The College

Philosophy
Greenfield Community College believes in people and the community we serve — in their dignity, individuality and diversity, in their freedom to think and to explore, in their need for knowledge and continuing growth and in their responsibility to contribute positively to society. The College motto expresses the essence of that philosophy: The right to think — The will to learn.

The College offers a comprehensive program of studies, workshops and seminars with related supporting services in an atmosphere of trust, freedom and responsibility. The services of the College are available to students of varying ages, both full and part-time. The instruction makes use of many techniques which recognizes that students learn in a variety of ways.

The College is open to all students who wish to attend and is dedicated to offering quality education at the lowest possible cost.

History
Founded in 1962, Greenfield Community College is one of fifteen colleges which make up the Massachusetts Regional Community College System. For twelve years, the College operated in an old school, a former factory building, and a remodeled warehouse in the center of Greenfield. In 1974, the College moved to a handsome, modern facility, located on an 80-acre site on the outskirts of Greenfield. Since its founding, the number of day students has grown from 125 to the present 1,428.

Twenty-three programs leading to an associate degree are available through the Day Division. The Division of Continuing Education and Community Services also offers a wide range of credit and non-credit courses through its evening and summer programs. Many programs are designed to give students a choice between starting a career immediately or continuing their education at a four-year college or university. In addition to the degree programs, Certificate Programs provide specialized training for early job entry or skills update. The Commonwealth Transfer Compact between the College, the University of Massachusetts and the other state colleges eases the transfer process for graduates who wish to continue their studies at state-supported institutions in Massachusetts.

Greenfield Community College graduates have attended colleges and universities all over the Commonwealth, throughout the United States, and in foreign countries.

Accreditation
Greenfield Community College is accredited by the New England Association of Schools and Colleges. It is served by an advisory board of regional residents appointed by the Governor.
General Information

Admissions

Usually, applicants for admission have a high school diploma or its recognized equivalent. Other interested individuals lacking these credentials are invited to discuss their candidacy with the Director of Admissions. The applicant must also satisfy the entrance requirements of the curriculum for which application is made.

Non-Massachusetts residents are admitted to the college providing their acceptance does not deny admission to a qualified Massachusetts resident.

Applicants for admission should:

- obtain an admissions application from the College Admissions Office or High School Guidance Office.

- return completed application form to the Admissions Office with a $10.00 (non-refundable) application fee. Please make check or money order payable to Greenfield Community College. Applicants may apply to three Massachusetts Community Colleges for one $10.00 application fee. When an application fee has been paid to another Massachusetts Regional Community College, please indicate which one, and ask the college to send verification of payment to Greenfield Community College. For those students in financial need, application fee waivers are available from the Admissions office.

- have official transcripts sent directly to Greenfield Community College by all high school, college, and other post-secondary institutions attended.

- contact the Admissions Office to arrange an admissions interview.

- Transfer students must forward a certified financial aid transcript from previous post-secondary institutions or colleges.

Advanced Placement

Advanced placement in specific subjects may be granted based on performance on College Board Advanced Placement Examinations administered to high school seniors and/or the General Examination of the College Level Examination Program.

Credit by Evaluation

Greenfield Community College recognizes that a college degree is more than the sum total of courses taken and examinations passed. The college grants academic credit for a wide range of educational experience including transfer of credit from accredited or recognized institutions of higher education; credit awarded on the basis of selected College Level Subject Examinations; credit awarded from successful performance on subject examinations created by appropriate faculty; credit awarded on the basis of unique life and work experiences which lend themselves to evaluation; credit granted for courses taken in the military through the United States Armed Forces Institute or other recognized educational programs.
Foreign Students

A limited number of foreign students may be admitted to the college each year on a selective basis. These students are required to apply no later than six months prior to the date of entrance.

Foreign students whose native language is other than English will be required to take the Test of English as a Foreign Language (TOEFL) and obtain a score of 550 or better.

Inquiries concerning this program, including the schedule of test dates, should be directed to:

TOEFL Program Director
Educational Testing Service
Princeton, New Jersey 08540

Foreign student applicants must also file the following prior to the admissions decision:

- Medical Examination Record
- Declaration and Certification of Finances
- Results of the Test of English as a Foreign Language (TOEFL).

Greenfield Community College is unable to offer financial assistance to foreign students under any federally funded financial aid programs. Foreign students should plan to have sufficient financial resources to meet college expenses.

