organizational behavior, production, as well as the social and economic environment of business. [B] (Fa,Sp) 3 credits

BUS 121: Principles and Methods of Marketing I
This course covers marketing methods and institutions, including analysis and interrelationship of the marketing mix. Application of basic management and marketing strategy planning methods, and performance computations related to marketing efficiency. Prerequisite: eligible for ENG 111 or “C-” or higher in BUS 111. [B] (Fa) 3 credits

BUS 122: Principles and Methods of Marketing II
Marketing theory and its application to product planning, price determination, government regulation, and distribution cost analysis through planned class activities will be taught. Prerequisite: BUS 121. [B] (Sp) 3 credits

BUS 161: Real Estate Principles and Practices
This is an introductory course in real estate, covering topics required by the Connecticut Real Estate Commission, leading to licensing of real estate salespersons and brokers. Designed for students who plan to enter the real estate profession or others who wish to obtain real estate knowledge to help them in business. [B] (Fa) 3 credits
BUS 162: Real Estate Appraisal I
Required by the Connecticut Real Estate Commission for licensing of real estate brokers. This course covers methods of appraising residential property. Prerequisite: BUS 161. [B] (Sp) 3 credits

BUS 163: Introduction to Property Management
This course is an overview of the property management field including the legal, interpersonal, maintenance and accounting administration functions of the property manager. Specific practices and problems dealing with the management of all kinds of commercial properties. [B] (O) 3 credits

BUS 201: Business Management
This course is an analysis of principles, techniques and the major functions (planning, organizing, and leading) of business enterprise management. [B] (Fa,Sp) 3 credits

BUS 211/ECON 211: Money and Banking
This course deals with the role and supply of money, the Federal Reserve system, the principles of banking, and the structure of financial institutions. Monetary policy and its application are emphasized. Class: 3 hours per week. Prerequisite: ECON 101. [L,S] (O) 3 credits

BUS 214: Managerial Communications
This is a practical course in oral and written managerial communication skills, covering the writing of letters, memos and reports, editing techniques, and the preparation of resumes and cover letters. Prerequisite: ENG 111 or C- or higher in BUS 111. [B] (Fa,Sp) 3 credits

BUS 221: Sales and Techniques of Selling
This course is an introduction to the principles, methods and techniques of selling, and the application of these principles through individual sales demonstrations. Prerequisite: eligible for ENG 111 or "C-" or higher in BUS 111. [B] (Fa,Sp) 3 credits

BUS 231: Basic Advertising Principles
This course is a study of advertising strategy, tactics and techniques, including media selection, ad preparation, market research methods, and program evaluation. Prerequisite: eligible for ENG 111 or "C-" or higher in BUS 111. [B] (Sp) 3 credits

BUS 240/PSYC 240: Organizational Behavior
This course is a survey of psychological factors as they affect the individual in a work setting. It includes employee attitudes, motivation, group dynamics, leadership, decision making, and assessment as an introduction to human resource management. [B,L,S] (Fa,Sp) 3 credits

BUS 244/HIST 244: The Development of American Business
The goal of the course is to provide students interested in management with an historical, philosophical and economic framework for dealing with a rapidly changing business environment. [B,L,S] (O) 3 credits

BUS 252: Retailing
A study of retailing methods and institutions including analysis of their behavior in a competitive environment. Prerequisite: eligible for ENG 111 or "C-" or higher in BUS 111. [B] (Fa,Sp) 3 credits

BUS 262: Real Estate Appraisal II
This is a third course in real estate leading to a broker's license in the state of Connecticut which covers methods and procedures for the appraisal of income property. Prerequisite: BUS 162. [B] (O) 3 credits

BUS 263: Problems in Real Estate Brokerages
This course assists potential real estate brokers in managerial techniques and principles of operating successful sales offices. Prerequisite: BUS 161. [B] (O) 3 credits

BUS 264: Real Estate Finance
This course prepares the student to be a more effective investor in real estate as a broker, developer, lender or property manager. Prerequisite: BUS 161. [B] (O) 3 credits

BUS 270: Cooperative Education/Work Experience
This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including corporations, small businesses, financial institutions and governmental agencies. Prerequisites: 15 completed credit hours in Business Administration, Accounting, Computer Information Systems or Marketing programs. [Fa,Sp] 3 credits. Please refer to page 16 for more information and general prerequisites for Cooperative Education/Work Experience.

BUS 271: International Business
This course provides students with a foundation for conducting international business and a general understanding of international corporate and government operations. The course will undertake a comprehensive overview of international business designed to provide a global perspective on international trade including topics in: foreign investment, international marketing, the operations of multinational corporations, and government relations. [B] (O) 3 credits

BUS 272: Conducting Business in Developing Nations
This course provides students interested in Developing Nations or the Third World with a background for conducting business or working for the U.S. government in these nations. Focus on special regions of the world will include: Africa, Latin America, Asia, Eastern Europe and the Middle East. [B] (O) 3 credits

Business Office Technology
(formerly Office Administrative Careers)
* NOTE: AVT (Audio-Visual Tutorial) is self-paced media-assisted instruction.

BOT 100A: Keyboarding for Information Processing
Keyboard mastery for computer input. AVT instruction.* Not for BOT students. [B] (Fa,Sp) 1 credit

BOT 101: Shorthand I - Gregg Centennial
Fundamentals of Gregg Shorthand, including phrasing and brief forms; introduction to taking dictation and transcription. Prerequisite: BOT 107 must be taken before or concurrently with this course. [B] (Fa,Sp) 3 credits

BOT 102: Shorthand II - Gregg Centennial
Further development of fundamentals of Gregg Shorthand, including phrasing and brief forms; development of speed in taking dictation and transcription; punctuation and vocabulary building. Prerequisites: BOT 101 and 107. [B] (Fa,Sp) 3 credits

BOT 103: Office Writing Procedures
Provides students with the skills necessary to produce marketable business communications. [B] (Fa,Sp) 3 credits

BOT 104: Introduction to Machine Transcription
Fundamentals of machine transcription. AVT instruction.* Prerequisite: C- or better in BOT 102. [B] (Fa,Sp) 1 credit

BOT 107: Beginning Keyboarding
Keyboard mastery using computers with WordPerfect software and electronic typewriters; development of speed and accuracy; introduction to the preparation of business correspondence, forms, tables and reports; development of proofreading skill. [B] (Fa,Sp) 3 credits

BOT 108: Advanced Keyboarding
Further development of speed and accuracy using computers with WordPerfect software and electronic typewriters; preparation of business correspondence, forms, tables and reports; development of proofreading skill. Prerequisite: C- or better in BOT 107. [B] (Sp) 3 credits

BOT 109: Machine Transcription
Fundamentals of machine transcription, including review of keyboarding skills, English grammar, punctuation, spelling, capitalization and proofreading. AVT instruction.* Prerequisite: BOT 107 or permission of instructor. [B] (Fa,Sp) 3 credits

BOT 113: Speedwriting I
Fundamentals of Speedwriting including phrasing and brief forms; introduction to taking dictation and transcription. AVT instruction.* Prerequisite: BOT 107 must be taken before or concurrently with this course. [B] (Fa,Sp) 3 credits

BOT 115: Records Management
Creation, maintenance and disposition of records including alphabetic, geographic, subject, numeric and chronological indexing, retrieving and storage utilizing manual and computer methods. AVT instruction.* Prerequisites: BOT 107; CIS 161 must be taken before or concurrently with this course. [B] (Fa,Sp) 3 credits

BOT 120: Introduction to WordPerfect
Basic word processing concepts on the IBM compatible computer utilizing WordPerfect software. Prerequisite: BOT 107 or 35 words per minute keyboarding skill. Not for BOT majors. [B] (Fa,Sp) 1 credit

BOT 124: Word for Windows
Provides a working knowledge of computer word processing concepts utilizing Microsoft Word for Windows word processing software. Prerequisite: BOT 107 or 35 words per minute keyboarding skill. [B] (Fa,Sp) 3 credits

BOT 125: Introductory Word for Windows
Fundamentals of the Word for Windows software package. Prerequisites: CIS 105; knowledge of the keyboard. [B] (Fa,Sp) 1 credit

BOT 126: Intermediate Word for Windows
Intermediate applications of the Word for Windows software package. Prerequisite: BOT 125. [B] (Fa,Sp) 1 credit

BOT 127: Advanced Word for Windows
Advanced applications of the Word for Windows software package. Prerequisite: BOT 126. [B] (Fa,Sp) 1 credit

BOT 160: WordPerfect
Comprehensive word processing training utilizing the IBM compatible computer and the WordPerfect software package. Prerequisite: BOT 107 or 35 words per minute keyboarding skill. [B] (Fa,Sp) 3 credits

BOT 201: Dictation and Transcription
Further development of dictation skills through shortcuts for speed; introduction to the art of transcription for mailable copy; and review of punctuation, capitalization and spelling. AVT instruction.* Prerequisites: BOT 102 and BOT 108. [B] (Fa,Sp) 3 credits

BOT 203/ENG 203: Advanced Editing and Proofreading
An advanced course designed to hone written communication skills, including editing and proofreading documents. This course will also help students develop a command of the standards and conventions of written English. This is a course for perfecting skills. Prerequisite: ENG 111 or permission of instructor. [B,H,L] (Fa,Sp) 3 credits

BOT 210: Machine Transcription: Medical I
This course teaches the fundamentals of machine transcription and the development of medical reports, patient records, histories/physicals, and correspondence using appropriate reference sources. Keyboarding skills, English grammar, punctuation, spelling, capitalization, and proofreading are covered. AVT instruction.* Prerequisites: BOT 107; BOT 124 or BOT 160; BOT 241 must be taken before or concurrently with this course. [B] (Fa,Sp) 3 credits

BOT 211: Machine Transcription: Medical II
Further development of medical machine transcription demonstrating the ability to effectively incorporate English usage, medical terminology, proofreading and editing skills, transcription equipment, and style and medical references while transcribing a variety of healthcare records and documents. Students will meet progressively demanding medical transcription accuracy and productivity standards. AVT instruction.* Prerequisite: BOT 210. [B] (Fa,Sp) 3 credits

BOT 222: Administrative Office Procedures
Application of previously acquired secretarial skills to the tasks and responsibilities encountered by the administrative assistant in the modern office. Topics include: professional image, human relations, job attitudes, time management, decision making, electronic technology, records management, business mathematics and business writing. Prerequisite: BOT 107 or permission of instructor. [B] (Fa,Sp) 3 credits

BOT 224: Office Accounting
Provides students with knowledge of the accounting cycle and procedures for professional offices. Students will also be prepared to handle personal financial management. [B] (Fa,Sp) 3 credits

BOT 231: Legal Office Procedures
Use of secretarial skills in the execution of duties encountered in a law office. Topics include: human relations, legal ethics, law office technology, calendaring, billing, records management, preparation of court and non-court documents, and client contact. Prerequisite: BOT 233. [B] (Sp) 3 credits

BOT 233: Legal Terminology I
Introduction to legal terminology with emphasis on litigation; dictation and transcription of legal materials; preparation of legal documents. Prerequisites: BOT 102 and BOT 108 must be taken before or concurrently with this course. [B] (Fa) 3 credits

BOT 234: Legal Terminology II
Mastery of terminology utilized in various areas of the law; dictation and transcription of legal materials; preparation of legal documents. Prerequisite: BOT 233. [B] (Sp) 3 credits

BOT 241: Medical Terminology
Introduction and mastery of basic medical terminology through presentation of word roots, prefixes and suffixes. AVT instruction.* [B] (Fa,Sp) 3 credits

BOT 245: Medical Office Procedures
Introduction and practice in medical secretarial procedures; emphasis on appointment making, telephone techniques, medical ethics, handling correspondence, billing, filing, banking services, receptionist’s duties, office machines and insurance forms. Prerequisite: BOT 241 and BOT 107. [B] (Sp) 3 credits

BOT 261: Document Production
Development of professional level keyboarding skill in the preparation of business documents and correspondence. Prerequisites: BOT 124; BOT 108 or permission of instructor. [B] (Fa) 3 credits

BOT 262: Advanced Word Processing Applications
Concepts of information/word processing and the integration of spreadsheets, desktop publishing, and databases with word processing utilizing the IBM compatible computer. Prerequisites: BOT 124; BOT 108 or permission of instructor. [B] (Sp) 3 credits
Students with no prior chemistry experience should strongly consider CHEM 105*, or CHEM 121*, or permission of the instructor. 4 credits.

CHEM 112: College Chemistry II
A continuation of the principles of chemistry, including intermolecular forces, properties of liquids and solids, physical properties of solutions, chemical kinetics, general chemical equilibria, acid-base theory and equilibria, solubility equilibria, electrochemistry, coordination compounds, and an introduction to organic chemistry. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: CHEM 111. [L,N] (Sp,Su) 4 credits

CHEM 201: Principles of Organic Chemistry
Principles of organic chemistry, emphasizing functional groups, molecular structure, nomenclature and organic reactions will be taught. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: CHEM 111. [L,N] (Sp,Su) 4 credits

CHEM 211: Organic Chemistry I
A study of the structure, properties, reactions, and nomenclature of aliphatic hydrocarbons and their derivatives, including alkyl halides, alcohols and ethers. Emphasis will be given to mechanisms, stereocchemistry, and synthetic considerations. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: CHEM 112. [L,N] (Fa) 4 credits

CHEM 212: Organic Chemistry II
A study of the structure, properties, reactions, and nomenclature of aromatic compounds, aldehydes and ketones, carboxylic acids and their derivatives, amines, addition and condensation polymers, and biochemical molecules. Additional topics will include the role and use of spectroscopy, reactions involving carbanions, and alpha-beta unsaturated compounds. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisite: CHEM 211. [L,N] (Sp) 4 credits

COMM 150 Issues in Print, Broadcast and Photojournalism
An overview of law, ethics, and professional standards in media careers. Students must have access to a 35mm camera for photojournalism assignments. Class: 3 hours per week. (Sp) 3 credits

COMM 171/FA 171: Film Study and Appreciation
The viewing, discussion and analysis (written and oral) of representative films from the early years of the industry to the present will be taught. [H,L] (Fa,Sp,Su) 3 credits

COMM 176/FA 176: Video/Filmmaking
A creative workshop in which students will work in groups and make their own movies. Students work with video camcorders and editors. Students will learn scripting, shooting, editing and audio production techniques. (Fa,Sp) 3 credits

COMM 201: Public Relations I
A comprehensive survey of public relations principles and practices: fact-finding, planning and programming, action and communication, evaluation. This course covers relationships between organizations and their publics, and the effective use of media. Students will plan a complete public relations program. Class: 3 hours per week. Prerequisite: ENG 111. (Fa) 3 credits

COMM 206: Broadcast Announcing
The rudiments of broadcast announcing in a studio setting: clear speech, presence, projection, intimacy will be taught. This course covers both radio and television announcing. Class: 3 hours per week. Laboratory: 2 hours per week. (Fa) 3 credits

COMM 208: Mass Communication
This course is a survey of the American mass media and communication. Lectures and discussions will focus on the various print and electronic mass media industries, and the impact of mass communication on our society. The course is designed as an introductory course for those students who plan to major in Communication and for those who want to be informed about the development of the influence of modern mass media. Class: 3 hours per week. (Sp) 3 credits
COMM 210: Broadcast/TV Production  
The fundamentals of television production are presented in this lab course in the College’s TV studio. Scripting, camera set-ups, how to work with talent, and the control room side of TV production are topics that will be covered. Class: 3 hours per week. Laboratory: 2 hours per week. (Fa) 4 credits

COMM 211: Advanced Broadcast/TV Production  
This course is designed to give students further training in broadcast/TV production. The course will focus on using Electronic News Gathering and Electronic Field Production formats and integrating them into studio productions. Students will learn about field production, including lighting, audio, and camera techniques. Students will gain more expertise in the editing process. Students, in the latter part of the semester, will produce weekly programs for local and public access. Class: 3 hours per week. Laboratory: 2 hours per week. (Sp) 4 credits

COMM 213/SNPC 213: Effective Speaking  
This course is designed to encourage students to develop their speaking and listening skills in order to become more confident communicators. The course introduces students to communication as an interactive process and emphasizes developing effective public presentation skills. Instruction stresses organization, research, writing, delivery and audience adaptation. Class: 3 hours per week. [H,L] (Fa,Sp,Su) 3 credits

COMM 216/SNPC 216: Oral Interpretation of Literature  
An introduction to reading literature aloud. Classes focus on analytical and reading techniques designed to bring literature to life. Students practice reading aloud in class and in front of other audiences. Class: 3 hours per week. [H,L] (O) 3 credits

COMM 220/SNPC 220: Interpersonal Communication  
The focus of this course is on the theory and process of communication in both professional and personal interpersonal relationships. The course examines the theoretical and practical application of communication as it relates to family, friends, work and intimate relationships. [H,L] (O) 3 credits

COMM 222/SNPC 222: Gender and Communication  
Gender and Communication is a course dealing with issues of language, speech and perception as they relate to gender. Students become familiar with the various theoretical approaches to gender and their implications for the study of communication. They explore how women and men approach same and opposite sex interactions and relationships in personal, social and professional contexts. Class: 3 hours per week. [H,L] (O) 3 credits

COMM 251/FA 251 Computer Animation  
Students will learn how to use the Macintosh computer to create animated presentations. The course will cover basic animation techniques as they apply to the digital environment as well as traditional skills such as storyboarding and script preparation. The software used will be Macromedia Director. The class is limited to 20 students. Studio: 6 hours per week. [L] (Fa,Sp) 3 credits

COMM 252/FA 252 Advanced Computer Animation  
This course is a continuation of COMM/FA 251 with an emphasis on multimedia design and interactivity. Students will work with Macromedia Director’s Lingo scripting language to create interactive presentations. Advanced tips and tricks with this software are covered as well as a discussion of design principles for multimedia development. Topics such as digital video and sound are also discussed. The class is limited to 20 students. Studio: 6 hours per week. [L] (Sp) 3 credits

COMM 270, COMM 271: Cooperative Education/Work Experience  
This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including TV, radio, and newspaper. Prerequisites: 12 completed credit hours in Media Associate program. (Fa,Sp,Su) 3 credits. Please refer to page 16 for more information and general prerequisites for Cooperative Education/Work Experience.

COMM 281: Basic Newswriting  
This course covers news gathering and reporting within the context of news criteria. Interviewing, ethics and law are introduced. Class: 3 hours per week. Prerequisite: ENG 111 with a grade of B or better. (Fa,Sp) 3 credits

COMM 282: Feature and Magazine Writing  
This course covers: Types of features considered most in demand such as profile, travel, health and consumer issues. It also introduces students to the free-lance market. Class: 3 hours per week. Prerequisite: ENG 111 with a grade of B or better. (Sp) 3 credits

COMM 285: Television News Reporting  
Students are exposed to the skills used by television reporters and videographers. Students produce weekly “news reports” on various campus and community events. Scripting as well as videocamcorder and editing equipment operation is covered. Class: 3 hours per week. Prerequisite: COMM 281 or COMM 218 or COMM/FA 176. (Sp) 3 credits

COMM 290: Introduction to Desktop Publishing  
In this course the student learns to use the Macintosh computer, the image scanner and a variety of popular Desktop Publishing software programs including Microsoft Word, Photoshop, QuarkXpress, and PageMaker. Students use these programs to create a variety of publications ranging from simple flyers to four page newsletters. [H] (Fa,Sp) 3 credits

COMM 291: Advanced Desktop Publishing  
In this course the student learns to create Web pages for the Internet. Project based activities introduce the use of basic HTML codes, design techniques and popular software used to create effective interactive Web pages. [H] (Sp) 3 credits

Computer Information Systems  
CIS 098: Exploring the Computer  
This course is designed for students who want to learn the basics of operating a microcomputer. The course is designed to be primarily hands-on and assumes no previous experience. Topics will include computer components, using files and functioning in the Windows 95 environment. It is particularly recommended for students required to take any of the following courses: ENG 093, ENG 096, ENG 098, and/or MATH 098. Class: 3 hours per week. no credit

CIS 102: Getting Acquainted with the IBM  
An introductory look at the IBM/compatible microcomputer. Students will explore the use of the mouse and basic desktop features in the Windows environment. This hands-on course assumes no previous computer experience. (Fa,Sp) 1 credit

CIS 106: Windows 95  
This course presents basic survival skills using the Windows 95 operating system. The topics covered include: essential hardware and software concepts; utilization of the mouse; using the Windows 95 desktop; disk preparation; creating, editing, saving and printing files; creating and organizing folders; and exploring the Windows 95 accessory programs. The course is taught in a hands-on environment and assumes no computer experience. Students who receive credit for CIS 106 cannot also receive credit for CIS 105. Prerequisites: eligibility for MATH 101 and ENG 111. (Fa,Sp) 2 credits
CIS 107: Advanced Windows 95
This course presents the advanced skills necessary to utilize fully the myriad of Windows 95 features. The topics covered include: sharing and exchanging data between programs; MS-DOS command syntax, file and system maintenance, multimedia features, and connecting to the world. This course is taught in a hands-on environment. Prerequisite: CIS 106. (Fa,Sp) 1 credit

CIS 111: Introduction to Computers
This transferable course is designed for the individual who wants to become computer literate and learn how to effectively use the IBM/compatible microcomputer as a tool at home, on the job, or in the classroom. The student will be exposed to operating system concepts and application software through lecture and some hands-on experience. A research paper is a course requirement. Please note: Students with no keyboarding experience should take BOT 100A concurrently. Prerequisites: eligibility for MATH 101 and ENG 111. (Fa,Sp,Su) 3 credits

CIS 114: Exploring the Internet
This course includes the basic skills needed to become an informed Internet user. Major topics include: connecting to the Internet, accessing the Internet, using E-mail, browsing the World Wide Web with Netscape Navigator, and the dynamics of using search engines. Prerequisite: CIS 106. (Fa,Sp) 2 credits

CIS 115: Building Web Pages
This course is designed to deliver the fundamentals for designing and building Web Pages. Various standards for design will be explored along with the tools for development of pages for the Intranet and the Internet. The Web building tools used and explored in class will depend on current technologies. To complete course assignments, individuals can use the MCTC lab computers or their home computer. Netscape or a comparable browser will be used for this class. Prerequisite: CIS 114 or a working knowledge of the Internet. (Fa,Sp) 3 credit

CIS 118: Presentation Software: PowerPoint
This course will demonstrate the use of presentation graphics programs and the characteristics of effective presentations. The course will give students practical experience with the PowerPoint program and its associated tools. Prerequisite: CIS 106 or CIS 111 or equivalent Windows experience. (Fa,Sp) 1 credit

CIS 125: Programming Logic and Design with BASIC
This course is an introduction to the structured logic and design of a computer program. Various types of flowcharting and design schemes will be used to work out the logic of a program. This course is designed for anyone contemplating working with computer languages or with the macro languages of application software. Approximately one-third of the course explores the BASIC language. Prerequisites: eligibility for MATH 101 and ENG 111. (Fa,Sp) 3 credits

CIS 156: Database Applications I: ACCESS
This course introduces students to a microcomputer database management software package. A hands-on approach is used to acquire skills and concepts in database creation and queries. This course uses ACCESS for Windows. Prerequisite: CIS 106 or CIS 111. (Sp) 1 credit

CIS 157: Database Applications II: ACCESS
Continued instruction in the use of ACCESS for Windows. This course explores additional concepts such as, report design and advanced querying. Prerequisite: CIS 156. (Sp) 1 credit

CIS 158: Database Applications III: ACCESS
This course offers advanced concepts in database management. Instruction builds on the database design, report, and manipulation ideas presented in prerequisite courses. Prerequisite: CIS 157. (Sp) 1 credit

CIS 159: Database Management: ACCESS
This course covers introductory and advanced concepts in personal computer database management. Lecture integrated with a hands-on approach helps students acquire knowledge and skills in effective information management, including concepts of tables, queries, forms, reports, and macros. Half way through the course, concepts involving forms and queries are expanded upon: subforms and custom forms are created; a variety of sorts are covered, as well as queries with calculations, and multiple table queries. The concept of referential integrity in establishing table relationships is also explored. The latter part of the course covers tables, queries, reports, and forms in more detail, and introduces macros. Students work with multiple and joined tables, customize reports, create more advanced types of queries, import OLE objects, create linked subforms, and design and use various macros. Prerequisites: CIS 106, or CIS 111. (Fa,Sp) 3 credits

CIS 166: Application Software: EXCEL
This course is designed to deliver the beginning, intermediate, and advanced capabilities of Microsoft EXCEL in a hands-on teaching environment. Topics covered include basic spreadsheet concepts; workbook design and organization; formatting data on the spreadsheet; using formulas and functions; using charts; using the database feature; and creating macros. Students who receive credit for CIS 166 Excel cannot also receive credit for CIS 167 EXCEL. Prerequisite: CIS 106. (Fa,Sp) 3 credits

CIS 167: Introductory and Intermediate EXCEL
This course is designed to deliver the beginning, and intermediate capabilities of Microsoft EXCEL in a hands-on teaching environment for the student and business professional. To complete course assignments individuals can use the MCTC lab computers or home computer. This course is designed for the student who does not need the advanced topics offered in the 3-credit CIS 166. Students who receive credit for CIS 167 cannot also receive credit for CIS 166 EXCEL. Prerequisite: CIS 106. (Fa,Sp) 2 credits

CIS 171: Local Area Networks
This course will cover introductory networking concepts. The advantages and disadvantages of personal computer networking will be explored. Factors in making network decisions, network topologies, hardware and software components will also be covered. Network administration on Windows NT will be explored in a “hands-on” learning environment. Prerequisites: CIS 106 and CIS 107. (Fa,Sp) 3 credits

CIS 191: Personal Computer Hardware Maintenance and Troubleshooting
Students in this course will learn to identify different components of PC hardware and to describe their functions. The course will cover upgrading components and troubleshooting hardware problems. A portion of the course will include some hands-on experience. Prerequisites: CIS 106 and CIS 107. (Fa,Sp) 3 credits

CIS 201: Visual Basic I for Windows
This course will give the student practical experience with an object-oriented/event driven programming language. The emphasis of Visual Basic is on the objects included in the user interface and on the events that occur on these objects (such as clicking or scrolling). The development of good design and programming techniques will be a major part of this course. Prerequisite: CIS 106 or a working knowledge of Windows. (Fa,Sp) 3 credits

CIS 202: Visual Basic II for Windows
This course is a continuation of the Visual Basic experience started in CIS 201. The emphasis will be on more complex programming tasks using advanced controls, graphics, Crystal Reports, multiple forms, and database techniques. Prerequisite: CIS 201. (Fa,Sp) 3 credits
CIS 213: Computer Programming COBOL I
This course is an introduction to structured COBOL programming. Students will analyze problems, design solutions, code, test and debug business-oriented programs. Prerequisites: CIS 125 and CIS 111. (Fa,Sp) 4 credits

CIS 214: Computer Programming COBOL II
Advanced, structured COBOL programming techniques, including complex table handling, internal sorts, modular programming, various updating methods, PC screen manipulation, and VSAM coding will be taught. Prerequisite: CIS 213. (Sp) 4 credits

CIS 220: Assembly Language - IBM
This course introduces the student to the fundamentals of IBM mainframe Basic Assembly Language. Emphasis is on computer internals with some analysis, coding, testing, and debugging of programs coded in BAL. Prerequisite: CIS 213, or CS 120 or CS 121. CIS 226 is recommended. (O) 4 credits

CIS 225: Systems Design
An intensive study of the elements of computer-based systems analysis and design. Systems methodology is studied and a team approach is used to complete a semester project. Prerequisites: CIS 111 and CIS 125, or CS 120 or CS 121. (Sp) 4 credits

CIS 226: MVS Operating Systems/JCL
The study of operating systems, utility programs, job control language, and software packages with practical application on an IBM MVS/ESA system will be taught. CIS 213 may be taken concurrently. Prerequisites: CIS 125, CS 120 or CS 121. (Fa) 3 credits

CIS 270: Cooperative Education/Work Experience
This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study. For students in the computer information systems programs this may include positions as system analysts, or staff specialists within a variety of settings. Prerequisites: 15 completed credit hours in the Computer Information Systems programs. (Fa,Sp) 3 credits. Please refer to page 16 for more information and general prerequisites for Cooperative Education/Work Experience.