ESTIMATED COLLEGE EXPENSES FOR FOREIGN STUDENTS PER YEAR:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees</td>
<td>$1,774</td>
</tr>
<tr>
<td>Room and Board (food)</td>
<td>2,800</td>
</tr>
<tr>
<td>Books and Supplies</td>
<td>200</td>
</tr>
<tr>
<td>Medical Care and Insurance</td>
<td>155</td>
</tr>
<tr>
<td>Personal Expenses</td>
<td>1,005</td>
</tr>
<tr>
<td>Transportation (after arrival in U.S.)</td>
<td>510</td>
</tr>
<tr>
<td><strong>TOTAL ESTIMATED ANNUAL COST</strong></td>
<td><strong>$6,444</strong></td>
</tr>
</tbody>
</table>

Costs for items such as books and supplies, housing, food, medical care and personal expenses may vary for each individual student. For additional information contact: Director of Admissions, (413) 774-3131.

Greenfield Community College does not provide housing on campus. However, students may contact the Student Activities Office at the College for assistance in locating housing.

General Educational Development Test (GED)

Greenfield Community College is an official GED testing center. Non-high school graduates wishing to receive the High School Equivalency Certificate should contact the GED office at the college for details. Testing is available during day and evening hours.
New England Regional Students

Students who are legal residents of any New England state may be eligible for consideration under the New England Regional Student Program. A student accepted under this program pays the Massachusetts in-state tuition rate. Potential students are eligible for consideration if . . .

- a study program is not offered at an in-state institution.

- a study program is offered at both an in-state institution and at one of the Massachusetts Regional Community Colleges, and the latter is closer in traveling time to the student’s residence.

Veterans

The college is approved by the Veterans Administration for attendance by veterans eligible for VA Educational Assistance or the VA Rehabilitation Program. This applies to the day, evening, and summer divisions.

Dependents of deceased or disabled veterans, whose death or disability is service connected, are also eligible for receipt of VA Educational Assistance.

The Commonwealth of Massachusetts provides for tuition exemption for Vietnam era veterans at state supported institutions of higher education with creditable service to the Commonwealth, i.e., a resident of Massachusetts at the time of entry into active service. This applies only to students who are attending day division classes. Veterans must submit Form DD214 to the Admissions Office.

For further information regarding application and procedures for veteran’s programs, contact the Office of Veterans Affairs.
Tuition, Fees, and Expenses

Tuition and Fees Payment
In accordance with college policy, all charges for tuition and fees are due and payable approximately three weeks before class registration begins. Students are urged to make payment by mail. Bank checks or money orders should be made payable to Greenfield Community College. DO NOT MAIL CASH. Students may not attend classes until all tuition and fees are paid.

Financial Aid Awards (Scholarship, Loan, etc.)
Donors or recipients of awards should provide the Financial Aid Office with appropriate certification and terms of such awards.

Classification of Students
Students carrying 12 or more credit hours per semester are full-time students. Students carrying less than 12 credits per semester are part-time students. Students with special programs not fitting any curriculum pattern are Special Students regardless of their full-time or part-time status.

Certificate of Residency
To be entitled to the low tuition rate established for residents of Massachusetts, students must submit a Certificate of Residency obtainable from the Admissions Office.

PLEASE NOTE: The residency requirements are attached to the official application to the college. In general, one is considered a Massachusetts resident if he/she has been in continuous residence in Massachusetts for six months immediately prior to the date of application to the college, and has established a domicile in Massachusetts. Massachusetts residents or students eligible under the New England Regional Student Program can take advantage of the in-state tuition charges.

<table>
<thead>
<tr>
<th>Tuition Costs</th>
<th>Part-time per semester (1-11 credits)</th>
<th>Full-time per semester (12 credits or more)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-State Students</td>
<td>$22.50/credit</td>
<td>$225.00</td>
</tr>
<tr>
<td>Out-of-State Students</td>
<td>$85.00/credit</td>
<td>$850.00</td>
</tr>
<tr>
<td>Foreign Students</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PLEASE NOTE: Students beginning full-time study at Greenfield Community College are required to make a non-refundable advance tuition payment of $35.00. (This amount will be deducted from the total tuition payment for that semester.)

Tuition Refunds
A student who leaves the college for any reason before a semester is completed will be granted a refund of tuition (less the $35.00 advance tuition payment) using the following schedule:

<table>
<thead>
<tr>
<th>Amount Refundable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before classes begin</td>
</tr>
<tr>
<td>During 1st week of classes</td>
</tr>
<tr>
<td>During 2nd and 3rd week of classes</td>
</tr>
<tr>
<td>During 4th week of classes</td>
</tr>
<tr>
<td>After four weeks of classes</td>
</tr>
</tbody>
</table>

(Please allow at least 4 weeks processing time for refunds)
Insurance Programs

Health and Accident Insurance
Every student is required to subscribe to the Student Accident Insurance Plan which is available for family or spouse coverage. Detailed costs and information will be included with the tuition and fee bill.

Liability Insurance
All nursing students must be covered by a Professional Liability Insurance plan approved by the college.

Life Insurance
Applications are available for life insurance sponsored by the Commonwealth Division of Savings Bank Life Insurance.

Laboratory/Institutional Materials Fee
Each student will also be charged a materials fee of $1.00 per credit, maximum $17.00 per semester, which is non-refundable after the end of the first week of classes.

Student Activities Fee (non-refundable)
This non-refundable fee of $20.00 per semester is authorized by the Massachusetts Board of Regional Community Colleges as recommended by the Student Senate. It supports the Student Senate and a range of cultural, social, and recreational activities for students. In addition, payment entitles each student to the student handbook and student identification card. Students enrolled part-time pay a fee of $10.00 per semester.

Graduation Fee
A $20.00 fee must be paid at the time of application for graduation, before the degree is awarded. This authorized fee covers the expense of graduation, including diploma, cap, gown, and various commencement activities.

Estimated Personal Expenses per year

There are other expenses related to attendance at Greenfield Community College. They include the cost of books and supplies, room and board, transportation, clothing and laundry, and personal expenses. Costs for these items vary for each individual student.

The estimate provided below is a guide to assist students in planning how they will meet the cost of attending Greenfield Community College. All students should plan on meeting college costs well in advance of the opening of school.

Food (commuting students) $ 230
Room and Board (resident dependent students) $2,100
Books and Supplies $ 200
Transportation $ 510

Housing and Transportation
Greenfield Community College does not provide dormitory facilities since it is an institution designed primarily to serve the commuting student.

Ample, well lighted parking space has been provided on campus. For those who do not drive, there is regular bus service from Court Square in the center of Greenfield, scheduled to meet class hours at the college.

For those students who find it inconvenient to commute, the Student Activities Office offers assistance in finding housing.
Financial Aid

Financial Aid Application Procedures
All applicants for aid are required to submit the Financial Aid Form (FAF) to the College Scholarship Service. The FAF may be obtained from the College Scholarship Service, P. O. Box 2857, Princeton, New Jersey 08541, or from the applicant’s secondary school, or from the Greenfield Community College Financial Aid Office. Students should apply for the Basic Educational Opportunity Grant and Massachusetts State Scholarships by checking the appropriate boxes on the FAF.

In addition, each applicant must submit a Greenfield Community College Financial Aid Application which may be obtained from the College Financial Aid Office after the student has applied for admission to the College. Dependent students are required to submit a copy of the Parents’ 1979 Income Tax Return, and the independent students are required to submit a copy of their own 1979 Income Tax Return.

For all types of Financial Aid, application by April 1 is encouraged. Inquiries regarding financial aid should be made to the Greenfield Community College Financial Aid Specialists.

Financial Aid Programs
Greenfield Community College participates in three federal financial aid programs: College Work-Study Program, the Supplemental Educational Opportunity Grant Program, and the National Direct Student Loan Program.

Students who are enrolled at least half-time and who need financial help are eligible. In addition students must be making satisfactory academic progress. See academic policies and procedures section. Financial aid awards are based on financial need and the amount of federal funds available.

The College Work Study Program provides an opportunity for eligible students to work at the College. The program is designed to assist students in paying their college expenses. In selecting students for the College Work Study Program, preference is given to those students with greatest financial need.

Supplemental Educational Opportunity Grants are available to a limited number of students with exceptional financial need. These grants must equal awards to the student by other federally approved funds.

National Direct Student Loans are available to students who need financial assistance in meeting college expenses. The repayment period begins nine months after termination of completion of studies.

Other Financial Aid Programs
Basic Educational Opportunity Grant Program
All aid applicants are required to apply for assistance under the Basic Educational Opportunity Grant Program. All grants are based on financial need. Applications may be obtained at secondary schools and Greenfield Community College. Students may apply for a BEOG by completing the Financial Aid Form (FAF) published by the College Scholarship Service. As indicated above, the FAF should be mailed to the College Scholarship Service in Princeton, New Jersey 08541. In addition, separate BEOG applications are available at Greenfield Community College. Completed applications should be mailed to BEOG Program, P. O. Box A, Iowa City, Iowa 52240.
Massachusetts Higher Education Loan Program
Students who are residents of Massachusetts are also eligible for the Massachusetts Higher Education Loan Program. Application for these Student HELP Loans is made directly to a bank in the student's home community.

Massachusetts State Scholarships
Students who are residents of Massachusetts are also eligible for the Massachusetts State Scholarships. The deadline date is March 1 of the year preceding college entrance. Applications are available from the applicant's secondary school. For the enrolled student applicants, the deadline is April 1. Applications are available from the Greenfield Community College Financial Aid Office. For the academic year, Massachusetts State Scholarship applicants are required to submit only one application form which is a special version of the Financial Aid Form (FAF). This application form is available at high school guidance offices and at the Financial Aid Office. Note that the Board of Higher Education requires candidates for the State Scholarships to apply for a Basic Educational Opportunity Grant.