Computer Science
CS 105: Programming in BASIC
A first course in computer programming in BASIC for any student seeking a teacher-directed, hands-on experience with a microcomputer. Topics include: programming commands, input-output statements, selected program statements, numeric, string, and subscripted variables, decision elements, loops, arithmetic operations, comparing and sorting. Class: 2 hour per week. (Fa,Sp) 2 credit

CS 110: Introduction to Computer Science
This course is an introduction to computer software and hardware fundamentals. It incorporates computer architecture and the analysis of combinational logic networks using Boolean algebra. Elementary data structure will be discussed with emphasis on PASCAL. Previous programming experience is not assumed. Class: 3 hours per week. Prerequisite: MATH 101. (L,N) (Fa) 3 credits

CS 120: Programming in FORTRAN
Students will be introduced to FORTRAN programming using variables, arithmetic, control and input/output statements, loops, arrays, formatting, and subprograms. Emphasis is on the solutions to numerical problems based on student background. Efficient problem design and structure are encouraged using FORTRAN. Class: 3 hours per week. Prerequisite: MATH 102 or the equivalent. (Sp) 3 credits

CS 121: Programming in PASCAL I
This course is an introduction to PASCAL programming with respect to problem analysis/algorithm development and program development, execution and validation. Emphasis is on the concepts behind input/output methods, data types and declarations, control structures, arrays, records and sets, and modularity through use of procedures and functions. Numerical and non-numerical problem solving techniques are studied, emphasizing good structure and style. Class: 3 hours per week. Prerequisite: MATH 102 or the equivalent, or CS 105 or the equivalent. [B,N] (Fa) 3 credits

CS 122: Programming in PASCAL II
The advanced development of modular programming design, style and expression, and debugging and testing, especially for larger programs will be taught. It introduces structured programming, emphasis on algorithmic analysis, basic aspects of strings, recursion, internal search/sort methods, and data structures. Class: 3 hours per week. Prerequisite: CS 121. [B,N] (Sp) 3 credits

CS 222: Programming in C
This course introduces students to programming in the language C, and solving problems with both numerical and nonnumerical applications. It entails fundamental rules of syntax, expressions and operators. Concepts of data types, functions and control structures are discussed, followed by an introduction to data structures including files, lists and stacks. Prerequisites: MATH 102 or math placement test, and one of the following: CIS 220, CS 120 or 121. [B,N] (Fa,Sp) 3 credits

CS 223: Programming in C++
This course introduces the student to programming in the language C++, and solving problems with both numerical and nonnumerical applications. It entails fundamental rules of syntax, expressions and operators. Concepts of data types, functions, control structures, arrays, pointers, strings, data abstractions with classes, objects, and operator overloading are discussed, followed by topics covering object-oriented programming. Sequential file processing and direct-access file processing is discussed. Students will design, write, and execute modular programs on a PC. Class: 3 hours per week. Prerequisite: CS 222. [N] (Fa,Sp) 3 credits

CS 252: Introduction to Computer Hardware
This course is an overview of computer hardware, centered around minis and PCs. Students will learn logic level development which includes combinational logic circuit and sequential circuit analysis and design. Computer memories, registers, counters with flip-flops, ALUs, and memory addressing circuits are investigated. Class: 3 hours per week. Prerequisites: CS 223 and CIS 220. (Sp) 3 credits

Criminal Justice
CJ 102: Criminal Justice Field Experience
This course is one hundred twenty hours of supervised field experience in a cooperating social service agency. Class: 1 hour, weekly pro–seminar. Prerequisites: CJ 111 and the consent of the program coordinator. (O) 3 credits

CJ 111: Introduction to Criminal Justice
This course is a descriptive-analytical survey of crime and criminal justice in the United States today, that explores strategies for change involving all levels of government, private groups and every American citizen. Class: 3 hours per week. [S] (Fa,Sp) 3 credits

CJ 112: Police Patrol Procedures
The history and growth of traffic problems and the development of specialized traffic control methods. Class: 3 hours per week. (Sp) 3 credits

CJ 114: Introduction to Corrections
An introduction to the correctional system in the United States and other allied countries. Emphasis will be placed on the role of corrections in our society and criminal justice system as a whole. [S] (Fa,Sp) 3 credits
CJ 122: Police Administration
This course is an introduction to police organization, administration, personnel, public relations, crime prevention and theory. Class: 3 hours per week. (Sp) 3 credits

CJ 131: Safety and Fire Protection Management
The management of safety and fire prevention services and accident prevention programs will be covered. Class: 3 hours per week. (O) 3 credits

CJ 133: Security Administration
The principles of organization, management, budgeting, personnel, records and public relations of a security agency will be covered. Class: 3 hours per week. (O) 3 credits

CJ 135: Introduction to Security Methods
A review and study of the organizations that require security, such as retail operations, medical institutions, educational institutions, financial operations and others, and of the legal and economic aspects that must be considered in security operations. Class: 3 hours per week. (O) 3 credits

CJ 136: Introduction to Security Methods II
A concise study of the procedures and operations that affect security and guarantee the rights of those involved in any security system. Class: 3 hours per week. (O) 3 credits

CJ 140: Motor Vehicle Stops and Safe Extrication:
The academic aspect of this course will provide an in-depth look and discussion of Connecticut motor vehicle laws. The practical aspect of the course will concentrate on suggested police procedures for the stopping and extrication of individuals from their vehicles. Several practicals will focus on the safe extrication of felony suspects as well as investigation of the suspected DWI offender. (O) 1 credit

CJ 141: Gangs and “Families”: Past, Present and Future
The course will provide the student with an overview of the psychology and sociology behind various gangs around the country. In-depth coverage will be given to local gangs’ symbolism including their graffiti, styles, tattoo, patches and other markings. Additionally, this course will cover assorted proactive strategies for the police and the community in their attempt to control gang violence/crime. (O) 1 credit

CJ 142: Identifying and Coping with Domestic Violence and Child Abuse
Instruction will encompass a history of domestic violence, it's causes, social impact and the impact on other family members. The recent changes in the area of law enforcement and it's response to domestic situations will also be addressed. The seminar will culminate with a decision making workshop focusing on the arrest/non-arrest dilemma. (O) 1 credit

CJ 143: Survey of Drugs of Abuse
The course will consist of an overview of drugs of abuse with regards to identification, effects on the body, mind and behavior. Class will include didactic presentation, video presentation discussion and interactive class presentations. (O) 1 credit

CJ 144: Community Policing Techniques
This course will help to identify the social science, theoretical and historical roots of community policing and will clarify the concept in both organizational and philosophical terms. Research relative to the successes and failures of community policing will be studied as well as various programs that fall under the community policing rubric. (O) 1 credit

CJ 145: Management and Preservation of the Crime Scene
This course will concentrate on collection of specific physical evidence at various crime scenes. Collection techniques will encompass crime scene photography, note taking, crime scene sketching, evidentiary search methodology and chemical/powder latent fingerprint collection and preservation. Constitutional considerations relative to the collection of said physical evidence as well as testimonial evidence from witnesses, victims and suspects is included. (O) 1 credit

CJ 151: Profiles of the Violent Offender
This course introduces the student to the fundamental principles of violence in American society, namely the nature, existence and causation of violent crime, the problems and procedures involved in the investigation and apprehension of violent criminals. (O) 1 credit

CJ 152: Traumatic Incident Stress Management
The focus of this seminar is the identification, origin and management of personal stress as it relates to public service fields. These sessions will draw upon the day to day life experiences and coping mechanisms of individuals working in law enforcement and other public service fields. (O) 1 credit

CJ 153: Serial Sex Offenders
This course will provide an in-depth look at the psychology, sociology and characteristics of the habitual sex offender. In-depth coverage will be given to the modus operandi of these offenders as well as a discussion concerning the profile of individuals who become their victims. (O) 1 credit

CJ 155: Hostile Situation Management
This seminar will focus on the controversy surrounding the management of crisis/hostile situations. The course will deal with the crucial questions of when, where and how force should be used in dealing with the public. (O) 1 credit

CJ 156: Advanced Studies in Gangs and Cults
The course will provide the student with an overview of the psychology and sociology behind various gangs around the country. In this advanced course the student will be exposed to west coast gangs’ symbolism including their graffiti, styles, tattoo(s), patches and other markings. Additionally this course will cover assorted cult groups identified throughout the country and some of the proactive strategies police and family members use to extricate individuals caught up in cults. (O) 1 credit

CJ 157: Interviewing and Interrogation
This course will present the determination of when interviewing or interrogation should be used. The use of interviewing methods including the how, what and why of each will be discussed. (O) 1 credit

CJ 158: Adventure Based Dynamics
This course is designed to provide students with the knowledge, skills and ability to improve their fitness level, agility and interactive skills by hands on experiences and techniques. Students will participate in physical situations that will assist them in developing an effective training routine as well as expose them to effective team reliance situations. The various exercises experienced in this class will allow students to make important changes in their own personal interactive perspective and physical routine. (O) 1 credit

CJ 160: The Death Penalty
This course will introduce students to the death penalty laws of the State of Connecticut, other states, and other countries. This will be accomplished through lecture, group discussion, reading material, video presentation and an expert guest lecturer. There will also be an in-depth discussion concerning present day death penalty cases. (O) 1 credit

CJ 161: Crime, Criminal and the Media
In this one credit course, the student will look at various aspects of the effect of the media in the criminal realm. This course will also explore the historical events that have led us to the contemporary relationship that now exists between the police and the media. (O) 1 credit
CJ 162: Test Preparation for Police Candidates
The goals and objectives of this two-day program are to prepare the student to successfully pass the written and oral board phases of police testing. In addition the student will learn about orientation and the human resource component of law enforcement provisions. (O) 1 credit

CJ 201: Institutional Treatment of the Offender
Introduction to the principles and practices of placing and treating adult and juvenile offenders in different institutions. Class: 3 hours per week. Prerequisite: CJ 111. (O) 3 credits

CJ 202: Community Correction
This course introduces students to historical, theoretical and judicial processes in the development of community correctional programs, with emphasis on juvenile delinquency programs at the police and judicial level (probation, parole, drug, alcohol and self-help programs). Class: 3 hours per week. Prerequisites: CJ 111 and 201. (O) 3 credits

CJ 203: Corrections Administration
This course introduces students to the specifics of corrections organization, systems, administration, personnel, public relations, programs, planning and budgeting, and governmental and executive control. Class: 3 hours per week. Prerequisite: CJ 111. (O) 3 credits

CJ 211: Criminal Law
Students will study the elements of crime, especially the intent and the act, and a survey of the common law felonies and misdemeanors that make up the body of criminal law. Class: 3 hours per week. (Fa) 3 credits

CJ 221: Criminal Investigation
Methods and procedures of investigation in misdemeanors and felonies will be taught. Class: 3 hours per week. Prerequisite: CJ 111. (Fa) 3 credits

CJ 222: Evidence and Court Procedure
The rules of evidence, with emphasis on the hearsay rule, the exceptions to the rule, best evidence rule, documents, corpus delicti, opinion evidence, circumstantial evidence, privileged communications, wiretapping, confessions, search and seizure will be covered. Class: 3 hours per week. (Sp) 3 credits

CJ 225/LEGL 225: Trial Techniques
Provides in depth involvement, academically as well as practically, in various aspects of courtroom experience. The rules of evidence are examined through the study of various legal problems. Ability to analyze facts and legal issues and to develop logical legal arguments is emphasized. Concentration is given to proper courtroom demeanor and advocacy skills. [B] (Fa) 3 credits

CJ 226/LEGL 226: Mock Trial Practicum
Provides in depth involvement, academically as well as practically, in various aspects of the courtroom experience. Selected students become role players in a national competition involving a mock scenario. Selected students are supplied a complex legal problem. Fact analysis and development of logical legal arguments are undertaken, and students prepare and present both sides of a case, competing against other colleges. Analytical and communication skills are developed in following courtroom procedure. Prerequisite: Students must try out during the previous semester and be selected for the American Mock Trial Association team. Not available to students who have received a Bachelor’s degree. [B] (Sp) 3 credits

CJ 227: Advanced Trial Presentation
Students in this advanced trial techniques and litigation class will further develop and perfect their skills in the presentation of a legal case in front of a courtroom (judge or jury). The student will learn to go beyond the basic aspects of courtroom rules and procedures and will develop a theme of how a case should be presented differently at different times and in front of different audiences. This class is set forth to fine tune the litigation skills of the prospective law student in a legal debate atmosphere. Furthermore, this course will perfect the technique and ability of the student to research, analyze and use legal case law and evidence to their fullest capacity in order to present the most effective and persuasive case possible in a court of law. Class: 3 hours per week. (Sp) 3 credits

CJ 230: Introduction to Forensic Science
Forensic science is the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. The study of physical evidence encompasses any and all objects that can establish that a crime has been committed or can provide a link between a crime and its victim or a crime and its perpetrator. This course will be devoted to the discussion of methods and techniques available to law enforcement personnel and forensic scientists for the evaluation of physical evidence. Class: 3 hours per week. (F) 3 credits

CJ 231: The Police Role in the Community
This course covers the study, analysis and recommendations for reducing the severity of the major tension points between police and the community. Emphasis is given to the practical application of scientific knowledge and methodology to police-community relations in the state of Connecticut. (Fa,Sp) 3 credits

Data Processing See Computer Information Systems

Deaf Studies
DS 111: Deaf Studies I: Introduction to the Deaf Community
This introductory course examines various aspects of the deaf community. It addresses culture, controversies, activities and events in the deaf community. In addition, the course explores the hearing mechanism, hearing disorders and the role of audiological assessment in the deaf community. Class: 3 hours per week. [L,S] (Fa,Sp) 3 credits

Drug/Alcohol Rehabilitation Counselor
DARC 101: Introduction to Issues in Drug/Alcohol Abuse
This course covers key issues of the alcohol and drug abuse treatment field from the standpoint of the unique sociological and public health aspects involved. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [S] (Fa) 3 credits

DARC 111: Introduction to Counseling
Theory and skills of therapeutic counseling will be taught. Discussion of relevant theory as well as development of such skills as attending behavior, reflection of feelings, direct mutual communication and interpretation will be covered. The focus of this course is issues in substance abuse. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. [S] (Fa) 3 credits

DARC 112: Group Therapy and Techniques
The emphasis of this course is on understanding the theory of group dynamics. An organized overview will be presented of the different modalities within the generic term “group counseling” and of the various guidelines for the appropriate use of these modalities with different client populations. The focus of this course is issues in substance abuse. Class: 3 hours per week. Prerequisite: DARC 111. [S] (Sp) 3 credits

DARC 158: Biology of Drug/Alcohol Abuse
The study of drug abuse in current times, including the pharmacology and pathology of chronic drug abuse with respect to the individual as well as society and the law will be covered. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. See the Drug and Alcohol Rehabilitation Counselor Program for restrictions. [N] (Sp) 3 credits

DARC 213: Advanced Counseling
The course will provide students with an in-depth study of individual and group counseling theory and an opportunity to synthesize theory with practical application. Class: 3 hours per week. (Sp) 3 credits

Next Semester Offered Designations:  Fa = Fall, O = Occasional, Sp = Spring, Su = Summer
DARC 251: Counseling Internship I  
Prospective drug and alcohol counselors are expected to demonstrate their counseling skills for a minimum of 15 hours per week in a clinical setting under the joint supervision of the College and qualified clinical personnel of the treatment agency. Open only to students formally accepted into the DARC Program. Class: 2 hours per week plus 15 hours of field placement per week. Prerequisites: DARC 101, 111, 112; BIO 158. (Fa) 6 credits

DARC 252: Counseling Internship II  
This course is a continuation of DARC 251. Open only to students formally accepted into the DARC Program. Class: 2 hours per week plus 15 hours of field placement per week. Prerequisite: DARC 251. (Fa) 6 credits

Earth Science  
ERSC 110: Introduction to Earth Science  
This course is an introductory survey of selected topics in geology, oceanography, astronomy, and meteorology. Earthquakes, moon probes, sea explorations, plate tectonics, and severe weather are among the topics treated in depth. The course may be supplemented with field trips. Class: 3 hours per week. [L,N] (Fa,Sp,Su) 3 credits

Economics  
ECON 101: Macroeconomics  
This course covers determinants of the level of national economic activity, employment and prices, fiscal and monetary policy, international economics, and payments mechanism. Class: 3 hours per week. [L,S] (Fa,Sp) 3 credits

ECON 102: Microeconomics  
Demand and supply, principles of the market mechanisms, pricing and output determination under competitive and noncompetitive market behavior, factor productivity, prices and international economics will be taught. Class: 3 hours per week. [L,S] (Fa,Sp,Su) 3 credits

ECON 211/BUS 211: Money and Banking  
This course deals with the role and supply of money, the Federal Reserve system, the principles of banking, and the structure of financial institutions. Monetary policy and its application are emphasized. Class: 3 hours per week. Prerequisite: ECON 101. [L,S] (O) 3 credits

ECON 212: International Economics  
This course presents the principles of international trade and finance, theory of comparative advantage, exchange rates, monetary standards, international financial institutions, and the history of national policies affecting trade. Students will learn both the principles of international trade and many applications. Prerequisite: ECON 102. [L,S] (O) 3 credits

Education  
ED 102: Introduction to Education  
An introductory survey of the historical, philosophical and social foundations of education. Emphasis will be on its development, organization, trends and current issues. Class: 3 hours per week. [S] (Fa) 3 credits

ED 110: The Educational Assistant  
An overview of education that includes the role of education in the United States, the organization and governance of public education in the United States, and the role of the educational assistant in the classroom. Class: 3 hours per week. (Sp) 3 credits

ED 111: Early Childhood Education  
This course is designed to acquaint students with the field of early childhood education. Foundations of early childhood education, the content of the curriculum and significant aspects of child growth and development will be covered. Class: 3 hours per week. (Sp) 3 credits

ED 112: Children's Literature  
An overview of literature and language activities for children. Class: 3 hours per week. (Fa,Sp) 3 credits

ED 117: Observation and Assessment of the Early Childhood Program  
The course will focus on the role of the learning environment and teacher/child interaction in the early childhood program. Students will visit programs and use observation forms to assess the quality of early childhood experience for the young child. Ten four-hour observation visits are required. Class: 3 hours per week and the required program visits. (Fa) 3 credits

ED 123: Language and Literacy  
This course is an introduction to the language and literacy development of children from birth through age eight. It explores ways that adults can promote growth in the areas of reading, writing, listening and speaking. Class: 3 hours per week (Sp) 3 credits

ED 200: Field Experience  
Students take one hundred fifty hours of training in a cooperating institution where they assume responsibilities appropriate to their previous background and experience. Attendance is required at proseminars and group evaluation sessions. Prerequisite: 30 credit hours of approved course work. (Fa,Sp) 3 credits

ED 200C: Field Experience in Early Childhood Education  
Students take one hundred fifty hours of training in a cooperating institution where they assume responsibilities appropriate to their previous background and experience. Attendance is required at proseminars and group evaluation sessions. Students enrolled in the Early Childhood Education Option ordinarily take this course twice, in different institutional settings. Prerequisites: ED 111 and PSYC 124. (Fa,Sp) 3 credits

ED 211: The Early Childhood Curriculum  
The study of the role of the teacher as s/he plans, implements, and evaluates a curriculum that focuses on the design of the learning environment, the interaction between teacher, child, and family, and the development of activities that foster children’s social, emotional, physical, and intellectual development. Class: 3 hours per week. Prerequisites: ED 111 and PSYC 124. (Fa) 3 credits

ED 212: Creative Activities for the Early Childhood Program  
This course covers the role of music, movement, art, language and learning, dramatic play, blocks, table toys, sand and water in the curriculum. The relationship of creative activities to the total educational program of the young child is explored. Students create and present developmentally appropriate creative activities. Class: 3 hours per week. Prerequisites: ED 111, ED 211, PSYC 124. (Sp) 3 credits

ED 217: Advanced Early Childhood Curriculum  
This course focuses on the teaching strategies necessary to design and implement a high quality early childhood program and will address topics of previous curriculum courses in greater depth. Study topics will include observation and planning for individual and groups of children, working with families, multicultural education, and guidance of the young child. Class: 3 hours per week. Prerequisite: ED 211. (Fa) 3 credits

ED 237: Science, Nature and the Environment  
This course will focus on the teacher’s role in supporting and expanding young children’s interests in science, nature and the environment. Students will both share and explore ideas, materials and activities both indoors and outdoors. Topics will include the importance of sand and water play, fostering observation skills and encouraging trial and error experiences. Identifying quality science literature for young children will also be addressed. Class: 3 hours per week. (Sp) 3 credits
ED 260: The Business of Child Care
This course will focus on administering Early Childhood Programs. It will look at establishing the program's framework, operationalizing the program and implementing the program. Emphasis will be on both center-based and family home child care settings. Class: 3 hours per week. (O) 3 credits

Electronics

ELT 111: Circuit Analysis I
An introductory course in electric circuit analysis. Mathematical techniques for analyzing and predicting the behavior of passive circuits excited from DC sources are emphasized. Topics include: the properties of resistance, capacitance and inductance; series, parallel and complex circuits, voltage sources and current sources; the maximum power transfer theorem; Kirchoff's current and voltage laws, Norton's and Thevenin's theorems, Maxwell's mesh analysis and Superposition theorem; and the transient response of RC and RL circuits. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: MATH 102, math placement test or two years of high school algebra. (Fa) 4 credits

ELT 112: Circuit Analysis II
Students will study the basic principles that govern the behavior of passive circuits excited from sinusoidal voltage and current sources. Topics include: reactance, admittance and impedance, the application of network theorems to AC circuits; single phase and poly phase circuit analysis; power and power factor correction; mutual induction, transformers and resonance. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: ELT 111. (Sp) 4 credits

ELT 113: Electrical Power Systems
This course covers the basic principles and major components used in energy conversion systems. Topics include: DC motor/generators, AC motor generators, AC squirrel cage induction motors and transformers and their control systems. Class: 3 hours per week. Prerequisites: PHYS 122, ELT 111. (Fa) 3 credits

ELT 201: Electronics I
A basic course beginning with a study of the physics of semiconductor devices and the DC and AC operation of solid state devices in active circuits. Devices studied include: diodes, zener diodes, bipolar and field effect transistors, and operational amplifiers. Emphasis is placed on the analysis and design of biasing networks and the small signal operating properties of discrete device amplifiers. Device characteristic curves and properties are developed for each of the devices above. Computer aided circuit simulation and analysis techniques are introduced for solving active electronic circuits. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: ELT 111, MATH 191. (Fa) 4 credits

ELT 202: Electronics II
This course is a continuation of ELT 201. Topics include: multistage amplifiers, multiple device circuit configuration, large signal amplifiers, active filters, regulated power supplies, oscillators, the Bode plot, Nyquist plots, frequency response, feedback and stability. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: ELT 201, ELT 112, MATH 191. (Sp) 4 credits

ELT 213: Controls Electronics
This course introduces students to electronic controls systems. Topics include: complex algebra, phasors, impedance, transfer functions, open and closed loop systems and sequential control including pneumatic and relay logic. Students will study pneumatic control elements, ladder diagrams, interfacing techniques, stepper motor controls and servo motor controls, the use of microcomputer controls in industrial applications such as robotics, application of data conversion electronics and the applications of program controllers. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: ELT 201, MATH 191. (Fa) 4 credits

ELT 215: Microprocessors
A basic course in the use of microprocessors in real time control applications and development systems and/or interfacing with machines using assembly and higher level languages. Class: 3 hours per week. Lab: 2 hours per week. Prerequisites: ELT 201, MATH 191. (Sp) 4 credits

Engineering

Technical Education 101: Introduction to Engineering & Technology
An introduction to engineering and technology careers with special emphasis on the programs of Engineering Science; Manufacturing Engineering Science; Industrial Engineering Technology; Electronics Technology; Quality Assurance Technology; Tool, Die, and Gage Maker Technology; and Machine Tool Service Technology. The course will include an introduction to the history and development of technology, career choices in the fields of engineering and technology, professional responsibilities in the chosen career fields, study skills, use of the technical library and publications, and information about specific technical programs at MCTC. Class 1 hours per week. (Fa,Sp) 1 credit

ENGR 101: Engineering Drawing Interpretation
An introduction to the interpretation of engineering drawings beginning with the basics of orthographic projection. Topics include: working drawings, lines, linear and angular dimensioning, sectional views, tolerances and allowances, thread representation, arrowless and tabular dimensioning, steel specifications, auxiliary views, point-to-point and datum dimensioning conforming to ANSI Y14.5M and ISO standards. Class 3 hours per week. (Fa) 3 credits

ENGR 102: Geometric Dimensioning and Tolerancing
An intermediate course in the interpretation of engineering drawing beginning with the basics of dimensional tolerances and tolerance systems. Topics include: the mathematics of interpreting and specifying tolerances on dimensions, the system of geometric tolerancing, the basic nomenclature and standard symbols conforming to ANSI Y14.5M. Class: 3 hours per week. Prerequisite: ENGR 101. (Sp) 3 credits

ENGR 111: Introduction to Engineering
Students will be introduced to the fields of engineering through design and graphics and comprehensive engineering projects. Topics include: sketching, charts, graphs, forces, energy, electrical circuits, mechanisms, robotics, manufacturing technologies, and fundamentals of engineering economics. Class: 3 hours per week. Prerequisite: MATH 102 or a satisfactory score on math placement test. (Fa,Sp) 3 credits

ENGR 121: Mechanics
A basic course in the fundamentals of classical mechanics. Topics include: vectors, kinematics, translational and rotational equilibrium, torque, Newton's laws of motion, gravitation, work, power, energy, impulse, momentum, rotary motion and elasticity. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: MATH 116. (Fa) 4 credits

ENGR 122: Electricity/Electronics I
A basic course in electricity and electronics for students who are not electronics majors. Topics include: DC circuits, AC circuits, basic magnetics, fundamentals of electrical machinery and basic electronics. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: MATH 116. (Fa) 4 credits

ENGR 123: Electricity/Electronics II
An intermediate class in electricity and electronics for students preparing for careers in manufacturing machine tool service. Topics include: basic principles and major components (DC motor/generators, AC motor/generators, etc.) used in energy conversion, analog and digital circuits, and machine control systems, circuits and components. Class: 3 hours per week. Lab: 2 hours per week. Prerequisite: ENGR 122. (Sp) 4 credits
**ENGR 211: Engineering Statics**

Students will be introduced to engineering mechanics via vector approach to static forces and their resolution. Topics include: properties of force systems, free-body analysis, first and second moments of areas and mass, and static friction. Applications to trusses, frames, beams and cables included. Class: 3 hours per week. Prerequisite: MATH 192 (which may be taken concurrently). (Fa) 3 credits

**ENGR 212: Engineering Dynamics**

Engineering applications of Newtonian mechanics to dynamic forces, translational motion, work, impulse and momentum will be taught. Topics included: kinematics, kinetics of particles and rigid bodies, vibrations, energy and momentum conservation. Class: 3 hours per week. Prerequisites: ENGR 211 and MATH 192. (Sp) 3 credits

**ENGR 221: Introduction to Electric Circuit Analysis**

Linear electric circuit analysis using Ohm’s and Kirchhoff’s laws; includes loop and nodal analysis; transients in electric circuits; behavior of operational amplifiers and nonlinear devices; design, operation and use of electric instruments; basic meter movements; simple filter circuits; laboratory included. TI-85 graphing calculator required. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: PHYS 132 and MATH 192. Corequisite: MATH 201. (Sp) 4 credits

**English**

**ENG 093: Preparatory College Reading and Writing I**

This course is designed for students who need a semester of reading and writing experiences before continuing on to ENG 096 and/or ENG 098. This course will engage students in reading and writing activities with an emphasis on whole class and small group discussion. Students who complete the course with a grade of “C” or better will be placed by their instructor in either ENG 096 or 098, depending upon the needs of the student. This course cannot be taken concurrently with ENG 096 or 098. Class: 3 hours per week. (Fa,Sp) no credit

**ENG 096: Preparatory College Reading and Writing II**

This course focuses on reading and writing as processes. Students interact with various types of text through reading, writing, listening and speaking. They will have the opportunity to create meaningful pieces for real purposes and real audiences. This course will prepare students to understand, interpret and respond to course content at the college level. As a result of this course, students will form a set of personal strategies for reading and writing. A grade of “C” or better is required to take ENG 111. Students who complete the course with a “C-” or lower, will be placed by their instructor in ENG 096 or 098, depending upon the needs of the student. Class: 6 hours per week. (Fa,Sp) 3 credits

**ENG 098: Preparatory College Reading and Writing III**

This course is designed for students who need to further develop their capabilities in language use—reading, writing, thinking and speaking to prepare them for the kinds of assignments they will be asked to complete in ENG 111 and beyond. Student will read, discuss, think and write about a number of topics. A grade of “C” or better is required to take ENG 111. Class: 3 hours per week. (Fa,Sp,Su) no credit

**ENG 100: Basic Study Skills**

This course is designed for and required of all students enrolled in the Adults in Transition program. Taken just before their first semester, this course introduces students to fundamental study skills. It presents these skills as processes and shows how they relate to and reinforce one another. Class: 15 hours. (Fa,Sp) 1 credit

**ENG 103: Reading Dynamics and Study Skills**

This course enhances reading and study skills on an individualized and group basis. The course includes the following areas: reading comprehension, note taking, memory training, time management, outlining procedures, how to use the library, how to take essay and objective examinations, and how to study. Class: 3 hours per week. [H,L] (Fa,Sp,Su) 3 credits

**ENG 106: ESL - Structure I**

This is the beginning level of content-based grammar for the ESL student. Students are required to attend the language lab one hour a week to practice grammatical patterns as well as pronunciation, stress and intonation. Class: 3 hours per week. Note: ENG 106 may be taken concurrently with ENG 116. But permission of instructor is required. [H,L] (Fa,Sp) 3 credits

**ENG 107: ESL - Structure II**

This course is the intermediate level of content-based grammar for the ESL student. Students are required to attend language lab one hour a week to practice grammatical patterns as well as pronunciation, stress and intonation. Class: 3 hours per week. Prerequisite: C or better in ENG 106 or appropriate placement test score or permission of instructor. ENG 107 may be taken concurrently with ENG 117. But permission of instructor is required. [H,L] (Fa,Sp) 3 credits

**ENG 111: College Reading and Writing**

This course is designed to introduce students to “the language of the academy”—that is, to the complex literacies of reading, writing, thinking, and speaking required of college students regardless of their area of specialization. ENG 111 also introduces students to the specific requirements and standards of academic writing, including essay format, voice, and organizational strategies. Class: 3 hours per week. (Fa,Sp,Su) 3 credits

**ENG 112: Reading and Writing for Academic Research**

This is a course designed to develop and refine the advanced skills in composition that are essential for both academic and professional writing. Emphasis will be on writing from data (outside sources). The main areas covered will be expository writing, argumentation and the research paper. Class: 3 hours per week. Prerequisite: ENG 111 with a grade of “C” or better. [H,L] (Fa,Sp) 3 credits

**ENG 114: Technical Writing**

This course focuses on the researching, writing, and editing of documents commonly found in the fields of science, technology, and business. Major topics covered include memo reports, instructions, proposals, progress reports, abstracts, document design, and documentation styles for technical reports. Class: 3 hours per week. Prerequisite: ENG 111. [H,L] (Sp) 3 credits

**ENG 115: Critical Thinking**

This course is designed to help students sharpen their analytical skills and deal clearly and logically with information. The role of language and perception in the reasoning process will be explored. Reading, writing, research and discussion will cover a broad spectrum of controversial topics and open-ended problems. This class will help students, not only with other college courses, but with life! [H,L] (Sp) 3 credits

**ENG 116: ESL - Reading/Writing I**

This is a beginning course of reading and writing in ESL. It also concentrates on proper spelling, punctuation and capitalization of written paragraphs. Class 3 hours per week. Prerequisite: C or better in ENG 106 or appropriate placement test score or permission of instructor. ENG 116 may be taken concurrently with ENG 106. But permission of instructor is required. [H,L] (Fa,Sp) 3 credits

**ENG 117: ESL - Reading/Writing II**

This is an intermediate course of reading and writing in ESL, emphasizing reading comprehension, inference and critical thinking strategies as well as more complex paragraph format and eventual essay development. Class: 3 hours per week. Prerequisite: C or better in ENG 107 or
appropriate placement test score or permission of instructor. ENG 117 may be taken concurrently with ENG 107. But permission of instructor is required. [H,L] (Sp) 3 credits

**ENG 120: Introduction to Literature**

This course is an introduction to the thematic and formal elements of literatures of diverse cultures, with an emphasis on fiction, poetry, drama, and the essay, with the aim of developing interpretive reading and writing skills. Class: 3 hours per week. Prerequisite: ENG 111 with a grade of “C” or better. [H,L] (Fa) 3 credits

**ENG 120 WE: Introduction to Literature**

A 4-credit innovative approach to the reading and study of literature in its three major genres. Selected Fiction, Poetry, and Drama will be read and analyzed using a thematic approach. Emphasis will be on the strengthening of reading skills related to imaginative writing and the development of an appreciation for good literature in its wide range of themes, forms and cultural diversity. In addition to the traditional material covered in ENG 120 classes, students in ENG 120 WE will receive an additional credit for participating in a unique Humanities Weekend Experience: two days of entertaining and educational activities in the various areas of the Humanities (i.e. art, poetry, music, history, drama, and philosophy). Pre-Weekend and post-Weekend reading and writing assignments will be given to prepare students for the Weekend activities and to help them attain a better understanding of and appreciation for the Humanities. Class: 3 hours per week. Prerequisite: ENG 111 with a grade of “C” or better. [H,L] (Sp) 3 credits

**ENG 140: Film and Literature**

This course explores what happens when classic (and not-so-classic) works of fiction and drama are brought to the screen. In studying specific literature-to-film adaptations, we will examine the elements of both media (metaphor, narration, symbol, shot, sound, editing) and debate what differences, if any, exist between so-called serious art and entertainment. Class: 3 hours per week. Prerequisite: ENG 111. [H,L] (O) 3 credits

**ENG 202: British Literature II**

A survey of representative figures and concerns in British Literature from 1799 to the Modern Period. Class: 3 hours per week. Prerequisite: ENG 120. [H,L] (Fa) 3 credits

**ENG 203/BOT 203: Advanced Editing and Proofreading**

An advanced course designed to hone written communication skills including writing, editing, and proofreading documents. This course will also help students develop a command of the standards and conventions of written English. Class: 3 hours per week. Prerequisite: ENG 111 or permission of the instructor. [H,L] (Fa,Sp) 3 credits

**ENG 220: Introduction to Contemporary Women Poets**

A seminar on the lives and work of women poets from the Puritan period, the eighteenth century and the American Civil War. Topics covered include Native American tales and oratories, slave folklore, and both the popular and “classic” works of writers from the Puritan period, the eighteenth century and the American Renaissance. Class: 3 hours per week. Prerequisite: ENG 120 or permission of the instructor. [H,L] (Fa) 3 credits

**ENG 245: American Literature I**

An examination of writings from the era spanning the arrival of Columbus to the Civil War. Topics covered include Native American tales and oratories, slave folklore, and both the popular and “classic” works of writers from the Puritan period, the eighteenth century and the American Renaissance. Class: 3 hours per week. Prerequisite: ENG 120 or permission of the instructor. [H,L] (Fa) 3 credits

**ENG 246: American Literature II**

A study of major American writers from the late 19th century to the present day, with focus on their contributions to the rapid and unique changes in style, form and content that mark the literary tradition of 20th century America. Class: 3 hours per week. Prerequisite: ENG 120 or permission of the instructor. [H,L] (Sp) 3 credits

**ENG 251: Western World Literature I**

This course introduces students to Western literature from the Greeks through the Renaissance, and (for purposes of comparison) to a variety of so-called “non-canonical” texts from writers who until very recently were not studied in college classrooms. Students will examine the poetic and narrative strategies of writers from a variety of classes and cultures. Class: 3 hours per week. Prerequisite: ENG 120 or permission of the instructor. [H,L] (Sp) 3 credits

**ENG 252: Western World Literature II**

This course is designed to introduce students to Western literature from the Age of Reason through the Modern Period, and (for purposes of comparison) to introduce students to a variety of so-called “non-canonical” texts from writers who until very recently were not studied in college classrooms. Students will examine the poetic and narrative strategies of writers from a variety of classes and cultures. Class: 3 hours per week. Prerequisite: ENG 120 or permission of the instructor. [H,L] (Fa) 3 credits

**ENG 271: Women in Literature**

A course designed to explore the nature, roles, relationships, and feelings of women as expressed by women writers in various literary genres (essays, short stories, personal reflections, poems, plays and novels). Students will read the works of women writers of the 17th, 18th, 19th and 20th centuries, who share their ideas and understanding of what it is to be human and, particularly, to be female. Class: 3 hours per week. Prerequisite: ENG 120 or permission of instructor. [H,L] (Fa) 3 credits

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**Environmental Science**

**EVSC 100: Introduction to Environmental Science**

An introduction to the problems of physical resources management and aspects of ecological concern in our natural environment, with emphasis on our demand for energy, the consumption of our natural resources, resource pollution, and waste management. Alternate sources of energy are explored. Class: 3 hours per week. [L,N] ((Fa,Sp,Su) 3 credits

**EVSC 110: Fundamentals of Solar Energy**

A study of the availability and utilization of solar energy as an alternate energy source. Consideration is given to both air and liquid systems with specific application to active and passive solar energy systems. Class: 3 hours per week. [L,N] (Sp) 3 credits

**Finance**

**FNCE 150: Investment Basics**

Introduction to the basics of money management: budgeting, saving, and investing. Students will develop an understanding of reconciling bank or brokerage statements, reading stock, bond, and mutual fund listings in The Wall Street Journal, and learning what to look for in a mutual fund prospectus and an annuity contract. Students will also be introduced to various retirement programs (IRA, Keogh, 401k, 403b, etc.). [B] (Fa,Sp) 1 credit
FNCE 210: Fundamentals of Personal Financial Planning
A survey of the financial planning process; introduction to regulations affecting financial planners; construction of financial statements; analysis of client’s current financial situation; overview of economic environment; presentation of time value of money concepts; and introduction to case analysis. Financial calculator required. HP 12-C recommended. [B] (Fa,Sp) 3 credits

FNCE 220: Risk Management
Principles of risk management; the insurance contract and concepts relating to life insurance, property and liability insurance, medical and disability insurance, and social insurance; case analysis evaluating insurance needs; and selecting appropriate risk management techniques. Time value of money calculations using financial calculator. Prerequisite: FNCE 210 or permission of program coordinator. [B] (O) 3 credits

FNCE 230: Investment Management
Principles of investment management, including the study of stocks, bonds, government securities, mutual funds, futures, options, and tangible assets for investment to construct and manage an investment portfolio with knowledge of risk and tax considerations. Time value of money calculations using financial calculator. Prerequisite: ACCT 101 and FNCE 210, or permission of program coordinator. [B] (O) 3 credits

FNCE 240: Tax Planning and Management
Principles of tax planning and management, including the study of tax law, terminology and calculation; tax implications of selecting a particular form of business; tax-advantaged investments; tax planning techniques; intrafamily and charitable transfers; and tax traps. [B] (O) 3 credits

FNCE 241: Corporation Finance
A study of the principles and techniques of financial management covering money and capital markets, financial analysis, working capital management, long-term financing, time value of money, risk, leverage, and cost of capital. Prerequisite: ACCT 102. [B] (Fa,Sp) 3 credits

FNCE 250: Retirement Planning and Employee Benefits
A survey of the key terms and concepts of retirement planning and analysis of employee benefit programs using time value of money calculations. Students will study both private corporate pension plans and government programs, including social security and Medicare as well as qualified and nonqualified corporate programs. Prerequisite: FNCE 210 or permission of program coordinator. [B] (O) 3 credits

FNCE 260: Estate Planning
A survey of principles of estate planning, including discussion of descent and distribution, wills, intestacy, probate and administration, Probate Court, estate and gift tax returns, fiduciary accounting. Prerequisite: FNCE 210 or permission of program coordinator. [B] (O) 3 credits

FNCE 261: Financial Management
Investigation of spatial design as a decision-making and problem-solving process bounded by criteria such as human sensory systems, basic structural systems and materials. Class activities will include studio assignments, demonstrations, lectures, slide presentations, museum visits and critiques. Studio problems will be worked on during and outside of class time. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits

FNCE 262: Three Dimensional Design
Investigation of spatial design as a decision-making and problem-solving process bounded by criteria such as human sensory systems, basic structural systems and materials. Class activities will include studio assignments, demonstrations, lectures, slide presentations, museum visits and critiques. Studio problems will be worked on during and outside of class time. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits

FA 101: History of Art I
The history and appreciation of fine arts (painting, sculpture, architecture, etc.) from prehistoric through medieval eras. Outside reading and visits to galleries and museums are required. Class: 3 hours per week. [H,L] (Fa) 3 credits

FA 102: History of Art II
The history and appreciation of fine arts (painting, sculpture, architecture, etc.) from the Renaissance through the 20th century. Outside reading and visits to galleries and museums are required. Class: 3 hours per week. [H,L] (Sp) 3 credits

FA 103: History of 20th Century Art
Visual art movements of the past 100 years from Impressionism and Cubism to today’s art. Outside reading and visits to galleries and museums are required. Class: 3 hours per week. [H,L] (Fa,Sp) 3 credits

FA 106: Women in the Visual and Performing Arts
This course will address the cultural biases that have relegated women artists to the ‘back burner’ of mainstream cultural aesthetics. A historical survey of women's contributions to the visual and performing arts will augment our inquiry into philosophical questions such as: Is there a “Feminist” Aesthetic? or: Who determines what is “Great” art? Class: 3 hours per week. [H,L] (O) 3 credits

FINE ARTS STUDIO COURSES: Students enrolled in fine arts studio classes are responsible for buying any supplies required for satisfactory completion of the course. All studio courses (FA 115-165) are open to both beginning and advanced students. Advanced students may work on individual projects. Studio courses meet 6 hours per week.

FA 115: Introduction to Studio Art
A course covering the fundamentals of visual art through hands-on experience. The course includes basic design and composition, color theory, drawing and a thorough exploration of the creative process through the use of a wide variety of media and techniques including drawing, water media, collage and fiber. [H,L] (O) 3 credits

FA 121, FA 122, FA 223, FA 224: Drawing I/II
This course covers the basic elements, media and processes of drawing including composition and perspective. Extensive drawing from still-life, landscape and the live model will emphasize development of students' manual, perceptual and conceptual skills. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits. May be taken up to four times as FA 121, 122, 223 and 224, all of which run concurrently.

FA 125: Two Dimensional Design
The theory and practice of design principles: compositional problems, color and the interrelationships of space, planes and volumes are examined in two dimensional projects using a variety of media. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits

FA 126: Three Dimensional Design
Investigation of spatial design as a decision-making and problem-solving process bounded by criteria such as human sensory systems, basic structural systems and materials. Class activities will include studio assignments, demonstrations, lectures, slide presentations, museum visits and critiques. Studio problems will be worked on during and outside of class time. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits

FA 127, FA 128, FA 227, FA 228: Figure Drawing
This in-depth course is based in both anatomical and expressive approaches to human figure drawing. A variety of media will be explored, including color and wet media, along with instruction in composition, proportion and foreshortening principles. Students will work extensively from the live model. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits. May be taken up to four times as FA 127, 128, 227, 228, all of which run concurrently.

FA 131, FA 132, FA 233, FA 234: Painting
A course in the technical and aesthetic fundamentals of painting, covering construction of a canvas, selection and use of materials, basic color theory, realistic and expressive paint handling. Students will work in both traditional and experimental painting styles. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits. May be taken up to four times as FA 131, 132, 233, 234, all of which run concurrently. *Experience in drawing is strongly recommended.

FA 137, FA 138, FA 237, FA 238: Water Color
An introduction to the technical and aesthetic principles of painting with water media, primarily water color. This course will cover the selection and use of water media materials in a variety of styles and deal with various subject matter from the still life to the landscape. Design elements


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and compositional problems are also included. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits. May be taken up to four times as FA 137, 138, 237, 238, all of which run concurrently. *Experience in drawing is strongly recommended.

FA 141, FA 142: Printmaking
A course in the materials, design and techniques of printmaking: calligraphy, etching, silk screening and relief printing. Studio: 6 hours per week. [H,L] (Fa) 3 credits. May be taken for two semesters (when offered) as FA 141 and 142, both of which run concurrently.

FA 151, FA 152, FA 253, FA 254: Sculpture
A course in the principles, techniques, and materials of sculpture (metal fabrication/welding, casting, plaster, wood, etc.). Students will concentrate on controlling sculptural media and examining the fundamentals of three-dimensional design. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits. May be taken up to four times as FA 151, 152, 253, 254, all of which run concurrently.

FA 161, FA 162, FA 163, FA 164: Creative Crafts: Fiber Arts
A course in contemporary and traditional means of making art with fibers including weaving, soft sculpture, batik, tapestries, paper making and coiling. Studio: 6 hours per week. [H,L] (O) 3 credits. May be taken up to four times as FA 161, 162, 163 and 164, all of which run concurrently.

FA 165, FA 166, FA 267, FA 268: Ceramics
Experimentation with, and development of, basic skills in a variety of hand-forming, wheel-throwing, firing and glazing techniques. The class focuses on processes involved in creating both utilitarian and sculptural works. Studio: 6 hours per week. [H,L] (Fa,Sp) 3 credits. May be taken up to four times as FA 165, 166, 267 and 268, all of which run concurrently.

FA 171/COMM 171: Film Study and Appreciation
[H,L] (Fa,Sp,Su) 3 credits. (See Communications, page 84.)

FA 176/COMM 176: Video/Filmmaking
(Fa) 3 credits. (See Communications, page 84.)

FA 201: Illustration I
A studio course designed to develop fundamental graphic rendering skills. The course explores a variety of materials and media through the creation of images. The emphasis is on the translation of concepts into visuals. (Illustration may be taken up to 4 times for credit.) [H,L] (Fa,Sp) 3 credits

FA 202, FA 203, FA 204: Illustration II, III, IV
These studio courses expand the skills and techniques of translating concepts into visual form that were learned in FA 201 with a greater emphasis on project development and professional presentation. [H,L] (Fa,Sp) 3 credits

FA 205: Graphic Design I
An introduction to communication design and basic studio skills with an emphasis on developing the ability to convert creative concepts into visual form that were learned in FA 201 with a greater emphasis on project development and professional presentation. [H,L] (Fa,Sp) 3 credits

FA 206, FA 207, FA 208: Graphic Design II, III, IV
Subsequent semesters of graphic design build on fundamentals covered in FA 205 but place a greater emphasis on professional design presentation through the development of more complex projects. [H,L] (Fa,Sp) 3 credits

FA 210: Computer Graphics I
An introduction to creating images using the Macintosh computer. Students will learn basic imaging skills through the use of several software programs such as MacPaint, MacDraw, QuarkXpress, and PageMaker. Previous drawing or design experience is helpful and no prior computer skills are required. [L] (Fa,Sp) 3 credits

FA 211, FA 212, FA 213: Advanced Computer Graphics
This course is a continuation of computer imaging skills developed in FA 210 but with an emphasis on creating and executing design projects on the computer. The course includes instruction in advanced software such as Adobe Illustrator and Adobe Photoshop as well as such topics as image scanning, memory management and color outputting. Studio: 6 hours per week. (Advanced Computer Graphics may be taken up to three times for credit.) [L] (Fa,Sp) 3 credits

FA/COMM 251, FA/COMM 252: Computer Animation
[L] (Fa,Sp) 3 credits. (See Communications, page 85.)

FA 270: Cooperative Education/Work Experience
This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their programs of study including corporations, publishing/graphic design firms and newspapers. Prerequisite: 15 completed credit hours in Graphic Design. (Fa,Sp) 3 credits. Please refer to page 16 for more information and general prerequisites for Cooperative Education/Work Experience.