Nursing Student Loan or Nursing Student Scholarship Program
Students enrolled at least half-time (6 credits per semester) in the Nursing curriculum at Greenfield Community College are eligible to apply for assistance under the federally funded Nursing Student Loan or Nursing Student Scholarship Programs. Nursing Student Scholarships are awarded to students of exceptional financial need.
Academic Information

The Academic Programs
A student admitted to the College normally pursues an organized curricular program designed to culminate in the awarding of the degree of Associate in Arts (A.A.) or Associate in Science (A.S.). Most curriculum options are structured so as to allow completion within two academic years; however, some students may find it desirable or necessary to devote a longer period of time. Persons of post-high school age may wish to take credit or non-credit courses either during the day or evening for purposes of occupational up-grading or personal enrichment.

Curriculums and course offerings of the College are implemented through four major divisions of instruction. These include the Division of Behavioral Sciences, the Division of Business Administration, the Division of Humanities, and the Division of Natural Sciences.

Advisory Services
An important and vital part of the educational process is the academic advising available to students throughout their college careers.

Advising begins during the admissions process and continues with the assigned advisors who assist in orientation to the college and in registration. Advisors are also available throughout the academic year.

It is the responsibility of students to initiate and maintain close contact with their advisor.

Grading
Reports of grades are issued to students after the end of the semester and at the end of the summer session. In the middle of each semester preliminary reports of academic deficiency are mailed to students. Plus and minus symbols may be used only for grades B and C; a minus symbol may be used for the grade of A. The following grades are used:

A - Excellent
B - Good
C - Satisfactory
D - Poor
F - Failing
P - Satisfactory work in a non-credit course
IN - Incomplete

Incomplete is used to indicate work of acceptable quality where the student has failed to complete course requirements and the instructor wishes to allow time for the completion of the work. The IN must be removed within four weeks of the beginning of the next semester or it is replaced by an F.

W - Withdrawn
AU - Audit (not registered for credit or a grade). This option may be selected at the time of registration. A change from this status is treated as a regular course change and must be processed within the course adjustment period at the beginning of the semester.

CR - Credit (credit-no credit option)
NC - No credit (credit-no credit option)

CR-NC (credit-no credit) is an option available to a student carrying a program of 12 credits or more. With approval of the student's advisor, a qualified student may elect to take one course per semester on a CR-NC basis. This option may be exercised in addition to courses which are graded exclusively on a CR-NC basis (e.g. Leisure Education courses) provided that at least 9 credits are carried on a graded (A, B, C, D, F) basis.
A student electing the CR-NC option makes that commitment at the time of registration. A change from that status is treated as a regular course change and must be processed within the drop/add period at the beginning of the semester.

**Grade Point Averaging**

Grade Point Average (GPA) is the method used to indicate a student's academic status. The GPA is based upon a range of numerical values, as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>3.65</td>
</tr>
<tr>
<td>B+</td>
<td>3.35</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>2.65</td>
</tr>
<tr>
<td>C+</td>
<td>2.35</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>1.65</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Each student's GPA is computed on both a semester and cumulative basis. Only the cumulative GPA is used to determine a student's academic standing. Decisions regarding academic standing are made after the close of each semester.

**Graduation Requirements**

To earn a degree, a student must complete the course requirements of the curriculum and achieve a cumulative grade point average of at least 2.00 for all courses except those transferred from other institutions. No curriculum requires fewer than sixty credits, several require more. At least fifteen credits toward the degree must be completed at Greenfield Community College.

If a student wishes to complete a second Associates degree, 15 credit hours beyond the first degree must be successfully completed.

Students must fulfill degree requirements in effect in the catalog at the time they matriculate. If these requirements change while they are enrolled as matriculated students they may elect to fulfill the new requirements.

To be eligible for graduation "With Honors" a student must complete at least thirty credit hours of coursework at Greenfield Community College. A minimum cumulative grade point average of 3.50 is required (effective entering class, Sept. 1980).

Students eligible for graduation must submit an application for graduation and pay a graduation fee. Graduation applications are available in the Registrar's office.
**Academic Policies and Procedures**

**Academic Standing**

After one semester, any student who falls below a 1.00 cumulative GPA may be placed on PROBATION or be SUSPENDED or be DISMISSED from the college.