French
FREN 101: Elementary French I
An introduction to spoken and written French and Francophone culture. Emphasis is on communication through development of skills in conversation, reading and writing based upon the principles of French grammar and pronunciation. No previous knowledge of French is required. Class: 3 hours per week. Laboratory: 1 hour per week. [H,L] (Fa) 3 credits

FREN 102: Elementary French II
The second half of Elementary French. Practice in conversation, reading and writing, and the study of French grammar and culture as an aid to communication. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisite: FREN 101. [H,L] (Sp) 3 credits

FREN 106: Elementary French I and II
An intensive beginning French course in which FREN 101 and 102 are completed in one semester. This course is a study of written and spoken French and Francophone culture with emphasis on oral proficiency through audio and video tapes. Class: 6 hours per week. Laboratory: 2 hours per week. [H,L] (O) 6 credits

FREN 110: French Conversation
This course is designed for the student with no previous French experience who needs French vocabulary and grammar which is useful for the traveler. The emphasis will be on oral communication and comprehension. [H,L] (O) 3 credits

FREN 125: French Culture and Civilization
This course, taught in English, will acquaint the student with French customs and culture. In addition to an overview of French history, the course will present life in France today and will provide practical information for those intending to visit France. [H,L] (O) 3 credits

FREN 130: France Today
This course is designed as a companion course to the academic travel program. It is open only to participants on the trip and is conducted as an independent study course before, during and after the trip. Credits: 1, 2, or 3 credit hours (the number of credit hours earned depends on the nature of the trip, the final project, and the extent of participation). Corequisite: student must participate in an academic trip sponsored by MCTC. [H,L] (O) 1, 2 or 3 credits

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FREN 201: Intermediate French I
An intermediate level study of the principles of French grammar and basic vocabulary as a means of developing skills of conversation, reading and writing. The course includes the study of Francophone culture. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisites: FREN 101 and 102, or two years of high school French, or permission of instructor. [H,L] (Fa) 3 credits

FREN 202: Intermediate French II
This course is the second half of Intermediate French. The course will work to continue to develop skills in listening, speaking, reading and writing, including reading from selections on Francophone culture. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisites: FREN 101 and 102, or two years of high school French, or permission of instructor. [H,L] (Sp) 3 credits

FREN 203: Advanced French I
This course allows students to perfect their skills in French. Oral and written practice will be based on cultural and literary readings. Prerequisites: FREN 201 and 202, or permission of instructor. [H,L] (O) 3 credits

FREN 204: Advanced French II
This course is the second half of Advanced French. Students will read, discuss and write about excerpts from literary masters of the French-speaking world. Prerequisites: FREN 201 and 202, or permission of instructor. [H,L] (O) 3 credits

Geography
GEOG 101: People and Land: Introduction to Geography
This course introduces some of the many topics geographers examine to explain the relationship between people and place. Topics include the physical earth, i.e. how mountains and lakes form, cultural patterns such as how languages in neighboring countries are related, population analysis, like human migration trends, and economic analysis including growth and decline of regions. Geographic factors that underlie current political, social and economic problems will also be explored. [L,S] (Fa,Sp,Su) 3 credits

GEOG 111: World Regional Geography
This course provides the student with a survey of the lands, peoples, and places in the world’s major cultural regions. Students explore the interaction between the physical environment, cultural, political and economic conditions in regions such as South and Middle America, Asia, Africa and the Middle East. This course provides a background for understanding world events. [L,S] (Fa,Sp,Su) 3 credits

GEOG 201: Urban Geography
The history, nature and function of urban settlements are considered, with attention to geographic problems of urban areas. Introduction to practical problems, using census data, interpretation of aerial photographs, G.I.S. and map construction. Class: 3 hours per week. [L,S] (Sp) 3 credits

GEOG 202: A Geography of the United States and Canada
A regional study of the environmental, cultural, political and economic patterns that give character to the different parts of the U.S. and Canada. Historical and contemporary factors are considered to determine the place of this region in the modern world, with a focus on the changing role of the U.S. in the global marketplace. [L,S] (Sp) 3 credits

GEOG 203: This Fragile Planet: Toward an Environmentally Responsible World
An introduction to the global environmental dilemma from the end of the 20th century perspective. Attention to natural and cultural environmental problems with stress on causes, remedial action, policy and politics. [L,S] (Fa) 3 credits

GEOG 204: Geography and Tourism Development
The course introduces students to tourism and the components that link geography and travel together. The tourism system model of demand, travel, destination, and marketing is discussed. This course also gives insight into tourism planning; impacts on the water, land, and air; travel geography; travel modes; accommodations; support industries; resorts; tourism regulation; consumer behavior; and trends. The comprehensive view outlined in the course brings to the forefront the immense proportions of world tourism. [L,S] (Sp) 3 credits

GEOG 205: Physical Geography and Human Activity
In order to understand the human physical environment, physical geography examines the atmosphere, lithosphere and hydrosphere — our life zone, the biosphere. This course will examine each of these earth layers and their connectivity in order to provide students with an understanding of the world around them. Class: 3 hours per week. [L,S] (O) 3 credits

Geology
GEOL 101: Introduction to Physical Geology
An introduction to the principles governing the composition and structure of the Earth’s crust, and the study of land forms and geological processes on and within the Earth’s surface. Topics include: rock-forming minerals, rocks, fossils, glaciers, earthquakes, volcanoes, plate tectonics and mountain building. Field trips may be included. Class: 3 hours per week. [L,N] (Sp) 3 credits

Gerontology
GERN/SOC 141: Dealing with Alzheimers
An introduction to the possible causes and ramifications of Alzheimers disease. This course will emphasize the physical, psychological and sociological aspects of the disease for individuals, families and society. Class: 3 hours per week. [S] (Sp) 1 credit

GERN/SOC 142: Health, Nutrition and the Elderly
An introduction to the variety of health related changes experienced by the elderly and the impact of those changes on health choices made by the elderly. The course emphasizes healthy options for seniors during the later stages of life. Class: 3 hours per week. [S] (Sp) 1 credit

GERN/SOC 143: Legal Issues for Seniors
The student will be introduced to an array of options related to retirement planning, power of attorney., trusts and wills. The student will be provided with information leading to the preparation of legal documents although no specific legal advice will be given. Additionally, students will learn about the process of probate. Class: 3 hours per week. [S] (Sp) 1 credit

GERN/PSYC 144: Aging and Mental Health
Students will examine mental health, mental health issues, and mental health service delivery systems as they relate to the elderly population. Class: 3 hours per week. [S] (Sp) 1 credit

GERN/SOC 145: Work and Leisure Opportunities for the Elderly
This course will examine the financial and emotional impact of retirement. Work and leisure opportunities for the elderly, discrimination against the older worker and adjustment to retirement will be explored. Class: 3 hours per week. [S] (Sp) 1 credit

GERN/SOC 146: Caring for the Elderly at Home
This course will consider the key social issues and current health care delivery systems that impact the aged population and their families. Emphasis will be placed on the advantages and disadvantages of home care for the elderly. Class: 3 hours per week. [S] (Sp) 1 credit
Health, Physical Education
The College offers instruction in many different kinds of athletic activities and an associate degree in Sport and Exercise Studies. Consult the class schedule for the list of health, physical education courses offered each semester.

HPE 120: Physiology of Fitness
A survey of sport/exercise physiology and its application to sport performance and fitness. Emphasis will be placed on a study of physiological changes associated with training for various sports. (Sp) 3 credits

HPE 125: Beginning Tennis (Fa,Sp) 1 credit
HPE 126: Racquetball (O) 1 credit
HPE 127: Beginning Badminton (O) 1 credit
HPE 128: Volleyball (O) 1 credit
HPE 129: Basketball (O) 1 credit
HPE 130: Softball (Fa,Sp) 1 credit
HPE 131: Soccer (Fa,Sp) 1 credit
HPE 132: Bowling (Fa) 1 credit
HPE 133: Beginning Golf (Sp) 1 credit
HPE 138: Self Defense-Elementary Tae Kwon-Do (O) 1 credit
HPE 139: Aerobics and Weight Training (Fa,Sp) 1 credit

HPE 140: Medical Aspects of Sport
An introduction to the basic concepts and techniques in the prevention, diagnosis, treatment and rehabilitation of injuries to athletes. The practical applications are examined. Basic concepts of training, conditioning, diet and nutrition in athletics are presented. Class: 2 hours per week. Prerequisite: permission of instructor. (Fa) 2 credits

HPE 141: Principles and Practices of Sport
An introduction to the basic principles and practices required to deal with the arrangement, administration and organization of athletic programs. Emphasis is placed on planning athletic activities: legal responsibilities, historical perspectives of sport, ethics, philosophy, sport psychology, sport pedagogy, sport medicine and physiology will be introduced. This course meets state certification requirements. Class: 3 hours per week. (Fa,Sp) 3 credits

HPE 160: First Aid and Safety
This course provides the skill and knowledge needed in the immediate care of injured persons and seeks to create a safety consciousness for accident prevention. American Red Cross certificates are awarded to those who qualify. The prevention and care of basic athletic injuries are also studied. Class: 2 hours per week. (Fa,Sp) 2 credits

HPE 161: Physical Fitness and Exercise
This course is designed to provide the background information concerning exercise prescription, development and follow through. Participants will be trained in exercise testing theory and ethics, and practical exercise prescription. Class: 2 hours per week. (Sp) 2 credits

HPE 165: Professional Practicum
This course is designed to allow qualifying students the opportunity to gain on-campus and/or off-campus teaching, coaching, supervision, or practical experience under the supervision of a program coordinator and in cooperation with a qualified professional when appropriate. The student will perform 40 hours of work for each semester hour of credit. This work will reflect the duties of the intern as outlined and agreed upon by the student and the program coordinator. (Fa,Sp) 1-3 credits

HIST 101: Western Civilization Through the Reformation
An examination of major themes in the development of Western Civilization from the earliest historical beginnings. Topics include: Ancient Middle East, Greece and Rome, Medieval and Renaissance Europe. Class: 3 hours per week. [H,L,S] (Fa,Sp,Su) 3 credits

HIST 102: Western Civilization Since the Reformation
A continuation of HIST 101, examining the history of Western Civilization from the Protestant Reformation to the Cold War. Class: 3 hours per week. [H,L,S] (Fa,Sp) 3 credits

HIST 121: World Civilization I
Beginning with an examination of the most ancient human societies, as revealed in the archaeological record, the course goes on to study the origin, development and spread of the major civilizations in the world, their contacts, interactions and cross-fertilization down to the point at which the civilization of Western Europe begins its world-wide expansion. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 122: World Civilization II
This course studies the major trends and conflicts throughout the world after 1500 to the present, focusing on the impact of and reaction to the Western world through slavery, imperialism, the two world wars, and the Cold War. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 201: United States History I
The course represents a social, political, and economic survey of America beginning before the arrival of Columbus and continuing to 1877 through an analysis of the transformation from Native American to Anglo-American society, from sectionalism to national unity, from westward expansion to urban development and an examination of the forces shaping American thinking and society. Other topics will feature race, ethnicity, women, and family issues. Class: 3 hours per week. [H,L,S] (Fa,Sp,Su) 3 credits

HIST 202: United States History II
The course represents a social, political, and economic survey of the United States from 1877 to the present through an analysis of the growth of transportation, industrialization, urbanization, technology, and imperialism and an analysis of their effects in shaping American thinking and society. The discussion will also feature women’s suffrage, civil rights, and ethnic and minority issues. Class: 3 hours per week. [H,L,S] (Fa,Sp,Su) 3 credits

HIST 204: The City in American History
An examination of the impact of the city upon American life, centered around the transformation from the 17th century, pre-industrial town to the post-industrial 20th century city. Field trips are included. Class: 3 hours per week. Prerequisite: any one of the following: GEOG 101; HIST 201, 202 or 215; CJ 111; HS 101; SOC 101. [H,L,S] (O) 3 credits

HIST 210: Colonial History
A study of the 13 American colonies in the 17th and 18th centuries with emphasis on the Europeans and Africans who settled the colonies. Field trips will be included. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 215: America Since 1945
America’s political, social, intellectual and diplomatic history, with emphasis on the period from 1945 to present. Topics include: the Cold War and Detente, the quest for social justice, the changing face of urban America, race relations, social and political upheavals. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 220: Racial and Ethnic History of the United States
This course will examine immigration to this country from Europe, Africa, Asia and Latin America. It will explore whence we came and why, and how we adapted to life in the United States while retaining
emotional attachments to our homelands. Field trips and slide lectures complement class discussions and readings. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 222: Modern Ireland
Focuses on the political, social, cultural and economic development of Ireland after 1600. Major themes discussed include: Ireland’s relationship with Britain, the role of the Catholic Church, emigration, and the creation of the divided modern Irish state [H,L,S] (O) 3 credits

HIST 242: Europe in the 20th Century
An introductory survey of the diplomatic, political, social and intellectual history of Europe from 1914 to present. Class: 3 hours per week. Prerequisite: 3 hours of college history. [H,L,S] (Sp) 3 credits

HIST 251: History of Women in the U.S.A.
A study of American women from pre-contact period to the late 20th century. Special emphasis will be given to the effects of race, class and ethnic origins on the history of particular groups of American women. [H,L,S] (O) 3 credits

HIST 261: From Village Green to Mill Town: The Transformation Of American Life in the 19th Century
This course uses modernization theory to explain the changes in American life from the end of the War of 1812 to 1890. Particular emphasis will be placed on economic and technological developments, especially in industry and transportation. The increased authority and operations of the Federal Government will be considered. These changes will be viewed as the result of mostly conscious decisions to increase human control over the environment. Attention will be paid to the less anticipated effects of these changes on family and community life. [H,L,S] (O) 3 credits

HIST 270: Far Eastern Civilization
The major political, social and intellectual developments in China and Japan from earliest times to the present. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 280: Modern Africa
Modern Africa focuses on the history of the continent after 1500 through the study of African states and societies on the eve of European contact, the impact of the Trans-Atlantic slave trade, the Scramble for Africa, de-colonization and the creation of contemporary African states. Class: 3 hours per week. [H,L,S] (O) 3 credits

HIST 281: The Modernization of China
The impact of Western encroachment on China in the 19th century, the attempts of China to deal with the West and with problems arising from contact with the West, the Revolution of 1911 and the period of Nationalist control, the conflict with Japan, the growth and victory of the Communist Party, and the internal changes wrought by the People’s Republic of China since 1949. Class: 3 hours per week. Prerequisite: 3 hours of college history. [H,L,S] (O) 3 credits


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HOSP 212: Equipment, Design and Layout
Simple drafting procedures are used to lay out basic floor plans and simple evaluations of project drawings. Students are taught to interpret architectural plans. The selection of equipment and the making of applicable scale templates are part of the term project in which each student designs his or her own operation. Prerequisite: C- or better in HOSP 102. [B] (Sp) 3 credits

HOSP 214: Hospitality Human Resource Management
A course in managing people, including recruiting, training, motivating and supervising. Forecasting, staff planning and payroll controls are included. Emphasis is on the supervisor from the standpoint of his or her effectiveness in motivation, communication and productivity. Prerequisite: C- or better in HOSP 111. [B] (Sp) 3 credits

HOSP 215: Advanced Baking and Pastry Arts
This course focuses on the preparation of advanced pastries and classical desserts which include the preparation of petit fours, cake decoration and calligraphy, sugar and chocolate work, ice cream and show pieces. The course objectives also include the preparation of pralines, candies and specialty items. Laboratory classes are complemented with baking and pastry arts related studies that introduce management operations and procedures in the baking profession. Class: 1 hour per week. Laboratory: 3 1/2 hours per week. Prerequisite: C- or better in HOSP 115. [B] (Fa,Sp) 3 credits

HOSP 217: Quantity Food Production II: International Foods
Full-course, ethnic menus are planned, prepared and served by student teams. Emphasis is on organization, showmanship and supervision. Students will provide both oral and written reports on the menu presentations including food and labor costs, product and production analysis, and menu presentation and delivery. Class: 1 hour per week. Laboratory: 5 hours and 30 minutes per week. Prerequisite: C- or better in HOSP 102. [B] (Fa,Sp) 4 credits

HOSP 231: Consumer Research and Marketing
A course to familiarize students with hospitality sales practices used in restaurants, hotels and clubs, from market analysis to actual sales activity. The course includes guest lectures, term projects, and voluntary membership in the Hotel Sales Management Association. Prerequisite: C- or better in HOSP 111. [B] (Fa) 3 credits

HOSP 232: Convention Sales and Services
This course offers a practical insight into the different types of conventions and meetings; the various types of organizations that stage such events and the people they represent. Students are introduced to product and supplier specifications and selection. Different techniques and strategies used to target various markets are determined. This course also includes how to analyze a hotel property to determine which segments of the market may be sold to successfully and how to organize a staff to go after that business. [B] (O) 3 credits

HOSP 241: Hotel Management Procedures
Management techniques used in all phases of hotel-motel management are studied, including front office procedures, housekeeping, public relations, food and beverage problems, and control procedures. Prerequisite: ACCT 101. [B] (Sp) 3 credits

HOSP 270: Cooperative Education/Work Experience
This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including corporations, institutions, restaurants, hotels and conference settings. Prerequisites: 12 completed credit hours in a Hospitality Careers program. (Fa,Sp,Su) 3 credits. Please refer to page 16 for more information and general prerequisites for Cooperative Education/Work Experience.

HOSP 295: Supporting & Training the Developmentally Disabled: Creating an Employee Resource for the Foodservice Industry
This course is designed to provide foodservice students with the appropriate skills needed to train individuals with special needs in foodservice occupations. Emphasis is on teaching strategies, training techniques, understanding behavior management, task analysis, and work adjustments for learners with special needs as they relate to foodservice operations. Class: 1 hour per week. Laboratory: 5 hours per week. Prerequisite: C- or better in HOSP 102. [B] (Fa,Sp) 4 credits

Human Services
HS 101: Introduction to Human Services
History of the human service movement. Introduction to current theory and knowledge related to human services. Survey of contemporary helping professions. Class: 3 hours per week. [S] (Fa) 3 credits

HS 152: Work With Individuals and Families
An introduction to current knowledge and theory related to understanding basic human needs. Theory and classroom practice of the interactions skills needed in the helping professions: assessment, planning, contracting, interventions, interviewing and evaluation. Self-awareness regarding personal values and professional ethics is developed. Class: 3 hours per week. Prerequisite: HS 101 or 6 credits in psychology. (Sp) 3 credits

HS 201: Work with Groups
Current group theory, knowledge, methods and skills are covered which lead to beginning competence in helping people behaviorally change through group experience. Class: 3 hours per week. Prerequisites: HS 101 or employment in a human service position. (Fa,Sp) 3 credits

HS 225: Work with Agencies and Communities
An introduction to the study of human service organizations. The skills, methods, and functions of human service providers are explored, developed, analyzed, and presented and integrated into the overall learning experience of the students. Through the utilization of group process, students will develop and present a grant proposal. Class: 3 hours per week. Prerequisites: HS 101, 152, 201 and 291. (Sp) 3 credits

HS 280: Human Services
This course provides a comprehensive approach to individual program planning and instruction for persons with severe handicaps. The focus is on facilitating the community entry of individuals with severe handicaps. Class: 3 hours per week. (O) 3 credits

HS 291: Human Services Field Experience I
One hundred twenty hours of supervised field work in a cooperating human service agency. Attendance is required at weekly prosiminar meetings. Prerequisites: HS 101, HS 152 and permission of coordinator. HS 290 for disabilities specialist students. (Fa) 3 credits

HS 292: Human Services Field Experience II
One hundred twenty hours of supervised field work in a cooperating human service agency. Attendance is required at weekly prosiminar meetings. Prerequisites: HS 101, HS 152, HS 201, HS 291 and permission of coordinator. HS 290 for disabilities specialist students. (Sp) 3 credits

Humanities
HUMN 101: Introduction to the Humanities
An interdisciplinary course that examines the interplay of the humanities and society from a multicultural perspective. Emphasis is on the interactions of the arts (literature, music, painting, theatre) with the personal and social issues of one’s culture and of other cultures. Class: 3 hours per week. Prerequisite: ENG 111 or permission of instructor. [H,L] (Fa,Sp) 3 credits
HUMN 110: Performance Skills
Personal growth course in effective communication skills in the performing arts and job-related presentations. Students will learn to focus energy to overcome performance anxiety and project more ease in professional, business and social situations. Fees for performance skills lessons are in addition to regular tuition and are arranged between student and teacher. Class: 3 hours per week. Prerequisite: permission of instructor. [H,L] (O) 3 credits

HUMN 201: Harlem Renaissance
Students will explore and experience the incredible surge of creative activity in literature, music, the visual and performing arts by African-Americans in the 1920s. Class: 3 hours per week. Prerequisite: ENG 111 or permission of the instructor. [H,L] (O) 3 credits

Japanese
JPNS 101: Elementary Japanese I
An introduction to spoken and written Japanese language and culture. Emphasis is on communication through development of skills in conversation, reading, and writing (Hiragana) based on the principles of Japanese grammar and pronunciation. No previous knowledge of Japanese is required. Class: 3 hours per week. Laboratory: 1 hour per week. [H,L] (F) 3 credits

JPNS 102: Elementary Japanese II
This course is the second half of Elementary Japanese. Practice in conversation, reading, and writing Hiragana and Katakana with the study of Japanese grammar and pronunciation as tools for communication. Class 3 hours per week. Laboratory: 1 hour per week. Prerequisite: JPNS 101. [H,L] (Sp) 3 credits

JPNS 201: Intermediate Japanese I
A third semester course in spoken and written Japanese and the culture of Japan. Emphasis on communication through development of skills in conversation, reading, and writing based on the principles of Japanese grammar and pronunciation. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisites: JPNS 101 and 102, or two years of high school Japanese, or permission of the instructor. [H,L] (F) 3 credits

JPNS 202: Intermediate Japanese II
A fourth semester study of spoken and written Japanese and the culture of Japan. Continued instruction in communication through development of skills in conversation, reading, and writing based on the principles of Japanese grammar and pronunciation at the intermediate level. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisite: JPNS 201, or three years of high school Japanese, or permission of the instructor. [H,L] (Sp) 3 credits

Legal
All paralegal courses require students to be eligible for ENG 111, or permission of instructor, as a prerequisite for enrollment.

LEGL 109: Introduction to Paralegalism
Introduces students to the role of the paralegal in the legal system and the workplace. Students will learn about the U.S. legal system and its history and origins. An overview of the litigation process and legal terminology is included. Students will become familiar with sources of legal authority, legal analysis, and writing. [B] (Fa,Sp) 3 credits

LEGL 110: Legal Ethics and Professional Responsibility
Introduces students to the paralegal profession and the basic ethical principles which regulate those working in law, placing special emphasis on how the rules affect paralegals. Regulation of attorneys and unauthorized practice of law is discussed with reference to permitted paralegal tasks. Critical issues such as conflicts of interest, confidentiality, competence, and financial matters are emphasized. Students will become familiar with the law affecting lawyers and legal assistants, including the American Bar Association Rules of Professional Conduct, and guidelines and codes adopted by bar and paralegal professional organizations. [B] (Fa,Sp) 1 credit

LEGL 112: Legal Research
Provides an understanding of the basic tools of legal research. Students will become familiar with the use of the law library, examining primary and secondary authorities and law-finding tools. Research procedural methods are advanced through case examples and problem-solving techniques. Research findings are reported in legal memoranda. Prerequisite: LEGL 109 Introduction to Paralegalism. [B] (Fa,Sp) 3 credits

LEGL 205: Administrative Law
Presents a basic understanding of legal concepts affecting public administrative agencies, including the way in which administrative agencies fit into the United States system of government, delegation of authority and separation of powers, the types and organization of administrative agencies, sources of administrative law, rule making, legislative oversight, agency actions, controls on agencies, appeals, adjudication’s, judicial review, and legal ethics. Specific areas of agency action are explored, which include environmental law, Social Security, civil rights, immigration law, and Workers’ Compensation. [B] (O) 3 credits

LEGL 207: Real Estate Transactions
Examines basic principles of real property law, with an emphasis on the role of paralegals in residential real estate transactions. Areas studied include acquisition of real property and fixtures; surveys and legal descriptions; co-ownership; easements and other encumbrances; marketable record title and title insurance; brokers and sales contracts; mortgage financing; and closing procedures. Students gain practical experience through document preparation, and familiarity with land records through assignments. Ethical issues related to this practice area are discussed. [B] (Fa,Sp) 3 credits

LEGL 211: Business Organizations
Provides an introduction to and understanding of the basic principles of law which apply to the formation of different business organizations: sole proprietorship, general partnership, limited partnership, LLC, LLP, and corporation, for the paralegal. Students will be taught legal concepts regarding the scope and skills needed in the formation and operation of these business forms. Familiarity with legislation, legal terminology, legal ethics, and legal requirements will be stressed. Practical applications and drafting of necessary documents and forms will be included. [B] (Fa,Sp) 3 credits

LEGL 212: Introduction to Bankruptcy Law & Practice
Provides an introduction to and understanding of basic bankruptcy practice and procedure for the paralegal. Students are taught the basic legal concepts, legal ethics, and skills which are needed in a bankruptcy practice. Familiarity with the federal bankruptcy courts, the role of the trustee, and the fundamental goals, procedures, documents and forms of Chapters 7, 11, and 13 of the United States Bankruptcy Code will be stressed. Students will be introduced to both federal and state legislation impacting bankruptcy. Practical applications and drafting of necessary documents and forms will be included. Prerequisites: LEGL 211 or BUS 102. [B] (O) 3 credits

LEGL 214: Computer-Assisted Legal Research
Provides an understanding of the components of computer-assisted legal research systems. Students will become familiar with pertinent computer hardware and software, and the language used in search instructions, planning a computer search, and executing a search on programs such as Law Office Information Systems, Westlaw and Lexis-Nexis. Hands-on assignments will develop research skills in using computers to find, read and update the law. Management of research session records and

Next Semester Offered Designations: Fa = Fall, O = Occasional, Sp = Spring, Su = Summer
LEGL 215: Environmental Law
Provides an introduction to and a basic understanding of environmental law for the paralegal. Students will be taught basic concepts regarding both national and state environmental laws. Familiarity with legislation, legal terminology and legal requirements in the area of environmental law will be stressed. Practical application will be presented. [B] (O) 3 credits

LEGL 221: Litigation
Provides the student with a basic understanding of the civil litigation process as preparation for employment as a paralegal. The course surveys and reviews the civil litigation process in state and federal courts, including the form and content of documents used in instituting or defending civil lawsuits. Students will be taught legal concepts and skills necessary to work as a litigation paralegal. Emphasis is given to court and office procedures before, during, and after trial, including causes of action and remedies, lawyer and client relationships and ethics, discovery, pleadings, organization of evidence, juries and verdicts; structure of a civil trial; post-trial motions; judgments; appeals, settlements, releases, and dismissals; and arbitration and mediation. [B] (Fa,Sp) 3 credits

LEGL 222: Family Law
Provides an introduction to and basic understanding of family law and practice for the paralegal. Students will be taught legal concepts and skills regarding the scope and skills needed in a family law practice. Familiarity with legislation, legal terminology, and legal requirements in the area of family law will be stressed. Topics covered will include family law research, ethics, interaction with the client, premarital agreements, ceremonial and common law marriages, annulment, separation, dissolution of marriage, child custody, child support, tax consequences, legal rights of women and men, legal status of children, adoption, and surrogacy. Practical applications and drafting of documents will be included. [B] (Fa,Sp) 3 credits

LEGL 225: Trial Techniques
Provides in depth involvement, academically as well as practically, in various aspects of courtroom experience. The rules of evidence are examined through the study of various legal problems. Ability to organize facts and legal issues and to develop legal legal arguments is emphasized. Concentration is given to proper courtroom demeanor and advocacy skills. An American Mock Trial Association case problem is used in this course. Students learn to analyze the given facts and legal issues within the problem and develop logical legal arguments. Students learn to identify what additional information is necessary to understand and present the case and how to find it. [B] (O) 3 credits

LEGL 226: Mock Trial Practicum
Provides in depth involvement in various aspects of the courtroom experience. Selected students become role players in a national competition involving a mock scenario. Students are supplied a complex legal problem. Fact analysis and development of logical legal arguments are undertaken, and students prepare and present both sides of a case, competing against other colleges in the American Mock Trial Association Tournament. Students prepare demonstrative and illustrative evidence for the trial. Students develop legal analytical and communication skills in the academic as well as practical aspects of courtroom procedure which will help them assist an attorney before and during trial. Prerequisite: Students must try out during the previous semester and be selected for the American Mock Trial Association team. Not available to students with a baccalaureate degree who are seeking or have earned a professional or graduate degree. [B] (Sp) 3 credits

LEGL 231: Wills, Trusts, and Estate Administration
Provides a basic understanding of the fundamental principles of law and legal terminology relating to the control and disposition of property before and after death, the probate court system and the probate process. Students will be taught basic concepts concerning wills, trusts, probate administration, estate and gift taxation, and fiduciary accounting. Responsibilities, ethical considerations, and duties of the paralegal in the handling of an estate will be stressed. Students will gain practical experience through exposure to document preparation, file management, and preparation of forms for estate administration. [B] (Fa,Sp) 3 credits

LEGL 270: Cooperative Education/Work Experience
Provides students with the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings related to the program of study, including private law firms, corporate legal departments, government or other settings in which practical experience may be gained. In addition to site placement (150 hours for unpaid internships; 300 hours for paid placement), students attend seminars focusing on job-related interpersonal skills, such as values and preferences; time and stress management; communication skills; conflict management; corporate culture; new employee orientation; performance evaluations; business ethics; leadership, and career advancement. Job search strategies are designed and practiced. Prerequisites: 12 completed credit hours in the Paralegal Program and permission of instructor. Students work with the Cooperative Education Director during the semester before enrollment to secure an appropriate site placement. [B] (Fa,Sp,Su) 3 credits. Please refer to page 16 for more information and general prerequisites for Cooperative Education/Work Experience.

Manufacturing
CAD 101: Computer Aided Design I (AutoCAD)
An introduction to the techniques of generating graphic images with computers. Topics include: overview of CAD technology, computer technology, hardware descriptions and requirements, file manipulation and management, two and three-dimensional geometric construction, symbol library creation, dimensioning, scaling, sectioning, plotting, detail and assembly drawing including tolerance studies. Class: 4 hours per week. (Fa,Sp) 3 credits

CAD 102: Computer Aided Design II (AutoCAD)
A continuation course in industrial drafting concepts using a CAD system, specifically oriented towards the design of machine tool tooling, fixtures and gages. Class: 4 hours per week. Prerequisite: CAD 101. (Fa,Sp) 3 credits

CAD 103: Computer Aided Design I (CADKEY)
An introduction to the techniques of generating graphic images with computers. Topics include: overview of CAD technology, computer technology, hardware descriptions and requirements, file manipulation and management, two and three-dimensional geometric construction, symbol library creation, dimensioning, scaling, sectioning, plotting, detail and assembly drawing including tolerance studies. Class: 4 hours per week. (Fa,Sp) 3 credits

CAM 101: Computer Aided Manufacturing
An introductory course in the utilization of computer technology for the planning, implementation and control manufacturing processes. The process of manual and automated preparation of computer aided manufacturing systems programs and equipment are studied in preparation for implementing these techniques in a computer integrated manufacturing environment. This will be accomplished through numerical control programming (CNC) and CAD/CAM interface. Class: 3 hours per week. Prerequisites: MFG 111, CAD 101. (Fa) 3 credits
MFG 111: Manufacturing Materials and Processes I
An introduction to the basic principles on which manufacturing processes are based, and to the basic materials produced by or used in these processes. Topics include: the basic processes in manufacturing metals, testing or engineering materials, ferrous and non-ferrous metals and alloys, fundamental metal-casting, and heat treating processes, non-metallic materials, metal cutting, forming, welding and joining, metal machining processes and quality control measurement and inspection. Class: 3 hours per week. Prerequisite: MATH 115 (may be taken concurrently). (Fa) 3 credits

MFG 112: Manufacturing Materials and Processes II
A continuation of MFG 111 - Manufacturing Materials and Processes I - with emphasis on metal machining and fabrication techniques, numerical control machining, tooling and fixture design and manufacture, and advanced metals machining technologies and concepts. Class 3 hours per week. Prerequisite: MFG 111. (Sp) 3 credits

MFG 113: Production Control
A basic course in the scheduling and controlling of manufacturing activities. Class 3 hours per week. (Fa) 3 credits

MFG 114: Plant Layout
A course in plant layout as practiced in modern industry. Analysis is made of the procedures used in placing equipment, organizing efficient machine-operator patterns and servicing of machines. Time is devoted to practical work on actual layout problems, including integrated production lines, using tools such as layout templates, two-dimensional models, machinery charts and process flow charts. The relationship of work standards, methods and layout inspection, production control and maintenance is also discussed. Class: 3 hours per week. Prerequisite: MFG 111. (Fa) 3 credits

MFG 115: Fundamentals of Tool Design
A basic course in the fundamentals, principles, practices, tools, theories and commercial standards of single point, jig, fixture and die design. Included is theory in the design of metal cutting tools and individual products and design work. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisites: MFG 112, MATH 116. (Fa) 4 credits

MFG 116: Hydraulics I
An introduction to the basic principles involved in machine tool hydraulic systems. Topics include: the study of the transmission, application and control of oil fluid power, the basic components used in hydraulic component arrangement in various fluid circuit design. Class: 3 hours per week. Prerequisites: ENGR 121, MATH 116. (Fa) 3 credits

MFG 117: Hydraulics II
A continuation of MFG 116 - Hydraulics. Topics include: the selection, installation, maintenance and trouble shooting of fluid power components and systems used in machine tools, including electrohydraulic servo-systems. Class: 3 hours per week. Prerequisite: MFG 116. (Sp) 3 credits

MFG 118: Vacuum Systems and Pneumatics
An introduction to the pneumatic and vacuum systems used in machine tools and machining centers. Topics covered include the proper selection, installation, maintenance and trouble shooting of pneumatic and vacuum systems used in machine tools. Class: 3 hours per week. Prerequisites: ENGR 121, MATH 116. (Sp) 3 credits

MFG 119: Productivity Improvement
This course deals scientifically with analytical and creative problems affecting time management. Topics include: The principles of methods, design and work measurement; motion study techniques and the establishment of time standards. Applications to product design, machine tool design, process planning, production scheduling, plant layout, budgeting, sales prices, manpower requirements, wage incentives and methods of improvements are studied. Class: 3 hours per week. Prerequisites: MFG 111, MFG 113, MFG 114. (Sp) 3 credits

Mathematics
MATH 098: Mathematical Modeling I: Number Sense & Geometry
This course is designed to enhance the student’s mathematical literacy so that he/she will be prepared to deal effectively with a variety of practical problems. Topics include: interpretation and analysis of charts and graphs; geometry and measurements; estimation and reasonableness of answers, applications using ratios, proportions, percents and decimals; properties of the whole, integer, and rational numbers and operations on the real numbers; and solutions of equations. A review of the operations and fundamental concepts of arithmetic and geometry will be imbedded in and connected to real world problem situations. Graphing calculators are required and fully integrated in the course. Class: 3 hours per week. (Fa,Sp,Su) no credit

MATH 101: Mathematical Modeling II: Algebraic Concepts
A first course in mathematical modeling using variables, equations, and graphs designed to develop students' ability to encode and interpret practical quantitative problems in symbolic form. The course includes all of the basic properties and theorems of the real number system that are required to solve linear, quadratic and selected rational equations. Linear systems, basic graphing, integer exponents and selected literal equations are included. Elementary geometric concepts are used throughout. A TI-83 graphing calculator is required and fully integrated into the course. Class: 3 hours per week. Prerequisite: C or better in MATH 098 or math placement test. No credit if already completed a higher numbered math, except MATH 110. (Fa,Sp,Su) 3 credits

MATH 102: Mathematical Modeling III: Advanced Algebraic Concepts
A second course in mathematical modeling whose main themes are functions, represented by table, graph and rule, and problem solving. Polynomial functions with special attention to linear, quadratic and power functions; rational with attention to the reciprocal function; square root, absolute value, piecewise and exponential functions are studied. A TI-83 or 86 graphing calculators are required and used throughout. Class: 3 hours per week. Prerequisite: MATH 101 or math placement test. No credit if already completed MATH 120 or any higher numbered math course. (N) (Fa,Sp,Su) 3 credits

MATH 105: Trigonometry
A brief review of sets, relations, functions, and inverses. Topics include trigonometry of the right triangle, solutions of triangles, the trigonometric functions, the circular functions, identities, solving trigonometric equations, graphs, inverse trigonometric functions, polar coordinates and vectors. Emphasis is on an analytic approach. *The 3 credit MATH 105, required for all students enrolled in the technology Pathways Program, includes a 1 hour per week laboratory including introduction to scalars and vectors, geometric and algebraic methods of vector addition in a plane and IBM PC laboratory problems to enhance the lecture part of the course. Class: 2-3* hours per week. Prerequisite: MATH 102 or math placement test. Recommend: MATH 109 or high school geometry. (L,N) (O) 2-3 credits

MATH 106: Elements of Modern Mathematics
An introduction to contemporary mathematics for students of science, social science and the liberal arts. Topics may include: sets and deductive reasoning, inductive reasoning, logic, counting techniques, social choice and decision-making, management science and the nature of geometry—growth and symmetry. Applications are considered throughout. A scientific calculator with a fraction key is used. Class: 3 hours per week. Prerequisite: MATH 101 or math placement test. (L,N) (Fa,Sp) 3 credits

MATH 108: Elementary Statistics
An introduction to statistical theory and its applications. The use of statistics as a decision making tool will be discussed. Topics include: data collection, organization and summarization, measures of central tendency and variation, counting techniques, introductory probability
MATH 101: Technical Mathematics I
A second course in technical mathematics with an emphasis on the application of trigonometry and algebraic techniques and principles to the solution of problems in industrial technology. The course is designed to develop and enhance the students' mathematical skills through presentation of relevant technical situations, and an integrated development of modeling and solution methods using algebra and trigonometry. A TI-86 graphing calculator is required and is used throughout. Prerequisites: MATH 115, MATH 102 or math placement test. Recommended MATH 109 or high school geometry. (Sp) 3 credits

MATH 102: Topics in Modern Mathematics I: Functions, Graphs, Matrices
A course in selected topics from contemporary mathematics with applications for students in business, economics, and social science. Topics include: the concepts of function and rate of change, a review of algebraic and graphical aspects of polynomial functions, a study of exponential and logarithmic functions, mathematical modeling, and operations on systems of linear equations including matrix operations. A TI-86 graphing calculator is required and used throughout the course. Class: 3 hours per week. Prerequisite: C- or better in MATH 102 or math placement test. (L,[N]) (Fa) 3 credits

MATH 103: Technical Mathematics II
A second course in technical mathematics with an emphasis on the application of trigonometry and algebraic techniques and principles to the solution of problems in industrial technology. The course is designed to develop and enhance the students' mathematical skills through presentation of relevant technical situations, and an integrated development of modeling and solution methods using algebra and trigonometry. A TI-86 graphing calculator is required and is used throughout. Prerequisites: MATH 101 or math placement test or MATH 110. The department recommends a C or better in the prerequisite course. A student cannot receive credit for MATH 108 if credit has already been received for MATH 111. Students planning to transfer to a four-year institution with a freshman statistics 4 credit requirement should take MATH 111 instead of MATH 108. (L,N) (O) 3 credits

MATH 104: Elementary Statistics with Computer Applications
A course in selected topics from calculus with applications in business, economics, and social science. Students will learn the fundamental concepts of calculus and how to apply them to real-life problems. A major goal is to develop conceptual understanding (rather than algebraic manipulation) through the use of graphing calculators and through the consideration of graphical, numerical and algebraic perspectives. The major conceptual focus is on rates of change and their interpretations within a problem context. The definition of the integral, the Fundamental Theorem of Calculus, some selected applications of integration and some integration techniques are included. A TI-86 graphing calculator is required and used throughout. Class: 3 hours per week. Prerequisite: MATH 102 or math placement test. (L,N) (S) 3 credits

MATH 105: Quantitative Literacy
A detailed study of relations and functions, operations on functions, and solving application problems are the main focus of the course. In particular, exponential, logarithmic and circular functions along with
MATH 189: See MATH 188

MATH 190: Analytic Geometry and Calculus I
A first course in calculus with analytic geometry for students in mathematics, science, engineering and technology. Topics include families of functions (including exponential and logarithmic) represented by table, graph and equation, modeling of actual data, the concepts of limit and continuity, the derivative and antiderivatives, the definite integral and the Fundamental Theorem of Calculus. Applications from mathematics, engineering, economics, applications will receive special attention. Solutions to such problems will require the use of graphing calculator and/or a symbolic algebra system (Mathcad of Derive). A TI-86 graphing calculator is required. Prerequisite: MATH 150 or math placement test. Students cannot receive credit for MATH 190 if they have already received credit for MATH 191. [L,N] (Fa,Sp) 5 credits

MATH 191: Analytic Geometry and Calculus I
The first course in calculus with analytic geometry for students of mathematics, science and engineering. Topics include: modeling of actual data, the concepts of limit and continuity, derivatives, anti-derivatives, and the Fundamental Theorem of Calculus and exponential and logarithmic functions. Applications from mathematics, engineering and physical sciences will be considered throughout. Solutions of such problems will require the use of a graphing calculator and/or Derive software. A TI-86 graphing calculator is required. Prerequisite: MATH 150. Students cannot receive credit for MATH 191 if they have already received credit for MATH 190. [L,N] (Fa,Sp) 5 credits

MATH 192: Analytic Geometry and Calculus II
A second course in Calculus and analytic geometry for students in mathematics, science, engineering and technology. Topics include antiderivatives, the definite integral, the Fundamental Theorem of Calculus, techniques of integration, numerical approximation, methods of integration, separable differential equations, improper integrals, sequences and series, polar coordinates and parametric equations. Applications of these topics are used throughout the course and will include problems in area, volume, arc length and exponential growth and decay: (Estimation and approximation techniques are considered throughout the course and include methods for approximating solutions to equations, methods of numerical integrations, and the use of power series to approximate functions.) Solutions of these problems will require the use of graphing calculator and/or Derive software. A TI-86 graphing calculator is required. Prerequisite: MATH 191 or 190. [L,N] (Fa,Sp) 4 credits

MATH 201: Differential Equations
An introductory course in differential equations. Solution methods for differential equations including selected first order equations, nth-order equations, and systems of linear equations using matrix techniques, Laplace transforms, and numerical methods. Series techniques for selected linear differential equations including Bessel’s equation will be considered. Computer software and/or graphing calculators will be integrated as appropriate throughout the course. Recommended for science and engineering students. Class: 4 hours per week. Prerequisite: MATH 192. [L,N] (Sp) 4 credits

MATH 208: Statistics II: Methods and Applications
Introduction to statistical research methods with applications to business, economics and social sciences. Emphasis on: statistical inference, hypothesis testing, correlation and simple linear regression and multiple regression, analysis of variance, nonparametric methods and chi-square tests. The statistical software package, Minitab, will be used throughout the course. Class: 3 hours per week. Prerequisite: MATH 108 or MATH 111. [L,N] (Sp) 3 credits

MATH 220: Introduction to Linear Algebra
A first course in linear algebra for students in mathematics, science and engineering. Topics include: systems of linear equations, matrices, determinants, vectors and vector spaces, linear transformations, eigenvalues and eigenvectors, vectors and vector spaces, linear transformations, eigenvalues and eigenvectors. Applications will be considered with emphasis on numerical methods. Computers and/or graphing calculators will be integrated as appropriate. Class: 3 hours per week. Prerequisite: MATH 192. [L,N] (Fa, odd years) 3 credits

MATH 250: Set Theory and Foundations
A formal introduction to the basic concepts of modern abstract mathematics. Topics include: symbolic logic, sets and relations, recursive and inductive procedures, functions, cardinality, algebraic structures, graph theory, and methods of proof. Class: 3 hours per week. Prerequisite: MATH 191 or MATH 190. [L,N] (Sp, even years) 3 credits

MATH 293: Analytic Geometry and Calculus III
A course in multivariable calculus with analytic geometry for students of mathematics, science and engineering. Topics include: parametric equations, two- and three-dimensional vector algebra, vector differential calculus, differentiation of functions of several variables, multiple integrals, and line and surface integrals. Applications are considered throughout. Computer software and/or graphic calculators will be integrated as appropriate throughout the course. Class: 4 hours per week. Prerequisite: MATH 192. [L,N] (Fa) 4 credits

Medical Laboratory Technician
These courses are open only to students in the Medical Laboratory Technician Program or with permission of program coordinator.

MLT 142: Introduction to the Medical Laboratory
An introduction to basic skills and selected procedures used in the medical laboratory. Class/laboratory: 3 hours per week. (Fa) 2 credits

MLT 182: Clinical Microscopy I
Theory and procedures performed on urine and other body fluids, such as spinal fluid, synovial fluid and serous fluids. Class/laboratory: 3 hours per week. (Sp) 1 credit

MLT 201: Clinical Microbiology
An introduction to the basic theories of clinical bacteriology and mycology, aseptic techniques for handling specimens and preparing media, primary specimen inoculation, subculturing, colony-count techniques, processing anaerobic and microaerophilic cultures, staining techniques, organism identification procedures and antibiotic susceptibility testing. (Fa) 4 credits
MLT 202: Clinical Microbiology
Study of disease-causing microorganisms and the techniques performed for their isolation and identification. (Sp) 4 credits

MLT 211: Chemistry
Theory and performance of chemical analyses on blood and other body fluids. (Fa) 4 credits

MLT 212: Chemistry
The quantitative analysis of chemical components of blood serum, plasma and other body fluids, gravimetric, titrimetric, colorimetric, spectrophotometric and automated procedures. (Sp) 4 credits

MLT 221: Hematology
Theories and concepts of the formation, physiology and pathology of blood. (Fa) 3 credits

MLT 222: Hematology
Practical aspects and techniques used in the study of blood, including cell counts, staining techniques, differentiation of normal and abnormal cells, special tests, coagulation studies and automated procedures. (Sp) 3 credits

MLT 231: Immunology/Serology
Basic concepts of the antigen-antibody reaction and the immune system. The theory and performance of immunological techniques used in serodiagnostic testing. (Fa) 2 credits

MLT 251: Phlebotomy
The theory, skills and attitudes necessary to obtain blood by venipuncture and other skin puncture techniques from patients in hospitals and other health care settings. (Fa) 2 credits

MLT 262: Immunohematology
An introduction to blood banking, with emphasis on proper techniques of blood collecting, grouping and typing procedures, compatibility testing and processing. (Sp) 3 credits

MLT 272: Parasitology/Mycology
The identification and processing of selected common specimens for parasitologic examination. Identification of common disease-causing yeasts and molds by macroscopic and microscopic examination. Class/laboratory: 3 hours per week. (Sp) 2 credits

MLT 282: Clinical Microscopy II
Practical aspects and analytical procedures performed on urine and other body fluids within the clinical lab. (Sp) 1 credit

Meteorology
MTEO 110: Introduction to Meteorology
An introduction to the principles of atmospheric behavior, with emphasis on atmospheric motion, general circulation, air masses and frontal systems, clouds and precipitation, and their relation to climate and weather formations. A field trip to a local weather bureau may be included. Class: 3 hours per week. [L,N] (Fa) 3 credits

MM 205 Digital Video/On-Line Editing
This course will introduce students to the discipline of digital video. All analog video will be digitized using a Macintosh computer and clips assembled into larger productions using on-line software such as Adobe Premiere and the Data Translation Media 100 editing suite. Topics will include scripting, analog digitizing, compression schemes, Quicktime movies, A/B roll composition, output to tape, special effects managing and sound design. Class: 6 hours per week. Prerequisite: COMM 176 or COMM 210 and FA 210 or FA 211 or COMM 290 or permission of instructor. (Fa) 3 credits

Music
MUS 111: History and Appreciation of Music I
A survey of western music from medieval times through the classical period, with an introduction to the concept of sound, melody, rhythm, harmony, texture and form. Emphasis will be given to major developments in polyphonic music along with the rise of vocal and instrumental compositions. Class: 3 hours per week. [H,L] (Fa) 3 credits

MUS 112: History and Appreciation of Music II
A survey of western music from the romantic period to modern times with emphasis given to the major forms of composition as well as pieces that have literary or other non-musical associations. A review of music concepts such as sound, melody, harmony, rhythm and form. Class: 3 hours per week. [H,L] (Sp) 3 credits

MUS 113: Today’s Music: Jazz, Blues, Gospel, Country, Rock
A music appreciation course that examines the development of American music from its roots in the spiritual, ragtime, blues, and jazz to the later styles of rock’n’roll, country and soul. Emphasis will be given to the impact of these earlier styles on contemporary practices. Class: 3 hours per week. [H,L] (Fa,Sp) 3 credits

MUS 121, MUS 122, MUS 221, MUS 222: Chorus
Open to all students and members of the community. Course may be repeated up to four semesters as MUS 121, 122, 221, and 222. Class: 3 hours per week. [H,L] (Fa,Sp) 2 credits

MUS 123, MUS 124, MUS 223, MUS 224: Chamber Music/Jazz Ensemble
Instrumental performing groups of various kinds and sizes, depending on the students enrolled. Course may be repeated up to four semesters as MUS 123, 124, 223 and 224. Credit may be earned for life experience. Class: 2 hours per week. [H,L] (Fa,Sp) 2 credits

MUS 127, MUS 128, MUS 227, MUS 228: Vocal Ensemble: Madrigal
This course is designed to rehearse and perform sacred and secular music written for the smaller vocal group. Unlike Chorus, an audition is necessary to prepare the singer for the increased difficulty of the musical material in this course. Course may be taken for a total of 4 credits as MUS 127, 128, 227, and 228. Class: 1 hour per week. [H,L] (O) 1 credit

MUS 131, MUS 132, MUS 231, MUS 232: Private Music Lessons
Private vocal or instrumental lessons. Private teacher must be approved by the Humanities Division. Fees for lessons are in addition to regular tuition and are arranged between student and teacher. Class: 1/2 or 1 hour per week. Course may be taken for a total of 8 credits as MUS 131, 132, 231 and 232, all of which can run concurrently according to students’ needs. May be taken for liberal arts elective credit. (Fa,Sp) 1 or 2 credits

MUS 201: Music Harmony and Ear Training I
Students will be introduced to tonal harmony and ear training. Topics will include diatonic harmonic procedures and voice leading principles. The ear training section of the course will develop listening skills, sight singing, rhythm and melodic dictation. Prerequisite: MUS 211 or permission of instructor. Class: 3 hours per week. [H,L] (Sp) 3 credits
MUS 202: Music Harmony and Ear Training II
Topics include further exploration of diatonic harmonic procedures and voice leading principles, and introduction to chromatic harmonic procedures. The ear training section of the course will continue in the development of listening skills through sight singing, rhythmic, melodic and harmonic dictations. Prerequisite: MUS 201 or permission of instructor. Class: 3 hours per week. [H,L] (Fa) 3 credits

MUS 203: Music Harmony and Ear Training III
Topics include further exploration of diatonic harmonic procedures, and voice leading procedures through four-part writing. The ear training section continues in the further development of listening skills through sight singing, rhythmic, melodic and harmonic dictation. Prerequisite: MUS 202 or permission of instructor. Class: 3 hours per week. [H,L] (Sp) 3 credits

MUS 211: Fundamentals of Music I
As a beginning course in the theory of music, students will be introduced to the skills necessary to read, write and perform music, with basic training in pitch and emphasis on performance. Prerequisite: basic piano skills. Class: 3 hours per week. [H,L] (Fa) 3 credits

MUS 213: Music Theory and Composition I
Continuation of four part writing through 13th chords and secondary 7ths. Intermediate study of jazz harmony, composition and instrumentation. Course meets at the Camerata Conservatory, Hartford. Class: 3 hours per week. Prerequisite: MUS 212 or equivalent. [H,L] (Fa) 3 credits

MUS 214: Music Theory and Composition II
Study of more complex four part writing and jazz harmony. Analysis and writing using advanced harmonic and melodic materials. Course meets at the Camerata Conservatory, Hartford. Class: 3 hours per week. Prerequisite: MUS 213 or equivalent. [H,L] (Sp) 3 credits

MUS 225: Keyboard Harmony I
The study of basic keyboard skills as well as accompaniment techniques. Emphasis on harmonic recognition, voice leading principles and sight singing skills. Course will include group activities as well as individualized instruction. Prerequisites: MUS 201 or permission of instructor and basic piano skills. Class: 2 hours per week. [H,L] (Fa) 2 credits

MUS 226: Keyboard Harmony II
Continued study of keyboard skills and accompaniments techniques. Emphasis on harmonic recognition, voice leading, and sight reading. Course includes group activities as well as individualized instruction. Class: 2 hours per week. Prerequisite: MUS 225 or permission of instructor. [H,L] (Sp) 2 credits

MUS 241: Electronic Music I
The study of contemporary electronic music composition, technique, performance, and recording using synthesis, computer, sequencer and recording equipment. Prerequisite: MUS 211/212 or permission of instructor. [H,L] (O) 3 credits

Occupational Therapy Assistant
These courses are restricted to students accepted into the Occupational Therapy Assistant Program. Permission from the program coordinator is required.