Any student who falls below a cumulative GPA of 2.00, but who achieves a cumulative GPA of 1.00 or above, may be placed under ACADEMIC REVIEW. At the end of the semester during which the student is under ACADEMIC REVIEW he/she must achieve a semester GPA of at least 2.00. Failure to do so will result in the student being placed on PROBATION, being SUSPENDED, or being DISMISSED. No student may be under ACADEMIC REVIEW more than twice. After two semesters under ACADEMIC REVIEW a student's cumulative GPA must be 2.00 or better. Failure to achieve that cumulative GPA will result in PROBATION, SUSPENSION, or DISMISSAL.

After one semester on PROBATION, any student who fails to achieve a cumulative GPA of 2.00 would be subject to continuing PROBATION, SUSPENSION, or DISMISSAL.

ACADEMIC REVIEW and PROBATION usually involve a reduction of academic load and co-curricular activities. It may also require interviews for diagnosis of difficulties and checking student progress.

Any student on PROBATION or SUSPENSION would be deemed to be making "Unsatisfactory Academic Progress."

Any student reinstated after SUSPENSION who continued to make "Unsatisfactory Academic Progress" would be subject to DISMISSAL from the college. Continuing "Unsatisfactory Academic Progress" following SUSPENSION remains the primary criterion for DISMISSAL.

Part-time students will not be evaluated for academic standing until they have completed a total of 12 credits. Subsequent evaluations of part-time students will be made on a proportional basis, with careful consideration of the number of credits attempted, and the grade point average earned in relation to total number of credits attempted and the cumulative grade point average.

The College recognizes that any of the above academic actions can be affected by unusual circumstances. Upon the request of a student, the College will review the circumstances of the academic action.

**Adding a Course**

The period to add courses begins on the second day of the semester and continues through the sixth day of classes. Adding courses requires the signature of the advisor only, unless a course requires permission of the instructor.

Adding courses after this period requires the signature of the advisor, the appropriate Division Chairperson, and the Dean of Students.

**Attendance**

Regular attendance is a normal expectation of a college education. If a student is excessively absent, he/she will be referred to the Registrar. Excessive absence may indicate some difficulty which the student is facing. Through counselors and advisors, the Office of Student Personnel Services will assist students in recognizing and solving such problems.

Students presently on the Dean's List have the privilege of attending classes at their own discretion; however, all students are responsible for meeting the requirements of the courses and curriculums in which they are enrolled.
Credit Overload

A semester of 19 or more credits, for a student in good academic standing, requires the recommendation of a student’s advisor and the approval of the advisor’s Division Chairperson.

Dean’s List

Inclusion on the Dean’s List for day students requires a GPA for the semester of at least 3.5 with no grade lower than C. Only full-time students carrying a program of at least twelve credits over and above any credit-no credit course options are eligible.

Matriculated Continuing Education students who have previously completed at least six graded credit hours at Greenfield Community College and who have completed at least six graded credit hours in Continuing Education during one semester are eligible for Dean’s List that semester provided they have a 3.50 semester average.

Dropping/Withdrawal From a Course

Courses may be dropped/withdrawn from in accordance with the schedule listed below. The signature of the advisor is required.

0-25 class days, “No Record”
26-45 class days, “W”
After 45 class days, “F” (unless Dean of Students’ approval warrants the grade of “W”).

Medical Withdrawal

A medical withdrawal or readmission after withdrawal for medical reasons may be granted by the Dean of Students upon the recommendation of the Director of the College Health Service or in special cases (i.e. psychological reasons) on the recommendation of the Director of the Health Service and the Divisional Counselor or Director of Disadvantaged Student Program.

Program Changes

Although a student indicates a curricular choice upon applying for admission, the college recognizes that changes in goals are common. A student considering such a change could consult with his/her academic advisor. Changes in curriculum emphasis require approval of the appropriate division chairperson.

A Change of Major Form may be obtained in the Student Personnel Office.

Students making changes should submit the Change of Major Form to the new program coordinator within the first three weeks of the semester and no later than registration for the following semester.

NOTE: Not all programs accept new students for the spring semester.

Readmission to College

Previously matriculated students at Greenfield Community College, who have discontinued their enrollment, must file a Petition for Reinstatement with the admissions office.

Records

The Family Rights and Privacy Act of 1974 requires that directory information — student’s name, school or college, major, address, telephone listing, dates of attendance, degree awards, class schedule, and confirmation of enrollment — may be given out on request. However, students have the legal right to notify Student Services in writing that this information be kept confidential. All other information will be released to appropriate college officials who have a legitimate need to know or to whom the student has given written consent specifying records to be released, reason for release, and to whom. A written copy of the written released information will be furnished to the student.
Repeating a Course

A course in which a student earns the grade of D or F may be repeated once. The new grade, if higher, replaces the old grade. Courses in which grades higher than D are earned may not be repeated for credit.

Options available under English Composition I (ENG 101, 103 105) may substitute for each other when a student repeats English Composition I because of failure or having earned a grade of D in one of the options; similarly options available under English Composition II (ENG 112, 114, 116) may substitute for each other when a student repeats English Composition II.