OTA 101: Introduction to Occupational Therapy
An overview of occupational therapy that describes the philosophy and theoretical foundation of the profession as well as the role of the occupational therapy assistant. Level I, observational experiences will be required. (Fa) 3 credits

OTA 102: Occupational Therapy with Children
An overview of disabilities and diseases that affect children, and the study of occupational therapy theory and practice as it pertains to the treatment of these disabilities. Prerequisites: OTA 101 and 120, BIO 112, and PSYC 124. (Sp) 3 credits

OTA 102L: Treatment Modalities Laboratory
A laboratory course in occupational therapy to complement OTA 102; must be taken concurrently with OTA 102. Laboratory: 2 hours per week. (Sp) 1 credit

OTA 106: Level I Advanced Fieldwork
A pass/fail course providing 20 hours of supervised fieldwork experience where the student applies treatment learned in OTA courses and learns about the roles of other professionals involved in patient treatment. Prerequisites: OTA 101, 120, BIO 112, PSYC 124. To be taken concurrent with OTA 102, 112, 122 and 232. (Sp) 0 credits

OTA 112: Occupational Therapy with Adults
An overview of disabilities and diseases that affect adults, and the study of occupational therapy theory and practice as they pertain to the treatment of these disabilities. Prerequisites: OTA 101 and 120, BIO 112, and PSYC 124. (Sp) 3 credits

OTA 112L: Treatment Modalities Laboratory
A laboratory course in occupational therapy to complement OTA 112; must be taken concurrently with OTA 112. Laboratory: 2 hours per week. (Sp) 1 credit

OTA 120: Human Neuroscience with Kinesiology Lab
A study of the human nervous system with a focus on sensory and motor behavior. The lab is a focus on anatomy and physiology including assessment of function. Prerequisite: concurrently or after OTA 101 and the biology requirement. Class: 3 hours per week. Laboratory: 2 hours per week. (Fa) 4 credits

OTA 122: Occupational Therapy with the Elderly
An overview of disabilities and diseases that affect the elderly, and the study of occupational therapy theory and practice as they pertain to the treatment of these disabilities. Prerequisites: OTA 101, 120, BIO 112, and PSYC 124. (Sp) 3 credits

OTA 122L: Treatment Modalities Laboratory
A laboratory course in occupational therapy to complement OTA 122; must be taken concurrently with OTA 122. Laboratory: 2 hours per week. (Sp) 1 credit

OTA 220: Group Approach in Occupational Therapy
A course designed to enable students to increase knowledge of themselves and the impact of their behavior on others. It will enable the student to understand and use the transfer of feelings, ideas, facts and findings in one-to-one and group relationships as part of the therapeutic process. Prerequisite: concurrent or after OTA 101 and 120. (Fa) 3 credits

OTA 232: Principles of Clinical Management
A course designed to develop the student’s ability to formulate treatment plans, document treatment, and understand professional issues of supervision, quality assurance and job performance. Prerequisites: OTA 101 and 120 and concurrent with 102, 112 or 122. (Sp) 3 credits

OTA 242: Level II Fieldwork
Sixteen weeks of clinical training under the direction of an occupational therapy practitioner. Half the training deals with psychosocial dysfunction and half with physical disabilities. Prerequisite: completion of all OTA and general education course work, and Level I Advanced Fieldwork. (Fa,S) 11 credits

OTA 244: Advanced Seminar in Occupational Therapy
The study of occupational therapy treatment principles and applications using the single case model; to be taken concurrently with OTA 242. Prerequisite: completion of all OTA and general education course work, and Level I Advanced Fieldwork. (Fa,S) 1 credit
Oceanography
OCEN 110: Introduction to Oceanography
An introduction to the science of the ocean with emphasis on the geological, physical, chemical and biological aspects of oceans. Topics include physical and chemical properties of seawater, circulation, bathymetry, waves, tides, El Niño, and marine plant and animal habitats. A field trip may be included. Class: 3 hours per week. [L,N] (Fa,Sp) 3 credits

Office Administrative Careers
See Business Office Technology

Paralegal See Legal

Philosophy
PHIL 201: Introduction to Philosophy
Development of personal views on the fundamental issues of human existence: the nature of reality, the nature of the human person, knowing and thinking, freedom, basis of morality, aesthetics, the philosophical basis of political systems, God’s existence. Class: 3 hours per week. [H,L] (Fa,Sp,Su) 3 credits

PHIL 203: Ethics
The fundamentals and principles of ethics: moral conscience, good and evil, values, norms, ethical judgment, major ethical systems, punishment, religion and ethics. Contemporary problems with case studies; in particular, issues of environmental and bio-medical ethics. Class: 3 hours per week. [H,L] (Fa,Sp,Su) 3 credits

PHIL 205: Logic
Logic is the study of sound reasoning, Areas of concern include practical logic, deduction, induction, and symbolic logic. Focus is upon the application of logical distinctions to rational argument, fallacies, definition, and generally to scientific method. Recommended for all students. Class: 3 hour per week. [H,L] (Fa,Sp,Su) 3 credits

PHIL 207: Religions of the World
Survey of the major religions of the world: Christianity, Judaism, Islam, Buddhism and Hinduism, with emphasis on essential doctrines and practices. A review of contemporary cults and sects. Class: 3 hours per week. [H,L] (Fa,Sp,Su) 3 credits

PHIL 211: Chinese Philosophy
An inquiry into the concept of order and harmony in Chinese philosophy. Readings in English translation will include both primary texts and contemporary analyses of materials from Confucianism, Taoism, and other Chinese philosophic schools. Recommended for all students. Class: 3 hours per week. [H,L] (Fa,Sp) 3 credits

PHIL 213: Health Care Ethics
This course relates specific health experiences and issues to ethical theories of traditional and contemporary philosophy. It includes a critical examination of current opinions on moral issues in health care and gives a fair consideration of those views. Class: 3 hours per week. [H,L] (O) 3 credits

PHIL 215/BUS 215: Business Ethics
This course will examine the full extent of the relationship between business and ethics: The philosophical foundation for capitalism will be examined as will the application of ethical values and principles to employee/employer interactions. Class: 3 hours per week. Students are strongly urged to take PHIL 201 or the equivalent; or any 100 or 200 level English course to prepare for this course. [B,H,L] (Fa) 3 credits

PHIL 227: Buddhist Philosophy
An examination of the predominant philosophical themes in divergent traditions of Buddhism. Some topics to be covered are metaphysics, ethics, aesthetic concepts, and the Buddhist values for confronting contemporary problems. Recommended for all students. Class: 3 hours per week. [H,L] (O) 3 credits

Photography
PHOT 191: Photography I
An introduction to basic camera operation, black and white darkroom procedures, non-silver processes, photographic genres, and visual language. Students must have a 35mm camera with manual exposure controls and provide their own film and paper. Class: 4 hours per week. Laboratory: extensive lab work is required outside these hours. [H,L] (Fa,Sp) 4 credits

PHOT 192, PHOT 293, PHOT 294: Photography II, III, IV
A continuation of black and white photography, including refining printing and presentation, and the development of a body of work. A written and oral presentation on a published photographer will be required. Students must have a 35 mm camera with manual exposure controls, and provide their own film and paper. Photography III and IV encourages the use of medium and large formats and digital photography. Class: 4 hours per week. Laboratory: extensive lab work is required outside these hours. [H,L] (Fa,Sp) 4 credits

PHOT 210: Digital Photography
An introduction to digital photography and specifically Adobe Photoshop, through the use of the students’ own photographs and negatives. Students will be introduced to the basic vocabulary, concepts, and tools of Photoshop. Through lectures, slides, demonstrations and assignments, students will learn the fundamentals of digitizing, manipulating and printing their own photographs. Prerequisite: Basic computer and photographic experience preferred. Class: 4 hours per week. [H,L] (Sp) 4 credits

Physical Education
See Health, Physical Education.

Physical Science
PHSC 100: Principles of Physical Science
An introduction to the physical sciences that provides an integrated treatment of facts, topics and concepts from physics and chemistry. Applications in astronomy and geology are included. Class: 3 hours per week. Prerequisite: MATH 101 or math placement test. Not open to students who have passed higher-numbered courses in the physical sciences. [L,N] (Fa,Sp) 3 credits

PHSC 101: Principles of Physical Science
This course provides an introduction to the physical sciences with an integrated approach between classroom presentation and laboratory experimentation. Topics include measurement, the scientific process, concepts from physics and chemistry. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: MATH 101 or math placement test. Not open to students who have passed higher-numbered courses in the physical sciences. [L,N] (Fa,Sp) 4 credits

Physical Therapy
All Physical Therapy courses are offered at Naugatuck Valley Community-Technical College, Waterbury, CT.

PT 101: Introduction to Physical Therapy
This course provides an orientation to the field of physical therapy. The industry of health care is explored. Physical therapy's role in the industry, as a member of the team of health care providers, is studied. Subject matter includes governing standards for the PT/PTA, documentation, clinical problem solving and legal/ethical issues. Prerequisite: Admission to the Physical Therapist Assistant Program. (Sp) 3 credits

PT 102: Therapeutic Techniques in Physical Therapy
Introduction to physical therapy concepts and techniques for treatment.
Learning includes techniques and the use of assistive devices to improve patients' function, and the application of massage and pulmonary rehabilitation techniques. Prerequisite: Admission to the Physical Therapist Assistant Program. (Sp) 4 credits

**PT 106: Introduction to the Physical Therapy Clinic**
This course provides an orientation to the physical therapy clinic, and to the provision of physical therapy treatments, through supervised clinical performance of the skills and techniques learned in the courses PT 101 and PT 102. Student develop communication, treatment, and problem-solving techniques within the physical therapy clinic. Prerequisites: PT 101 and PT 102 with a grade of “C” or better and PT 106 with a grade of “S”. (Su) 1 credit (clinical: 30 contact hours)

**PT 110: Modalities in Physical Therapy**
Provides the student with the knowledge and skills to apply the modalities utilized in a physical therapy program of care. Prerequisites: Completion of PT 101 and PT 102 with a grade of “C” or better and PT 106 with a grade of “S”. (Fa) 4 credits

**PT 201: Therapeutic Exercise**
The theories and application of therapeutic exercise techniques, within the scope of the physical therapist assistant, for the rehabilitation of developmental, cardiovascular or neuromusculoskeletal dysfunction. Prerequisites: Completion of PT 110 and PT 111 with a grade of “C” or better. (Fa) 4 credits

**PT 202: Human Development and Pathology**
Human development across the life-span is reviewed relative to motor and psychological development. Human pathology, with emphasis on conditions affecting motor control and functional capabilities, is presented, with additional emphasis on rehabilitation perspectives. Prerequisites: Completion of PT 110 and PT 111 with a grade of “C” or better. (Sp) 3 credits

**PT 210: PTA Seminar**
The role and function of the PTA is studied to improve the ability to perform clinical problem solving within the scope of the physical therapist assistant. Prerequisites: Completion of PT 110 and PT 111 with a grade of “C” or better. (Sp) 4 credits

**PT 211: Clinical Practicum I**
Clinical practicums represent the capstone of the physical therapist assistant’s education. 200 hours of clinical education are provided at affiliating clinical sites under the guidance of physical therapy providers. Prerequisites: Completion of PT 201, PT 202 and PT 210 with a grade of “C” or better. (Fa) 4 credits

**PT 212: Clinical Practicum II**
Clinical practicums represent the capstone of the physical therapist assistant’s education. 200 hours of clinical education are provided at affiliating clinical sites under the guidance of physical therapy providers. Prerequisites: Completion of PT 201, PT 202 and PT 210 with a grade of “C” or better. (Fa) 4 credits

**PT 213: Clinical Practicum III**
Clinical practicums represent the capstone of the physical therapist assistant’s education. 200 hours of clinical education are provided at affiliating clinical sites under the guidance of physical therapy providers. Prerequisites: Completion of PT 201, PT 202 and PT 210 with a grade of “C” or better. (Fa) 4 credits


**Next Semester Offered Designations:** Fa = Fall, O = Occasional, Sp = Spring, Su = Summer

**Physics**

**PHYS 110: Elements of Physics**
An introductory course in the physics of motion, heat, sound, electricity, magnetism, light, optics and the theory of the atom. Intended for non-science majors. A process oriented laboratory approach emphasizing exploration and problem solving. Students with credit for high school physics should elect PHYS 121 or 131. Scientific calculator required. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: MATH 101 or math placement test. [L,N] (Fa,Sp,Su) 4 credits

**PHYS 111: Physics and the Human Body**
An introductory course in physics commonly taken by students in the allied health sciences and related disciplines. Numerous applications and examples related to the health sciences are used throughout to illustrate physical principles in mechanics, heat and thermodynamics, electricity and magnetism, and wave phenomena. Special attention is devoted to energy and power in humans, heat and the human body, aspects of electricity in the human body, and applications of electromagnetic radiation. This course may be taken as alternate elective in place of PHYS 110 in any program which PHYS 110 is recommended as an elective. Students cannot receive credit for both PHYS 110 and 111. Scientific calculator required. Class and laboratory: 5 hours per week; integrated approach with approximately 3 hours class and 2 hours laboratory. Prerequisite: MATH 101 or math placement exam. [L,N] (Fa) 4 credits

**PHYS 121: General Physics I**
Basic concepts of mechanics and heat, including forces, work and energy, conservation laws, physics of fluids, temperature, heat transfer and the laws of thermodynamics. Scientific calculator required. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: MATH 102, or two years of high school algebra, or math placement test. [L,N] (Fa,Su) 4 credits

**PHYS 122: General Physics II**
Basic concepts of electricity, magnetism and wave motion, including electric and magnetic fields, electromagnetic radiation, wave properties of light and optics. Scientific calculator required. Class: 3 hours per week. Laboratory: 2 hours per week. Prerequisite: PHYS 121. [L,N] (Sp) 4 credits

**PHYS 131: University Physics I**
Intended for physics, chemistry, engineering and math transfer majors. Principles of Newtonian mechanics and thermodynamics. Topics include particle dynamics, work, energy and momentum, rotational motion, gravitation, calorimetry, heat, energy, expansion and the laws of thermodynamics. Graphing calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisites: MATH 190 or MATH 191 (may be taken concurrently although completion of MATH 190 or 191 prior to PHYS 131 is advisable), PHYS 110 (or one year of high school physics). [L,N] (Fa) 4 credits

**PHYS 132: University Physics II**
Intended for physics, chemistry, engineering and math transfer majors. Principles of electromagnetic waves, electricity and magnetism, wave properties of light and optics. Topics include Coulomb’s Law, Gauss’ Law and electric fields, Ohm’s Law, DC circuits, Ampere’s Law, inductance, elements of AC circuits, light and optics. Graphing calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisites: PHYS 131, MATH 192 (may be taken concurrently). [L,N] (Sp) 4 credits

**PHYS 133: University Physics III**
Intended for physics, engineering and math transfer majors. Principles of quantum radiation and modern physics, including electromagnetic waves, relativistic mechanics, quantized radiation, and an introduction to 20th century physics. Scientific calculator required. Class: 3 hours per week. Laboratory: 3 hours per week. Prerequisites: PHYS 132, MATH 293 (may be taken concurrently). [L,N] (Fa) 4 credits
Political Science

PLSC 101: Introduction to Political Science
The study of politics through the identification of great political issues that are analyzed from historical and philosophical viewpoints. Class: 3 hours per week. [L,S] (Fa) 3 credits

PLSC 102: International Relations
An examination of the international community, emphasizing theory and practice in international politics. Class: 3 hours per week. [L,S] (Sp) 3 credits

PLSC 111: American National Government
A study of the American political system at the national level, with emphasis on political dynamics and public policy. Class: 3 hours per week. [L,S] (Fa,Sp,Su) 3 credits

PLSC 112: State and Local Government
The forms, functions and problems of state and local government in the United States, with special emphasis on Connecuticut state government. Class: 3 hours per week. [L,S] (Fa,Sp,Su) 3 credits

PLSC 212: Constitutional Law and Civil Rights
An examination of the United States Constitution as it applies to police power and landmark decisions of the United States Supreme Court interpreting and defining police power. Class: 3 hours per week. [L,S] (Fa,Sp,Su) 3 credits

PLSC 280: Legislative Internship
Spring semester only. Students must apply in October. Selected students will spend two days per week interning at the State Capitol. Interns will be prepared to perform the following services for legislators: bill analysis and tracking, spot research, drafting news releases, and constituent casework. (Sp) 6 credits

Psychology

PSYC 111: General Psychology
Survey of psychology as a behavioral science, including its scientific origins: human development, learning, memory and thinking, motivation and emotion, personality, intelligence and social psychology. Class: 3 hours per week. [L,S] (Fa,Sp,Su) 3 credits

PSYC 112: Advanced General Psychology
Study of research and measurement techniques in psychology; the physiological bases of behavior, sensation, perception and abnormal patterns of behavior; major therapies; and altere states of consciousness. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Fa,Sp,Su) 3 credits

PSYC 117: Psychology of Death, Grief and Loss
This course will examine the processes of death, dying and grieving. Death and loss as they relate to major developmental life tasks are also studied, including the effect of death and loss upon survivors. Both Eastern and Western perspectives are considered. [L,S] (Fa,Sp,Su) 3 credits

PSYC 120: Understanding Self and Others
Personal growth and development through awareness of one’s impact on others and the impact of others on oneself. [L,S] (Fa,Sp,Su) 3 credits

PSYC 124: Developmental Psychology
A survey of cognitive, social, psychomotor and perceptual growth and change as they are influenced by heredity and environment from prenatal stages through childhood, adolescence, mid-life and aging. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Fa,Sp,Su) 3 credits

PSYC 125: Psychology of Aging and Mental Health
The course will offer a realistic portrait of the personal experiences of late life and highlight the mental health issues that confront human beings as they age. [L,S] (Sp) 3 credits

PSYC 127: Psychological Aspects of Human Sexuality
This course considers the influence of interacting psychological and social factors upon human sexual behavior, with a strong emphasis on attitudinal and affective learning. Developmental issues, including the effects of past sexual trauma, are explored. Class: 3 hours per week. Prerequisite: PSYC 111. (L,S) (O) 3 credits

PSYC 131: Social Psychology
Social psychology focuses upon the effects of groups upon the individual and how the individual influences the group. The course examines theoretical attempts to explain how people influence each other. Topics include one-to-one relationships, group formation, group structure and leadership. A group project is required. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Sp) 3 credits

PSYC 163: Children With Disabilities and Their Families
This course is a general introduction to children with disabilities, their families and their education. The course includes discussion of the psychological, medical and sociological aspects of children with disabilities and their relationship to family, community and especially the educational system. The course emphasis is on the inclusion of children with disabilities within family, community and school. [L,S] (Fa) 3 credits

PSYC 173: Adults with Disabilities
This course is a general introduction to adults with disabilities and the issues faced by them in American society in the 90s. The emphasis is on issues relating to full inclusion in neighborhoods, community associations, workplaces and leisure-recreation experiences. The Americans with Disabilities Act (ADA) and its powerful implications for full community inclusion by men and women with disabilities will be examined. [L,S] (Sp) 3 credits

PSYC 183: Children & Adults with Disabilities & the Learning Process
This course explores various learning theories, especially behavior modification, as they relate to children and adults with disabilities. Included will be an introduction to the biological aspects of the brain and learning. Ethical questions regarding the application of certain learning theories will be examined. [L,S] (Fa) 3 credits

PSYC 193: Issues and Trends in Disabilities
This course will examine current legal, ethical, community, family and personal support issues affecting children and adults with disabilities and their families. Through the study of literature, newsletters and media accounts and by listening to the leaders and advocates of today, students will more fully understand the challenges and opportunities of people with disabilities. [L,S] (Sp) 3 credits

PSYC 200: Health Psychology
The psychological factors which promote health and enhance resistance to disease or place people at risk for disease are explored. Emphasis is placed upon those psychological factors which can prevent or reverse illness and sustain or recapture health. Class: 3 hours per week. [L,S] (O) 3 credits

PSYC 210: Abnormal Psychology
Origins and models of normal and abnormal behavior. Areas presented include anxiety disorders, schizophrenia, infantile autism and personality disorders. Consideration of prevention and treatment methods for emotional and behavioral disorders. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Fa,Sp) 3 credits

PSYC 234: Child Development
An evaluation of current issues, theories, and research in the area of child development. This study of physical, cognitive and socioemotional development includes: genetics, development of self, language, play,
learning, intelligence, personality, social interactions from conception through age twelve. Emphasis is on normal development. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Fa,Sp) 3 credits

PSYC 240/BUS 240: Organizational Behavior
A survey of the psychological factors that influence the individual in the work setting. Includes employee attitudes, motivation, group dynamics, decision making, leadership, assessment and training as an introduction to human resource management. [L,S] (Fa,Sp) 3 credits

PSYC 243: Supervision: Leadership Behavior
The supervisory function in profit and nonprofit organization involves the ability to work with and through people. Topics studied include: motivation, leadership style, communications, performance appraisal, time management, stress, and workers with special needs. [L,S] (O) 3 credits

PSYC 244: Adolescent and Adult Development
An exploration of current problems, theories and research in adolescent and adult development. A basic exploration of physical, cognitive, and socioemotional changes and the psychological dynamics which accompany them including adjustments, changing roles, and social relationships. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Fa,Sp) 3 credits

PSYC 250: The Psychology of Sport
This course examines psychological theories and research related to sport and exercise behavior. The course is designed to introduce you to the field of sport and exercise psychology by providing a broad view of the major topics in the area. Class: 3 hours per week. Prerequisite: PSYC 111. [L,S] (Fa,Sp) 3 credits

Quality Assurance
Quality assurance courses are offered by the College in cooperation with local industrial organizations and the American Society for Quality Control.

QA 100: Statistical Process Control
An introduction to the concepts of manufacturing statistical process control. Topics include: measures of central tendency, measures of variation, normal distribution theory, process run charts, process control charts for variable and attribute data, normal probability plots, Pareto diagrams and cause and effect diagrams. Class: 3 hours per week. Prerequisite: MATH 108 or MATH 111. (Fa,Sp) 3 credits

QA 110: Measurement and Measurement Systems
An introductory course in the techniques of making successful measurements for dimensions, pressures, temperatures and other manufacturing process variables. The design and use of automated measuring and test equipment will be discussed. Methods for establishing controls for preparation and use of inspection gaging will be discussed. Prerequisite: ENGR 101. (Sp) 3 credits

QA 120: Inspection and Gaging
An introductory course that will cover the use of inspection gages. Students will gain hands-on experience with a variety of gages and measuring instruments. Basic concepts of angle measurement and true position layout will be discussed. Class: 3 hours per week. Prerequisites: ENGR 101 and QA 110. (Fa) 3 credits

QA 140: Layout Inspection
A course in the applications of engineering drawing interpretation and layout inspection techniques for detailed inspection of manufactured products. Students will become familiar with layout equipment such as rotary heads, sine plates, precision gage blocks and pins. Students will learn when and how to apply geometric true positioning concepts. Class: 4 hours per week. Prerequisites: ENGR 101, QA 100, QA 110, QA 120. (Sp) 4 credits

QA 150: Statistical Methods of Quality Improvement
A course in various statistical methods and their applications in industry. Course concentration will deal with the use of statistical logic and methods to aid in the solution of quality, production and engineering type problems. Class: 3 hours per week. Prerequisite: QA 100. (Fa) 3 credits

Quantitative Methods
QM 110: Quantitative Methods for Business Careers
A broad introduction to mathematical problems most commonly associated with business-oriented careers will be covered. This course provides students with sufficient background to assist them as consumer decision-makers and future employees of business firms. Prerequisite: eligible for MATH 101 or higher. (Fa,Sp) 3 credits

Respiratory Care
These courses are open only to students in the Respiratory Care Program.

RC 201: Clinical Practice
Placed in various clinical situations under the supervision of clinical instructors, students perform techniques learned in the classroom. (Fa) 1 credit

RC 202: Clinical Practice
Placed in various clinical situations under the supervision of clinical instructors, students perform techniques learned in the classroom. (Sp) 1 credit

RC 203: Clinical Practice
Placed in various clinical situations under the supervision of clinical instructors, students perform techniques learned in the classroom. (Su) 1 credit

RC 204: Clinical Practice
Placed in various clinical situations under the supervision of clinical instructors, students perform techniques learned in the classroom. (Fa) 2 credits

RC 205: Clinical Practice
Placed in various clinical situations under the supervision of clinical instructors, students perform techniques learned in the classroom. (Sp) 2 credits

RC 211: Applied Pharmacology
The study of the composition, indication and effects of medication administered to patients, with emphasis on the drugs prescribed for the cardiopulmonary system. (Sp) 3 credits

RC 221: Respiratory Care I
An introduction to the anatomy and physiology of the respiratory system including an in-depth study of normal breathing. Assessment of the pulmonary patient concludes the course. (Fa) 3 credits

RC 222: Respiratory Care II
The theory and administration of respiratory care procedures including airway management, monitoring devices, and clinical assessment of the respiratory patient will be taught. Prerequisite: RC 221. (Sp) 3 credits

RC 241: Ventilation Therapy I
The theory and function of gas administration systems and devices will be taught. Medical gases, regulators and oxygen delivery systems are discussed. (Fa) 3 credits

RC 242: Ventilation Therapy II
A study of the volume ventilators used in respiratory care with an in-depth explanation of mechanical and functional operation. Indications, hazards and complications for continuous ventilation of the patient are stressed. Prerequisite: RC 241. (Su) 3 credits
RC 251: Advanced Respiratory Care I
A study of the pulmonary and cardiac circulation, hemodynamic monitoring, and fluid and electrolyte balance as it relates to cardiopulmonary medicine. Prerequisite: BIO 153. (Fa) 3 credits

RC 261: Advanced Respiratory Care II
A study of the respiratory care modalities utilized in the care of neonatal and pulmonary rehab patients. (Each population will be discussed in separate units.) Prerequisite: RC 251. (Sp) 3 credits

RC 282: Clinical Application I
A study of cardiopulmonary abnormalities and their treatment. Acute and chronic diseases of congenital, accidental, malfunctional and microorganismal origin are studied. To be taken concurrently with RC 251. (Fa) 3 credits

RC 283: Clinical Application II
The study of cardiopulmonary abnormalities and diseases of the neonatal, pediatric and adult patient with major emphasis on diagnosis and treatment. Prerequisite: RC 282. (Sp) 2 credits

Social Science
SOSC 110: Introduction to Wellness
A survey of contemporary health concepts and concerns which affect life-style. Students will learn to apply these concepts by assessing their own level of fitness. Topics include: disease in the United States, health models, fitness, nutrition, stress, drugs, alcohol, tobacco, alternative medicine and the concept of self-care. Class: 3 hours per week. [L,S] (Fa) 3 credits

SOSC 150: Transition Development
This course is designed for adult students who are resuming their education. Topics include goal setting, academic and career choices, math anxiety, family and work stresses, problem solving, and skill building. Open only to students in the Adults in Transition Program. (Fa,Sp) 3 credits

SOSC 155: Women's Issues and the Law
An examination of legal responses to gender-based treatment in society. Legal materials will be studied to provide both a historical and current perspective on issues affecting women and men. Readings will be utilized as the basis for public policy discussions and greater understanding of the law of sex discrimination. [L,S] (Fa) 3 credits

SOSC 201: Introduction to African/American Studies
An interdisciplinary survey course of the historical, social, economical, political, philosophical and cultural experience of the African/American. This course serves as the introductory course to give students an Africentric perspective to evaluating information in society; other philosophical perspectives may be introduced. Recommended for potential U.S. History and American Studies majors. [L,S] (Fa,Sp) 3 credits

SOSC 220: Computers and Their Impact on Society
This is a course in elementary computer concepts and the historical development of computer technology. It emphasizes an introduction to hardware, software and programming. Applications to areas of education, science, business and personal use are among the subjects discussed. Hands-on instruction in BASIC and a review of major applications are included. This course is not intended for computer information systems majors and will be directed toward persons with no prior knowledge of computers. Class: 3 hours per week. [L,S] (O) 3 credits

SOSC 232: Crime and Punishment
Social crime and justice in America. This course will investigate the kinds of behavior which American society has defined as criminal and the legal treatment responding to such behavior. Class: 3 hours per week. [L,S] (O) 3 credits

SOSC 242: American Families
A look at nuclear American family life from early Colonial period to the present, to see how various commentators have regarded and evaluated American families. Course will rely on the writings of historians, sociologist, novelists and social critics. Class: 3 hours per week. [L,S] (O) 3 credits

SOSC 262: Puerto Rican History and Culture
An introduction to the history and culture of Puerto Rico designed to give both Hispanic and other students an understanding of the historical factors and the cultural concepts that help develop today’s Puerto Rico and its people, both on the island and on the mainland. Class: 3 hours per week. [L,S] (O) 3 credits

SOSC 270: Cooperative Education/Work Experience
This course provides students the opportunity to apply classroom theory in an actual work setting. Students may be placed in a variety of work settings as related to their program of study including social service agencies, day care facilities, and corporations. Prerequisites: 12 completed credit hours in the Social Service, Disabilities Specialist, Criminal Justice, Sport and Exercise, Therapeutic Recreation, and Early Childhood/Educational Associate programs. (Fa,Sp) 3 credits. Please refer to page 16 for more information and general prerequisites for Cooperative Education/Work Experience.

Sociology
SOSC 101: Introduction to Sociology
Introduction to the perspective, working concepts and investigatory methods of the sociologist as they apply to the understanding of social institutions, social processes and social problems. Class: 3 hours per week. [L,S] (Fa,Sp,Su) 3 credits

SOSC 161: Aging in America: Issues and Dilemmas
This course will introduce a multidisciplinary approach to the study of aging. Students will learn how to separate the facts from the stereotypes about aging and to examine basic sociological, psychological and physiological factors that affect the aging process. Class: 3 hours per week. [L,S] (Fa) 3 credits

SOSC 202: Contemporary Social Problems
A detailed analysis of major social problems in American society. Problems including population, ecology, poverty, race and ethnic relations, urbanization, the role of the media, criminal activity, aging, health, and housing will be evaluated. Emphasis is on American society, but some international issues and situations will be examined. Community awareness and involvement will be stressed as students evaluate local issues as well. Prerequisite: SOC 101. Class: 3 hours per week. [L,S] (Fa) 3 credits

SOSC 203: Sociology of Deviance
Analysis of social deviance, review and discussion of causes, and possible approaches for controlling deviant behavior. Areas to be studied include mental illness, alcohol and drug abuse, sexual deviance, criminal activity, physical abuse, violent behavior, and collective deviance. Class: 3 hours per week. Prerequisite: SOC 101 or permission of instructor. [L,S] (Fa) 3 credits

SOSC 205: Impact of Aging on the Family
This course will consider key social issues and current service delivery systems that affect the aged population. Prerequisite: SOC 101. Class: 3 hours per week. [L,S] (Sp) 3 credits

SOSC 211: Juvenile Delinquency
Examines the social aspects of juvenile delinquency and the pressures that cause this behavior to emerge. The organization, functions and jurisdiction of the juvenile court system, as well as processing, detention, case disposition and juvenile delinquency statutes, are examined. Class: 3 hours per week. Prerequisite: SOC 101. [L,S] (O) 3 credits
SOC 221: Criminology
Introduces the fundamental principles of criminology; namely, the nature, existence and causation of crime, the problems and procedures involved in the administration of justice, and rehabilitative and corrective treatment. Class: 3 hours per week. Prerequisite: SOC 101. [L,S] (Sp) 3 credits

SOC 231: Marriages and Families
This course will explore the complexity and diversity of contemporary family arrangements in American society. Prerequisite: SOC 101. [L,S] (Fa,Sp) 3 credits

SOC 241: Urban Sociology
Discusses the emergence of urban life, the historical development and changing social patterns and life-styles in metropolitan America, urban renewal and redevelopment, urban stratification and power, and urbanizing the Third World. Class: 3 hours per week. Prerequisite: SOC 101. [L,S] (O) 3 credits

SOC 245: Industrial Sociology
This course seeks to apply sociological principles to the study of industrialization and modernization; the individual in the work organization; the social organization of the work place; power, status, wealth, and advancement; applied problems and the community of the industrial organization. Class: 3 hours per week. Prerequisite: SOC 101. [L,S] (O) 3 credits

SOC 251: Sociology of Sport
This course is designed to introduce students to the field of sport sociology by providing a broad overview of the major topics in the area. The course will examine the importance of social forces upon sport activities and organization as well as the economic and political ramifications of sport in American society. Class: 3 hours per week. Prerequisite: SOC 101. [L,S] (O) 3 credits

SOC 260: Medical Sociology
An interdisciplinary course on the relationship between social factors and health. Prerequisite: SOC 101. Class: 3 hours per week. [L,S] (Fa,Sp) 3 credits

SOC 261: Survey of Women's Issues
An interdisciplinary study of women in contemporary America, making use of the data and methodology of history, psychology and sociology. Class: 3 hours per week. [L,S] (Fa,Sp) 3 credits

SOC 262: Women and Violence
The course uses a multidisciplinary approach to explore the historical, social, political, psychological and personal meaning of violence against women. Areas to be studied include sexual assault, battering, incest/child abuse, and sexual harassment. Class: 3 hours per week. [L,S] (Fa) 3 credits

SOC 271: Sociology of Ethnic and Racial Minorities
Focuses on the interrelationship of institutionalized prejudice and discrimination and related aspects of society. The experience of various ethnic and racial minorities in the United States is investigated in studying the origins and functions of subordination for society. Class: 3 hours per week. Prerequisite: SOC 101. [L,S] (O) 3 credits

SOC 277: Social Survey Research
This course will introduce students to the logic and uses of survey research. Topics include interview and questionnaire design and writing a research report. Data will be computerized and elementary data analysis performed using a statistical software package. The overall objective is for the student to develop critical thinking skills to become more informed consumers of social survey research. Class: 3 hours per week. Prerequisites: SOC 101 and MATH 101 or by permission of instructor. [L,S] (Sp) 3 credits


Next Semester Offered Designations:  Fa = Fall,  O = Occasional,  Sp = Spring,  Su = Summer
SPAN 201: Intermediate Spanish I
A third semester course in which grammar, conversation and reading materials are at an intermediate level. Cultural readings will be in Spanish. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisites: SPAN 101 and 102 (110), 106 or two years of high school Spanish or permission of instructor. [H,L] (Fa) 3 credits

SPAN 202: Intermediate Spanish II
A fourth semester course in which the grammar, conversation and reading materials are at an intermediate level. Cultural readings will be in Spanish. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisite: SPAN 201 (210) or three years of high school Spanish or permission of instructor. [H,L] (Sp) 3 credits

SPAN 203: Advanced Spanish I
A fifth semester course in which language skills will be reinforced while increased emphasis is placed on composition and conversation. Literature and culture will also be studied in Spanish. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisites: SPAN 202, 206 or permission of the instructor. [H,L] (O) 3 credits

SPAN 204: Advanced Spanish II
A sixth semester course in which language skills will be reinforced while increased emphasis is placed on composition and conversation. Literature and culture will also be studied in Spanish. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisites: SPAN 202, 206 or permission of instructor. [H,L] (O) 3 credits

SPAN 206: Intermediate Spanish I and II
An intensive, intermediate Spanish course in which two semesters of Spanish (201 and 202) are completed in one semester. Students will be taught all four language skills with an emphasis on speaking and listening in class and an emphasis on reading and writing through the assignments. Cultural readings will be in Spanish. Class: 6 hours per week. Laboratory: 2 hours per week. Prerequisite: SPAN 102 (110), 106 or two years of high school Spanish or permission of instructor. [H,L] (Sp) 6 credits

SPAN 210: Intermediate Career Spanish I
Specialized, filmed dialogue situations, taped materials, vocabulary building and aural-oral understanding. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisites: SPAN 101 and 102 (110), or 106 or two years of high school Spanish or permission of instructor. [H,L] (O) 3 credits

SPAN 220: Intermediate Career Spanish II
Selected dialogues from career situations, role playing, development of cross-cultural understanding and communication skills. Class: 3 hours per week. Laboratory: 1 hour per week. Prerequisites: three years of high school Spanish or permission of instructor. [H,L] (O) 3 credits

Speech
See Communication

Student Development

SD 100: Creating Your Own College Success
This course is designed to help students maximize the value of their college experience. Topics include self-assessment, goal setting, decision making, and time management. Emphasis will be placed on the development of a plan leading to a successful college experience. (Fa,Sp) 1 credit

SD 101: Career Life Planning
A course designed to provide the knowledge and skills necessary to do realistic career planning. May be used as a free elective. (Fa,Sp) 3 credits

Next Semester Offered Designations: Fa = Fall, O = Occasional, Sp = Spring, Su = Summer

Surgical Technology
These courses are open only to students in the Surgical Technology Program.

ST 101: Operating Room Procedures I
An introduction to theoretical experience of the basic skills used in an operating room: aseptic technique, technologists’ arts, instrumentation, draping techniques, and related operating room skills. An explanation of essential patient care concepts necessary for effective functioning in an operating room. (Fa) 4 credits

ST 102: Operating Room Procedures II
An introduction to practical experience of the basic skills used in an operating room: aseptic technique, technologists’ arts, instrumentation, draping techniques, and related operating room skills. An extensive survey of various surgical specialties including specific operations in each discipline. (Sp) 4 credits

ST 105: Medical Terminology
An introduction to basic and advanced medical terms used in medicine and surgery. Open to all students. (Fa) 2 credits

ST 106: Seminar in Surgery
The total picture of the operating room patient in surgery. Students are rotated through the following: anesthesia department, recovery room, surgical patient units, kidney dialysis, and surgeons’ offices. Students are required to write a research paper about an assigned surgical procedure. Lectures by surgeons emphasize surgical procedures as they relate to the care of patients. (Su) 2 credits

ST 220: Clinical Experience I
An introduction to clinical practice in general and specialty surgical procedures in the operating room, including rotations through the Emergency Room, Out Patient O.R., X-Ray Department, Surgical Clinic, and Delivery Room. (Su) 2 credits

ST 222: Clinical Experience II
Clinical practice in the operating room concentrating on experience in basic procedures of general and specialty surgery. (Fa) 4 credits

ST 224: Clinical Experience III
Clinical practice in the operating room concentrating on experience in advanced levels of general and specialty surgery. Includes classroom preparation for the national certification examination and development of job search skills. (Sp) 4 credits

Theatre

THEA 111: Introduction to Theatre
An introduction to the theory and practice of live theatre. The course covers how plays are produced, it establishes aesthetics by which live performances can be judged, and looks at the historical origins of current practices. Prerequisite: ENG 111 (may be taken concurrently). [H,L] (Fa) 3 credits

THEA 115: Modern Dance I
An introduction to modern dance techniques, improvisation, choreography and history. The course includes thorough body warm-up, physically energizing dance sequences and combinations, creative explorations, dance compositions, films and an informal performance. Open to all students. May be taken one or two semesters. Class: 3 hours per week. [H,L] (Fa) 3 credits
THEA 181: Acting I
A first course in acting. Students will focus on relaxation and physical awareness, and on developing their imagination, concentration and characterization skills. They will be introduced to basic vocal and physical techniques. Class: 3 hours per week. [H,L] (Fa,Sp) 3 credits

THEA 182: Acting II
A continuation of THEA 181. Students will focus on script analysis and interpretation, and will expand their emotional, expressive and technical ranges. Class: 3 hours per week. Prerequisite: THEA 181 or equivalent training or experience. [H,L] (Sp) 3 credits

THEA 195: Play Production
A hands-on introduction to theatrical production and backstage skills. The class will form the production team for the semester’s Theatre Wing productions. Each student will learn lighting and/or set construction techniques, as well as an overview of the theatrical production process. Class: 3 hours per week plus outside-class production responsibilities. [H,L] (Sp) 3 credits

THEA 201: Theatre Practicum
Students earn academic credit by participating in Theatre Wing productions, either on stage or backstage. Credit earned depends on extent of participation and degree of responsibility. Class: by arrangement. Prerequisite: THEA 181 or THEA 195, or equivalent training or experience. [H,L] (Fa,Sp) 1-3 credits

THEA 223: Playwriting
A laboratory course in playwriting, dealing with the techniques of writing dramatic material. Students progress from writing simple scenes to the completion of a play (one act or longer). Class: 3 hours per week. Prerequisite: ENG 120. [H,L] (O) 3 credits

THEA 281: Advanced Acting - Social Issues
A performance-oriented acting course. Students will use advanced acting techniques to develop a performance piece, centered on a current social issue, which they will perform on campus and in the community. Prerequisite: THEA 181 or permission of instructor. [H,L] (Fa) 3 credits

THEA 291: Survey of Drama
Critical study of representative plays from classical times to the present designed to promote intelligent and imaginative reading and comprehension of the western world’s dramatic traditions. Class: 3 hours per week. Prerequisite: ENG 120 or THEA 111. [H,L] (Sp) 3 credits

Therapeutic Recreation

THRC 115: Introduction to Principles of Therapeutic Recreation
This course provides a background of study for the field of therapeutic recreation. It encompasses the history and development of the profession with an emphasis on understanding the persons who are served, their disabilities, and the environments in which they live. An experiential approach offers understanding and empathy. Class: 3 hours per week. Prerequisite: eligibility for ENG 111. (Fa,Sp) 3 credits

THRC 116: Processes and Techniques in Therapeutic Recreation
This course is designed to provide an overview of the process and techniques used in treatment oriented programs. The course explores leadership skills of the helping professional through an in-depth look at facilitation techniques used in therapeutic recreation, including, but not limited to: creative arts, physical/body movement, mental stimulation, and social interaction in relation to the needs of special population groups. Emphasis is placed on meeting clients needs through proper activity selection, including activity analysis and program adaptation/modification. Prerequisite: eligibility for ENG 111. (Fa,Sp) 3 credits

THRC 215: Therapeutic Recreation Programs: Planning and Implementation
This course involves the student in the study of the therapeutic recreation process with emphasis on program planning. The needs of the client will be met through a well planned process that includes assessing functional abilities and needs, planning program goals and objectives, implementing the program, and evaluating both the program and the client. Prerequisites: THRC 115 and eligibility for ENG 111. (Sp) 3 credits
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BA, University of Connecticut
AS, Middlesex Community College
ZOWINIR, THOMAS M. Phone: 647-6199
Head of Physical and Applied Sciences Department
Professor of Chemistry and Mathematics
MS, University of Rhode Island
BS, Fairleigh Dickinson University

Part-Time Faculty and Professional Staff
(Only highest degree is listed in this section.)

AMARA, FRANK J. Phone: 647-6247
Lecturer in English
6th year, University of Connecticut
BAILEY, JOHN Phone: 647-8701
Lecturer in Drug & Alcohol Counselor Rehabilitation
MA, Cambridge College
BANDES, HERBERT Phone: 647-6223
Lecturer in Chemistry
PhD University of Michigan
BASCHE, MARIE Phone: 647-6385
Student Development Specialist, College Learning Center
MS, Central Connecticut State University
BEST-PARRIS, KAREN Phone: 647-6112
Lecturer in Law
JD, University of Connecticut School of Law
BODLAK, DAVID Phone: 647-6272
Lecturer in Art and Humanities
MFA, Claremont Graduate School
BRACEY, JACQUELINE Phone: 647-6002
Counselor
BS, New Hampshire College
BROWN, LESLIE A. Phone: 647-6103
Lecturer in Business
MS, Central Connecticut State University
BROWN, LYNN Phone: 647-6223
Lecturer in Occupational Therapy Assistant Program
BS, Central Connecticut State University
CARLTON, ELISE Phone: 647-6062
Counselor
MSW, Columbia University
CARTER, KATHLEEN Phone: 647-6112
Lecturer in Business Administration
MBA, University of Hartford
CONSIDINE, NANCY L. Phone: 647-6272
Lecturer in Philosophy
MA, Trinity College (Hartford)
COLE, RICHARD Phone: 647-6104
Lecturer in Political Science
JD, University of Virginia
CONVERSE, DAVID Phone: 647-6232
Audiovisual Technician
BA, University of Massachusetts
COREY, ANNETTE Phone: 647-6112
Lecturer in Business Office Technology
MS, Central Connecticut State University
COTTON, ESTHER A. Phone: 647-6160
Evening Administrator, College Learning Center
MBA, University of Hartford
COX, LOUISE Phone: 647-6075
Assistant Teacher, Child Development Center
MS, University of Illinois
DALENTA, CHRISTINE Phone: 647-6246
Lecturer in Photography
MFA, University of Hartford
DEL CASTILLO, JOSE Phone: 647-6117
Lecturer in Law
JD, University of Connecticut School of Law
DEL ROSARIO, RIFEL B. Phone: 647-6136
Lecturer in Hospitality Management
MA, University of Washington
DEUTSCH, SAL A Phone: 647-6204
Lecturer in Computer Information Systems
MS, Central Connecticut State University

DEVLIN, LINDA Phone: 647-8618
Lecturer in Mathematics
MA, St. Joseph College

DILL, MARGARET-ANN Phone: 647-6247
Lecturer in English
MS, Eastern Connecticut State University

DOUGLAS, WILLIAM Phone: 647-6223
Lecturer in Biology
PhD Brown University

DUCHARME, GEORGE G. Phone: 647-6103
Lecturer in Disabilities
PhD University of Connecticut

FAIN, MOIRA Phone: 647-6227
Lecturer in Graphic Design
BFA, University of Connecticut

FASANO, ANTHONY Phone: 647-6223
Lecturer in Astronomy
MS, Rensselaer Polytechnic Institute

FEIGIN, ARNOLD Phone: 647-6112
Lecturer in Business Law
JD, University of Connecticut Law School

FITZGERALD, DEBRA Phone: 647-6223
Lecturer in Biology
MS, St. Joseph College

FLORES, LUCILLE Phone: 647-6112
Lecturer in Business Office Technology
MS, St. Joseph's College

FLOCHE, MARK Phone: 647-6223
Lecturer in Mathematics
MS, University of Connecticut

LEFEBVRE, DONNA Phone: 647-6059
Assistant to the Director of Fitness & Athletics
BS, Eastern Connecticut State University

KHALID, MARIA Phone: 647-6223
Lecturer in Environmental Science
PhD University of Connecticut

LAGUARDIA, NANCY Phone: 647-6112
Lecturer in Business
MA, University of Connecticut

LEE, WELLINGTON C. Phone: 647-6212
Lecturer in Computer Information Systems
MS, Central Connecticut State University

LINDSAY, DIANE Phone: 647-6212
Lecturer in Computer Information Systems
BA, Central Connecticut State University

MACBRYDE, PATRICIA Phone: 647-8743
Lecturer in Psychology
PhD Rutgers University

MERRIFIELD, ROBERT Phone: 647-6103
Lecturer in Business
MS, Eastern Connecticut State University

MICHAIL, DANIEL J. Phone: 647-6223
Lecturer in Oceanography
MS, Central Connecticut State University

MIHOK, SONIA Phone: 647-8640
Lecturer in Mathematics
MBA, Rensselaer Polytechnic Institute

MILLS, MARILYN P. Phone: 647-8431
Lecturer in Computer Information Systems
MS, Boston State University

NORDWOLD, NANCY Phone: 647-6112
Lecturer in Business Law
JD, Washington College of Law

O'BRIEN, ROBERT Phone: 647-8654
Lecturer in Criminal Justice
MS, St. Joseph's College

PEMBERTON, MIKE Phone: 647-6321
Lecturer in Hospitality Management

PETEROS, RANDALL Phone: 647-6112
Lecturer in Accounting and Business Administration
JD, Western New England College of Law

PISU, ROSEMARIE G. Phone: 647-6212
Lecturer in Business Office Technology
MS, Marywood College

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Evening Administrator, Continuing Education Division

PORTER, JULIA Phone: 546-6371
Educational Assistant, Supported Education Program
AS, Manchester Community-Technical College

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Lecturer in Psychology

PURCELL, WILLIAM Phone: 647-6112
Lecturer in Accounting
BS, Central Connecticut State University

QUINLAN, RICHARD Phone: 647-6112
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JD, Indiana University

REGAN, CHARLES E. Phone: 647-6103
Lecturer in Business
6th year, University of Connecticut

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Lecturer in Computer Information Systems
MA, Columbia University Teacher's College

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Counselor

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Student Development Specialist, College Learning Center
BS, University of Connecticut

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Lecturer in Business
MBA, Wagner College

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Lecturer in Mathematics
MS, University of Pittsburgh