Transcripts

The first copy of grades transcripts is free. Subsequent copies are $1.00 each.

Information maintained on the student transcript is confidential and may be released only with the written consent of the student as provided for by State and Federal regulations.

Waiver

In the event that a student feels there are unusual or extenuating circumstances which justify an exemption from an academic regulation, a written request may be submitted to the Dean of Academic Affairs. Each request will be considered on its individual merit.

Withdrawal from College

To withdraw from the College, the student must file an Application for Withdrawal. Appropriate forms are available in the Office of Student Personnel Services; completed forms must be submitted to that office. Failure to attend class or merely giving notice to instructors will not be considered official withdrawal and may result in failing grades for all courses.

Official withdrawal from College will be recorded as follows:

1-25 class days, "no record"
26-45 class days, "W"
After 45 class days, "F" (unless Dean of Students' approval warrants the grade of "W").
The Commonwealth Transfer Compact

The Massachusetts Board of Regional Community Colleges, of which Greenfield Community College is a member, has endorsed the Commonwealth Transfer Compact, a policy enacted in May, 1974, for the purpose of facilitating student mobility in Massachusetts public higher education. The Compact guarantees that a student who fulfills the course distribution requirement as stipulated in the Compact and holds an A.A. or A.S. degree from a Massachusetts community college, and who subsequently transfers to a four-year public institution in Massachusetts will be awarded: (1) at least 60 semester hours of work toward a baccalaureate degree; and (2) at least 33 credit hours toward fulfillment of the general education (core) requirement for the baccalaureate degree. Further, the associate degree holder who is accepted for transfer under the Compact will be subject to no special requirements beyond those specified as major department and/or graduation requirements for students who originally enrolled in the four-year institution as freshmen.

An associate degree which is transferable as a unit under this policy is defined as the equivalent of at least 60 hours of undergraduate college-level study, including:

- 6 hours of English-Communication
- 9 hours of Behavioral-Social Sciences
- 9 hours of Humanities-Fine Arts
- 9 hours of Mathematics-Sciences

the remaining credits to be on a college level

It should be noted that the earning of an A.A. or A.S. degree does not guarantee acceptance to any four-year state institution, but does guarantee the transfer of credits as outlined above should the student be accepted for transfer.

For further information and clarification of the Commonwealth Transfer Compact, contact the Director of Transfer, Student Personnel Office.

Student Services

Career Counseling

The Career Counselor helps students to identify career and educational goals. Each student's interests and abilities are measured and used as a basis for counseling. In addition, career materials are provided for exploration. These services will also be helpful to those who are uncertain about course choices.

College Store

The College Store is operated under a Trust Fund the purpose of which is to engage in the sale of books, general supplies, and equipment, and such merchandising and service operations necessary to serve the needs of the students, the faculty, and the college.

The store is open from 9:00 A.M. to 3:00 P.M. every day during the academic year. Evening school and special occasion hours will be posted in the lobby outside the College Store.

A complete line of supplies and required texts is carried, along with an extensive display of current paperbacks and study guides geared to the college student. Special orders may be placed for specific books. Also available are shirts, jackets, charms, college mugs, stationery and other sundry items. Students are advised to attend classes before purchasing textbooks. No charging is permitted. The policy on refunds is as follows:

- Refunds are made for a period of two weeks after classes begin for the semester.
- Books must not be marked or damaged.
- Both the sales slip and an approved Petition for Course Change must be presented.

Policy on refunds does not apply to other merchandise.
The College Store will accept personal checks in the amount of the purchase only. A maximum personal check of $5.00 will be accepted by the College Store for cash upon presenting College I.D. There is no charge for this service; however, there is a $5.00 charge for returned checks that are cashed at the College Store.

**Dining Facilities**

The College, during the day, provides a full meal service in its modern dining facilities, and vending machines supplement the service in the evening.

A full breakfast menu, hot entrees, sandwiches, hot and cold drinks, and a daily dinner special are featured at attractive prices. Special group dinners or luncheons may be arranged through the resident manager of the food service organization.

**Health Service**

The staff of the Health Service is composed of one full-time college health nurse practitioner, one part-time registered nurse and two part-time physicians available on campus about 4 hours a week.

The Health Service is open from 9:00 A.M. to 5:00 P.M. daily, and is equipped to handle most problems common to the student population. All records are confidential, and information is not released without permission of the student. All treatment in the Health Service is free of charge. Students who need laboratory studies or x-rays are referred to the local hospital. It is advisable to purchase some form of health insurance to cover additional hospital costs.

The Health Service includes a Wellness Resource Center, with a large selection of health-related materials. Students are encouraged to drop in to read materials or to view films about achieving and maintaining a high level of wellness.