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Lecturer in Accounting
BS, Central Connecticut State University

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Lecturer in Japanese
BA, Central Connecticut State University
SANTACROCE, MARY ANN Phone: 647-6112
Lecturer in Law
JD, University of Connecticut School of Law
SAWYER, PHILLOMENA M. Phone: 647-6223
Lecturer in Mathematics
MED, University of Pittsburgh
SCHADE, ANNIE Phone: 647-6075
Teacher’s Aide Assistant, Child Development Center
AS, Manchester Community-Technical College
SCHADT, ROBERT A. Phone: 647-6294
Assistant Director of Fitness & Athletics
Lecturer in Sport and Exercise Studies
MA, University of Connecticut
SCHWARTZ, CHARLES Phone: 647-6112
Lecturer in Computer Information Systems
BS, Charter Oak College
SCHWARTZ, JUDITH R. Phone: 647-6103
Lecturer in Business
MS, Central Connecticut State University
SHEILS, FLORENCE A. Phone: 647-6342
Special Populations Advisor
MED, Harvard University
SIMIE, JANA S. Phone: 647-6223
Lecturer in Mathematics
MBA, University of Connecticut
SMITH, ELLEN Phone: 647-8571
Lecturer in Computer Graphics
BFA, SUNY, Buffalo
SMITH, STEPHEN F. Phone: 647-6272
Lecturer in Communications Graphics
BFA, University of Hartford
SMITH, BARBARA J. Phone: 647-6272
Lecturer in Fine Arts
MFA (Art), Pratt Institute
MAED, University of Hartford
STANZIONE, RALPH Phone: 647-6236
Lecturer in DARC Program
MBA, Western New England College
STARK, HENRY Phone: 647-6112
Lecturer in Marketing
AB, Cornell University
STEWART, MARVIN Phone: 533-5204
Public Relations Coordinator, Educational Assistant
BS, Eastern Connecticut State University
SYMONDS, ELIZABETH W. Phone: 647-6112
Lecturer in Business Office Technology
MA, University of Connecticut
THORNTON, ELEANOR J. Phone: 647-6272
Lecturer in Communications
BA, State University of New York
TRAPP, PATRICIA Phone: 647-8732
Lecturer in Sociology
MA, Wesleyan University
TWOMEY, DANIEL Phone: 647-6104
Lecturer in Sport & Exercise Studies
MA, University of Connecticut
VAILLANCOURT, KATHLEEN Phone: 647-6299
Director of Marketing
MBA, University of Massachusetts
VAN BUREN, ARLENE Phone: 647-8623
Instructor of Mathematics
MS, Central Connecticut State University
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AS, Manchester Community-Technical College
WADSWORTH RALPH J. Phone: 647-6247
Lecturer in English
MA, Harvard University
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Lecturer in Theatre
MA, University of Connecticut
WAMESTER, AMY Phone: 647-6130
Employment Coordinator, Supported Education Program
BA, St. Joseph College
WATTST-ELDER, CYNTHIA Phone: 647-6112
Lecturer in Law
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WEBNER, ALFRED P. Phone: 647-6112
Lecturer in Real Estate
LLB, New York Law School
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Lecturer in Occupational Therapy Assistant Program
AS, Manchester Community-Technical College
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Coordinator, Adults in Transition
MS, Central Connecticut State University
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Lecturer in English
MA, University of Connecticut
WILLIAMS, SANDRA Phone: 647-8424
Lecturer in Accounting, Business and Finance
MS, Rensselaer Polytechnic Institute
WILLIAMSON, DANIEL Phone: 647-6104
Lecturer in History
MA, Villanova University
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Lecturer in Accounting
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YOUNG, ALBERT Phone: 647-6090
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Emeriti
ALBERGHINI, JOHN E.
Professor Emeritus of Physics
PhD University of Sarasota
MS, Purdue University
BS, Holy Cross College
ARNOLD, ALLAN W.
Professor Emeritus of Biology
PhD University of Rhode Island
BS, University of Rhode Island
ARTHUR, WALTER W.
Professor Emeritus of Law
JD, Cornell University
BS, University of Connecticut
AYOTE, GERARD W.
Assistant Professor Emeritus of Marketing
MED, Massachusetts State College
BS, American International College
BANDES, HERBERT
Dean Emeritus of Administrative Services
PhD University of Michigan
MS, University of Michigan
BS, University of Michigan
BELLUARDO, SHIRLEY A.
Assistant Director Emerita of Admissions for Enrollment Administration
MA, University of Connecticut
BS, University of Connecticut
AS, Manchester Community College
BERGMAN, HOWARD S.
Professor Emeritus of Law
LLM, New York University School of Law
JD, University of Connecticut School of Law
BA, Clark University
BIANCHI, MARY ANN
Professor Emerita of Biology
CAGS, St. Joseph College
MA, St. Joseph College
BA, St. Joseph College
BROWN, LESLIE ANN
Professor Emerita of Business
MS, Central Connecticut State University
BS, Boston University
AS, Becker Junior College
CAPUTO, LEE C.
Professor Emerita of Secretarial Science
MS, Central Connecticut State College
BS, Central Connecticut State College
CASSANO, STEPHEN T.
Professor Emeritus of Sociology
MSW, University of Connecticut
MA, State University of New York/Albany
BS, Boston State College
AS, Manchester Community College
CHRICO, ROLAND A.
Professor Emeritus of English
PhD International College
MS, Boston University
BS, University of Florida
CHRISTENSEN, GEORGE
Professor Emeritus of Life Sciences and Coordinator of Surgical Technology Program
MA, University of Connecticut
BA, University of Connecticut
CLARK, PAUL O.
Associate Professor Emeritus of English
AM, Harvard University
BA, Wesleyan University
CLINTON, RONALD R.
Counselor Emeritus
CAGS, Springfield College
MS, Southern Connecticut State University
BA, Southern Connecticut State University
CLOUTIER, ARTHUR C.
Professor Emeritus of English
MA, University of Connecticut
BA, University of Hartford
COLGAN, JACQUELINE M.
Director Emerita of Financial Aid
BA, Eastern Connecticut State University
AS, Manchester Community College
COLTMAN, ELEANOR D.
Coordinator Emerita, Public Service Careers Program
MA, Tufts University
BA, Tufts University
CONNORS, THOMAS P.
Assistant Director Emeritus, Division of Social Science and Public Service Careers
MPA, New York University
BA, City College of New York
CROWLEY, JOHN R.
Professor Emeritus of Sociology
STM, Bellarmine School of Theology
MA, Loyola University
PhD, West Baden College
BA, Loyola University
DAVIS, SAMUEL B.
Librarian Emeritus
MLS, University of Rhode Island
BA, Howard University
SUTHERLAND, JOHN F.
Professor Emeritus of History
PhD Temple University
MA, University of Maine
BS, University of Maine

TAMARKIN, TOBY S.
Director Emerita of the Humanities & Communication Arts Division
PhD University of Connecticut
MA, University of Connecticut
BA, Ohio State University

Tatro, James O.
Dean Emeritus of the Division of Community Services
MA, University of Connecticut
AMT, Harvard University
AB, Harvard University

Teguis, Alexandra
Professor Emerita of Psychology
MA, Assumption College
BA, University of Massachusetts

Tierney, Joyce E.
Associate Professor Emerita of Accounting
6th year, University of Connecticut
MA, New York University
BA, University of Connecticut

Vizard, Richard E.
Professor Emeritus of Business
MS, University of Maine
BA, American International College

Wernier, Alfred P.
Professor Emeritus of Real Estate
JD, New York Law School

Willard, Lawrence F.
Associate Professor Emeritus of Communications
MA, Fairfield University
AB, Middlebury College

Zaheer, Mohammad
Professor Emeritus of Economics
PhD University of Connecticut
EdS, Indiana University
MS, Indiana University
MA, Panjab University
BCom, Panjab University

Zullo, Frank X.
Associate Professor Emeritus of Law Enforcement
MPA, City College of New York
BA, City College of New York

Adjunct Faculty (Health Careers)
Drug/Alcohol Rehabilitation Counselor Program

Blue Ridge Treatment Center, Bloomfield
Karen Gardner, MA, CADC, primary counselor/team leader

Farrell Treatment Center, New Britain
Richard Rinaldo, PhD executive director

Hartford (Meadows) Correctional Facility, Hartford
Jay-Todd Schuder, MS, LADC, clinical supervisor and program coordinator

Johnson Memorial Hospital, Enfield
Roseann Harding, RN, coordinator, chemical dependence program

Lebanon Pines, Lebanon
Bill Sugden, CADC, director

Manchester Memorial Hospital, Manchester
Dale Smith, MS, LADC, intern supervisor

Thomas Murphy Center, Willimantic
Mary Lemay, MA, program director

Natchaug Hospital, Mansfield
Robin Rosen, MA, LADC, addictions coordinator

New Hope Manor, Manchester
Judy Johnson, BS, prevention director

Perception House, Willimantic
Diane Theroux, MHA, RN, CARN, director

Ragooswee Correctional Institution, Montville
Robert Warfield, MS, LADC, addictions services program coordinator

Rushford Center, Middletown
Ely Sears, MA, LADC, CCS, clinical manager, residential program

Salvation Army, Hartford
Beverly Robinson, CADC, program director

Stonehaven, Portland
Lucy Rosenblatt, MA, CAC, intern supervisor

Waterford Country School, Waterford
Vivian McFarland, LCSW, CADC, CCS, shelter director

Medical Laboratory Technician Program

Hartford Hospital
Wayne Aguilas, MS, MT(ASCP), NCA(CLS), program director
Rosanne Lipcius, MS, MT(ASCP), instructor
William Pastuszak, MD, instructor
Ann Robinson, PhD instructor
Rebecca Ross, BS, MT(ASCP), SBB, instructor
Phyllis Roy, BA, MT(ASCP), clinical lab education assistant
William Rzuke, MD, instructor
Herbert Silver, MD, medical director
Carol Skarzyński, BA, C(ASCP) instructor
Robert Skiba, BA, H(ASCP)/SH, instructor
Alan Wu, PhD instructor

Occupational Therapy Assistant Program

Andrew House, New Britain
Laurie Wassell, COTA, clinical instructor

Bethel Health Care Facility, Bethel
Kathleen Burgess, COTA/L, clinical instructor

Bidwell Healthcare, Manchester
Curtis Manganello, COTA, clinical coordinator

Center for Optimum Care, West Hartford
Diane Garner, COTA/L, clinical instructor

Center for Optimum Care, Norwich
Courtney White, COTA/L, clinical instructor

Colchester Nursing & Rehab Healthcare Center, Colchester
Kathy Paganetti, COTA/L, clinical instructor
Carol Starczuk, COTA/L, clinical instructor

Colchester Public Schools, Colchester
Kathy EpperSON, OTR, clinical instructor

Connecticut Valley Hospital, Middletown
Tileen Sabbatino, COTA, clinical instructor
Kathy Nelson, COTA, clinical instructor
Valaree McLean, OTR, clinical supervisor

Consolidated School District of New Britain, New Britain
Diana Clark, OTR/L, clinical supervisor

Douglas Manor, Windham
Stephen Keller, OTR/L, clinical director

Fox Hill Nursing & Rehab Center, Rockville
Susan Rudeen, OTR, clinical instructor

Gaylord Hospital, Wallingford
Laura Sheehan-Bell, OTR/L, clinical coordinator

Hartford Hospital, Hartford
Susan Fagan, OTR/L, clinical coordinator

Hartford Public Schools, Hartford
Ann Koba, OTR/L, clinical coordinator
Tina Allen, COTA, clinical instructor

Institute of Living, Hartford
Martha Rogers, OTR/L, clinical instructor

Manchester Manor, Manchester
Traci Canavan, OTR/L, clinical supervisor

McLean Home, Simsbury
Lynn Brown, COTA/L, clinical instructor
Don Manuck, COTA/L, clinical instructor
Areeda Pringle, COTA/L, clinical coordinator

Midstate Behavioral Health, Meriden
Linda Denton, MS, OTR/L, clinical instructor

Natchaug Hospital, Mansfield Center
Theresa Cumpielli-Minor, AS, COTA, clinical instructor
Tracey Heck, BS, OTR, clinical supervisor
Carol Kilburn, AS, COTA, clinical instructor

New Britain General Hospital, New Britain
Donna Bristol-Goeben, COTA/L, clinical instructor

New Britain Public Schools, New Britain
Donna Clark, OTR/L, clinical supervisor

St. Joseph Living Center, Hartford
Nancy Broughton, COTA, clinical instructor

Sundance Rehabilitation Corporation (corporate offices), East Berlin
Wendy Call, AS, COTA, clinical instructor
Patricia Castelhano, AS, COTA, clinical instructor
Lewis Lake, BA, COTA, clinical instructor
Theresa Ludecke, AS, COTA, clinical instructor
Lisa Tredreau, AS, COTA, clinical instructor

THERAPEUTIC ENTERPRISES, Ashford
Noten Wallace, OTR/L, clinical supervisor
Laurie Hall, COTA/L, clinical instructor
Kelly Potthier, COTA/L, clinical instructor

Therapy Unlimited, Watertown
Catherine Wickline, OTR, clinical coordinator
Jeff Wickline, OTR/L, clinical instructor

Vernon Public Schools, Vernon
Diane Kuzmeski, COTA/L, clinical instructor

Wolcott View Manor, Wolcott
Kim Keegan, OTR/L, clinical instructor

Respiratory Care Program

Baystate Medical Center, Springfield, MA
John Castro, BS, RRT, clinical instructor
Patricia Daley, BS, RRT, clinical supervisor

Connecticut Children’s Hospital, Hartford
Toni Grady, AS, RRT, CRT-P, clinical instructor
Nancy McLellan, AS, RRT, CRT-P, clinical instructor

BAYSTATE MEDICAL CENTER, Springfield, MA
John Castro, BS, RRT, clinical instructor
Patricia Daley, BS, RRT, clinical supervisor

Connecticut Children’s Hospital, Hartford
Toni Grady, AS, RRT, CRT-P, clinical instructor
Nancy McLellan, AS, RRT, CRT-P, clinical instructor
GENOX, HOMECARE, Newington & Stratford
Sylvia Colvin, BS, RRT, clinical instructor
HARTFORD HOSPITAL, Hartford
Leonard Heroux, AS, RRT
H. Kenneth Lyon, MD, RRT, clinical instructor
Sally Mirti, AS, RRT, clinical instructor
Robert Mueller, MD, instructor
Patricia O’Rourke, BS, RRT, educational director
Debra Triolo, AS, RRT, clinical instructor
HOSPITAL FOR SPECIAL CARE
Janet Bowen, BS, CRTT, clinical instructor
Karen Drost, BS, RRT, clinical instructor
Thomas Nielsen, BA, RRT, clinical instructor
Mary Turley, AS, RRT, clinical instructor
MANCHESTER MEMORIAL HOSPITAL
Patricia Carroll, RRT, RN, lecturer
James Lewis, BS, CRTT, clinical instructor
Robert Margioli, AS, RRT, clinical instructor
Dennis Martini, BS, RRT, RPFT, manager, respiratory care
Bina Vyas, BS, RRT, clinical instructor
Carl Wright, AS, RRT, RPFT, clinical instructor
NEW BRITAIN EMS
Marge Letitia, RN, CEN, EMT-P, coordinator of EMS services
NEW BRITAIN GENERAL HOSPITAL
Nancy Apruzzese, BS, RRT, clinical supervisor
Mary Barrows, BS, RRT, clinical instructor
Jacqueline Bezrutczyk, BS, RRT, clinical instructor
Theresa Boudreau, BS, RRT, clinical instructor
William Carroll, CRTT, RPFT, clinical instructor
Lorraine Cullen, AS, RRT, clinical instructor
Mike Jeans, AS, RRT, clinical instructor
Nancy Kroeber, RN, cardiology manager
Steve McGinnis, AS, CRTT, CPFT, clinical instructor
Tom Perzan, BA, CRTT, CPFT, clinical instructor
Gail Sileo, CRTT, clinical instructor
ST. FRANCIS HOSPITAL/MEDICAL CENTER, Hartford
Thomas J. Godar, MD, instructor
Sylvia Colvin, BS, RRT, clinical instructor
Genox, HOMECARE, Newington & Stratford
Sylvia Colvin, BS, RRT, clinical instructor
### GENERAL FUND TUITION

1. **Full-time student - per semester (1)**
   - a) Connecticut resident (2) $804.00
   - b) Out-of-state resident (2) 2,616.00
   - c) NCBH 1,206.00

2. **Part-time student - per semester hour**
   - a) Connecticut resident (2) 67.00
   - b) Out-of-state resident (2) 218.00
   - c) NCBH 100.50

3. **TV course student - per course (3 credits)** 201.00

### GENERAL FEES (3)

1. **Auxiliary Service Fund Fees**
   - 1. Full-time student - per semester College Service Fee 93.00
   - 2. Part-time student - per semester
     - a) College Service Fee (fewer than 5 credits) 37.00
     - b) College Service Fee (5-11 credits, per credit hour) 7.00

2. **Student Activity Fund Fees**
   - 1. Full-time student - per semester 10.00
   - 2. Part-time student - per semester 5.00

### EXTENSION FUND FEES

1. **Extension Fund student - per semester hour**
   - a) Full-time student - per semester: 7.00
   - b) Part-time student - per semester:
     - 1. Full-time student - per semester 10.00
     - 2. Part-time student - per semester 5.00
   - c) NEBHE 100.50

### SPECIAL FEES

1. **Application Fee (6)**
   - 1. Full-time student 20.00
   - 2. Part-time student 20.00

2. **Program Enrollment Fee (7)**
   - 1. Full-time student 10.00
   - 2. Part-time student 5.00

3. **Late Registration Fee**
   - 1. Full-time student 15.00
   - 2. Part-time student 15.00

4. **Returned Check Fee**
   - 1. Full-time student 25.00
   - 2. Part-time student 25.00

5. **Replacement of lost ID card**
   - 1. Full-time student 1.00
   - 2. Part-time student 1.00

6. **CLEP Examination Fee (8)**
   - 1. Full-time student 15.00
   - 2. Part-time student 15.00

7. **TV course student - per course (3 credit hours)** 7.25

8. **Portfolio Assessment Fee**
   - 1. Full-time student 50.00

### Fee Deposit - Non-Refundable

Full-time and part-time students at the time of registration must pay a non-refundable deposit of all fees applicable to the courses for which registered, including courses for audit, exclusive of tuition.

The total tuition applicable to the courses for which registered, including courses for audit, is payable in one installment and is due six weeks before the first day of classes unless a deferred payment schedule, in accordance with approved Board of Trustees policy, has been approved.

### Installment Payment Plan

An Installment Payment Plan is available to students who are registered for a minimum of eight (8) credit hours. Students may pick up an installment payment form at the time of registration. There is a $15 non-refundable fee for participation in the plan.

### Footnotes:

1) Students enrolled in Tuition Fund courses and/or Educational Extension Fund courses carrying 12 semester hours or more will be classified as full-time students for general fee purposes.

2) Waivers:
   a. Complete waiver of tuition for dependent child of person missing in action or former prisoner of war.
   b. The Connecticut Tuition Waiver is available for veterans who served on active duty (for at least 90 days) in the U.S. Armed Forces during time of war and were released from active duty under honorable conditions. The periods of conflict are: the Vietnam Era (1/1/64 to 7/1/75), the Korean hostilities (6/27/50 to 10/27/53), World War II (12/7/41 to 12/31/46), World War I (6/25/17 to 11/11/18) and any previous periods of conflict as far back as the Spanish-American War (4/21/98 to 8/13/98). The 100 percent tuition waiver is available for veterans if they are residents when accepted for admission.
   c. The tuition fees of veterans of armed forces who served in either a combat or combat support role in the invasion of Grenada; the peace keeping mission in Lebanon; or service during Operation Desert Shield and Operation Desert Storm (8/1/90-6/30/94) shall be waived. To be eligible for such waiver, a veteran must be a resident of Connecticut at the time he is accepted for admission and be honorably discharged or released under honorable conditions from active service in the armed forces. “Combat or combat support role” means assigned to the theatre of operations during the invasion or peace keeping mission.

3) Tuition, general fees and the application fee are completely waived for those persons 62 years of age or older who have been accepted for admission, provided at the end of the regular registration period, there is space available in the course in which the person intends to enroll. Special fees other than application fee must still be paid.

4) Tuition may be waived or remitted by the President, or his designated appointee, for any in-state student who demonstrates substantial financial need and who is enrolled on a full-time or part-time basis in a degree or certificate program or a precollege remedial program.

5) Tuition shall be waived for any student attending the Connecticut State Police Academy who is enrolled in a criminal justice program at the Academy which is offered in coordination with a regional community-technical college which accredits courses taken in the program. This waiver applies only to courses taken at the Connecticut State Police Academy and not to course work required for a degree taken at the college.

6) The tuition fees of any eligible member of the Connecticut Army or Air National Guard shall be waived. To be eligible for such waiver, a member of the Connecticut Army or Air National Guard must (1) be a resident of Connecticut, (2) present certification by the Adjutant General or his designee as a member in good standing of the Guard, and (3) be enrolled or accepted for admission to a regional community-technical college on a full-time or part-time basis in a degree granting program. The tuition waiver shall be reduced by the amount of any educational reimbursement received from an employer.

7) The community-technical college presidents are authorized to waive the Student Activity Fee only for students enrolled in Tuition Fund financed courses offered at off-campus locations.

8) General Fees are applicable to both Tuition Fund and Extension Fund students, except the TV course and courses by newspaper.

9) This fee is optional for Summer Session students; collection is determined by the President.

10) On-campus Extension Fee: rate applies to on-campus Extension Fee courses which permit the colleges to enroll additional students beyond the level supported by the General Fund.

11) Not applicable for the following: (a) CONNTAC applicants, (b) Upward Bound applicants and (c) needy and deprived students as determined by college.

12) Not applicable if student paid the $20 application fee.

13) CLEP exam fees are payable to College Level Examination Board and are not deposited or held in state accounts.

College Presidents, with the approval of the Executive Director, are authorized to waive general and special fees of students enrolled in special programs when the circumstances justify such action.

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**Tuition and Fees Subject to Change.**
Visitors are welcome at the College. Administrative offices are open from 8:30 a.m. until 4:30 p.m., Monday through Friday. Evening hours are available by appointment. Hours of the summer session are published in the summer session catalog.

Manchester Community-Technical College is located in the southwestern corner of Manchester near East Hartford and Glastonbury. College property is bounded on the north by Interstate Route 384.

The main entrance to the College is on Bidwell Street. Visitors are requested to park in lots A, B or C. Administrative offices are located in the Frederick W. Lowe, Jr. Building at the west end of the campus. All buildings have ramps to provide easy access for physically handicapped persons. Parking spaces at several locations on the campus are reserved for handicapped persons also.
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Paula Raum photo on page 4

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Manchester Community-Technical College is committed to access and equal opportunity. Should you require special accommodations in order to participate in any of the programs offered, please contact the Disabled Student Services at 647-6062. Alternative formats of this material may be provided upon request.
Accreditations and Memberships

Manchester Community-Technical College is accredited by the Board of Governors for Higher Education and by the New England Association of Schools and Colleges, Inc., which accredits schools and colleges in the six New England states. Accreditation by the Association indicates that the institution has been carefully evaluated and found to meet standards agreed upon by qualified educators.

Eight programs of study offered by Manchester Community-Technical College have been awarded national accreditation. The Occupational Therapy Assistant program has been accredited by the Accreditation Council for Occupational Therapy Education. The Medical Laboratory Technician Program has been accredited by the National Accreditation Agency for Clinical Laboratory Sciences. The Respiratory Care and Surgical Technology Programs have been accredited by the Commission on Accreditation of Allied Health Education Programs. The Legal Assistant Program has been approved by the American Bar Association. The Foodservice Management and Culinary Arts Programs have been accredited by the American Culinary Federation Educational Institute Accrediting Commission.

The College is a member of the American Association of Higher Education (AAHE), the American Association of Community Colleges (AACC), the Association of American Colleges and Universities (AAC&U), Association of College Personnel Administrators (ACPA), Association of College Unions International (ACUI), several chambers of commerce, the National Council for Resource Development, the National Association for Campus Activities, and several other organizations.

This catalog of Manchester Community-Technical College is provided as a source of information for prospective students. It is printed and distributed in advance of the academic period during which it is to be in effect: therefore, the College reserves the right to make necessary changes in any of the information appearing in the catalog. While the College cannot guarantee employment for students following graduation, the College Placement Office will assist students in their effort to find employment.

Manchester Community-Technical College and the community-technical college system of the state of Connecticut will not discriminate against any person on the grounds of race, color, religious creed, sex, age, national origin, ancestry, present or past history of mental disorder, marital status, mental retardation, sexual orientation, learning disability, or physical disability, including, but not limited to, blindness, or prior conviction of a crime, unless the provisions of sections 46a-60(b), 46a-80(b), or 46a-81(b) of the Connecticut general statutes are controlling or there is a bona fide occupational qualification excluding persons in one of the above protected groups. With respect to the foregoing, discrimination on the basis of sex shall include sexual harassment as defined in section 46a-60(8) of the Connecticut general statutes. Although it is recognized that there are bona fide occupational qualifications which provide for exception from employment prohibitions, it is understood these exceptions are to be applied pursuant to section 46a-68-33 of the administrative regulations. Further, the system does not discriminate against any individual on the grounds of political beliefs or veteran status.
MANCHESTER COMMUNITY-TECHNICAL COLLEGE

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