**The Learning Center**

The Learning Center helps students to overcome academic deficiencies. Services include tutoring in academic subjects and basic skills, small group study sessions, reading and writing improvement and tutoring in special subject areas. No appointment is necessary for an initial interview, and all services are free of charge to students.

**Personal Counseling Services**

The Divisional Counseling staff assists students in exploring their growth potential and any personal concerns encountered while in college. All meetings are strictly confidential and at the student's convenience; no appointment is necessary for an initial interview.

**Placement Services**

The Placement Office, with the cooperation of the faculty, assists graduating students and alumni seeking appropriate full-time employment and/or training.

Students are urged to consult the Placement Office six to eight months prior to graduating. Students may also use the Placement Office for help in finding part-time jobs.

**Sports**

Greenfield Community College offers varsity intercollegiate programs in cross-country, basketball, and baseball for men and volleyball, basketball, and softball for women. Toboggan racing is a coed sport. Soccer and wrestling will be added to the athletic program in the near future.

Intramurals are offered in 22 different areas such as bowling, flag football, boxing, golf, softball, basketball, road races, soccer and wrestling.
Student Association

The Student Association of Greenfield Community College is the basic structure within which Student Senate and the Student Activities Program exist. All students who pay the student activities fees are considered to be members of the Association. Members may hold office, vote in elections, and participate in association programs.

Student Senate

The Student Senate, elected by members of the Student Association, approves student organization budgets and supervises expenditures with the consent of the College President. Its objectives are:

- to promote and support activities that enhance the life of the college community.
- to administer and allocate the funds of the Student Association in conjunction with the administration.
- to represent the students on and off the campus.
- to act with college officers in supervising the college activities program.

Student Activities Program

The Student Activities program is a vital part of the college community. The program assists student groups in planning and operating their programs, and encourages faculty to serve in the role of organizational advisors and participants.

Typical activities include intramural activities, varsity athletics, social activities, recreation activities, cultural programs, exhibits, workshops, lectures, films, tours, trips, and clubs.

Transferring Students

The Student Personnel Office assists students in formulating and completing transfer plans. Students who may be considering transferring to a four year institution are encouraged to consult with their advisor and/or the transfer officer early in their college career to discuss transfer plans. Application forms and information about many four year institutions are available in the Student Personnel Office. Questions about transfer procedures should be referred to the Coordinator of Transfer, Student Personnel Office.
Learning Resources

Learning Resources are an integral part of the academic programs and facilities at Greenfield Community College. Two major service functions are included which are the Library Services and the Media Services.

Library Services

Library Services play an important role at the College. A collection of nearly 60,000 units of print and non-print materials is housed in the Library/Learning Resource Center. In addition to a rich variety of books, periodicals, newspapers, films, filmstrips, slides, audio/videotapes and phonodiscs, the Library/Learning Resource Center also contains a film preview room, a language practice room, a microform reading/printing room and a sunken periodical reading area. Services available include individualized library instruction on request, information and reference services, reserve services and walk-in interlibrary loans. A special room within the Library/Learning Resource Center holds the Archibald MacLeish Collection where materials by and about the nationally prominent local poet are available for scholarly research.

Media Services

The Media Center provides instruction for faculty, staff, and students in the production of mediated materials and the operation of media equipment. The Media Center also provides assistance in the design of instructional materials. The materials produced by the Media Center are: video tapes, audio tapes, color slides, duplicate slides, slide tape presentations, overhead transparencies, various graphic and photographic products, dry mounted and laminated visuals, and other teaching materials.

The Media Center is responsible for the distribution and scheduling of media equipment. The equipment, subject to lending policies and procedures, is available to students, faculty and staff.

The Media Center facilities include an audio studio, darkroom, three camera color television studio and other areas.

The college is also connected to the local CATV cable system and regularly cablecasts student productions. Through a closed circuit television system, video playbacks can also be transmitted to all instructional spaces on the campus.
Division of Continuing Education and Community Services

The Division of Continuing Education and Community Services is concerned with identifying current and potential community needs, drawing together resources from college and community, and creating appropriate educational programs.

Continuing Education Program

The Evening Division, with its established broad ranged curriculum, offers basic courses required in Associate Degree programs as well as other courses for personal and professional enrichment. Instructors for these courses include day college faculty, professors from other colleges, and members of the surrounding community.

Since its inception in 1962, enrollment in the Continuing Education Division has expanded from 47 students to over 1,000 students per semester. These students range in age from 14 to 78 and share a wide variety of educational, social, and vocational experiences.

Credit and non-credit courses are offered during the day and evening hours in the fall and spring semesters, as well as during a special summer session.

In addition to credit courses, the Division also offers a wide range of non-credit community service workshops, lectures, conferences, community forums, and other special events.

The Division of Continuing Education is maintained at no expense to the Commonwealth. All faculty and staff salaries, supplies, printing costs, and related expenses are generated from tuition money.

While most of the courses offered through Continuing Education are held at the college, credit and non-credit courses may be scheduled off campus by request. The Division is also willing to design and offer any course not listed in the catalog to be held at any location, at any convenient time.

A Continuing Education catalog is available upon request.

Summer Session

Credit and non-credit courses are offered during a special summer session. For further information contact the Division of Continuing Education.
Academic Programs

The community college mission includes the provision of programs for students desiring transfer to the upper division of a baccalaureate degree program, and programs designed to prepare students for a variety of career positions in which an associate degree is necessary or desirable.

Cooperative Education Programs

A component in many of the programs at Greenfield Community College, cooperative education is a systematic method of delivering educational services to students by combining academic instruction with community based, supervised on-the-job learning experiences.

There are a variety of terms used to designate the cooperative method of learning at Greenfield Community College: field experience, field work, cooperative work experience, and internship. The student receives academic credit for satisfactory completion of the learning experience.

Liberal Arts Programs

The Liberal Arts Programs are organized programs of general education leading to the degree of Associate in Arts and include studies in the Humanities, Behavioral Sciences, and Natural Sciences.

Many professions require a strong liberal arts background before a student is accepted for more specialized education. Law, medicine, economics, education, and journalism are a few examples.

Most students choosing a Liberal Arts curriculum plan to transfer to a baccalaureate degree program. To facilitate this in Massachusetts public institutions, the Liberal Arts programs at Greenfield Community College have been designed to fulfill the requirements of the Commonwealth Transfer Compact, see page 17 for more information.

The College currently offers seven Liberal Arts programs including a General Liberal Arts program and six concentrations.

Students choosing a Liberal Arts Program may wish to discuss vocational goals with the Director of Admissions or with their academic advisor.

Students planning to transfer to baccalaureate degree programs have the responsibility of familiarizing themselves with the requirements of potential transfer institutions.
**Liberal Arts/General Program**

To earn the Associate of Arts degree in the General Liberal Arts Program, a student must complete a minimum of sixty semester credits. At least fifteen semester credits must be completed in residence at Greenfield Community College. The specific Liberal Arts degree requirements follow:

**Core Requirements** — 36 credits to be selected from the following categories:

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td><em>English Composition I</em> — may be satisfied by completing any English Composition I course coded (E) (ENG 101, 103 or 105)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><em>English Composition II</em> — may be satisfied by completing any English Composition II course coded (E) (ENG 112, 114 or 116)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><em>SPE 101 — Oral Communication</em> — may be satisfied by completing any course coded (S)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td><em>Behavioral Science Core</em> — may be satisfied by completing any combination of courses coded (BC)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td><em>Humanities Core</em> — must be satisfied by completing a minimum of one three-credit course from each of the following specific categories: a) History (HIS 101, 102, 105, 106 or 113) b) Literature (ENG 201, 202, 203, 204, 205 or 206) c) Any additional course coded (HC)</td>
<td></td>
</tr>
</tbody>
</table>

6. *Science/Math Core* — must be satisfied by completing a minimum of one three-credit course from each of the following specific categories:
   a) Math — any MAT course coded (NC)
   b) Science — any science course (BIO, CHE, EAS, PHY, or SCI coded (NC))
   c) Any additional course coded (NC)

**Electives** (Liberal Arts and/or General, as defined below)

<table>
<thead>
<tr>
<th>Credit</th>
<th>Elective Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>TOTAL</td>
</tr>
</tbody>
</table>

The 24 credits of electives may be satisfied as follows:

1. A Liberal Arts elective can be satisfied by the successful completion of any course coded (BC), (HC), (NC), (BL), (HL), (NC), and (L). No more than 18 credits may be taken in any specific Liberal Arts subject, such as English, Chemistry, Psychology, etc.

2. A Liberal Arts elective can also be satisfied by completing courses designed for career programs and coded (A) or (X). No more than twelve credits can be taken in (X) coded courses, and a maximum of four of those twelve credits can be in Leisure Education (LED) courses.

3. A General Elective may be satisfied by the successful completion of any course offered by the College, regardless of code.
Liberal Arts/American Studies Concentration

The Liberal Arts concentration in American Studies provides a comprehensive overview of American culture for those planning to pursue such professions as teaching, public service, social service, law, advertising, public relations, journalism, library science and the ministry. The major emphasis is on American literature, history and government. A student electing this concentration should expect to transfer to a bachelor degree program in order to meet the educational requirements of such professions.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101, 103 or 105</td>
<td>English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114 or 116</td>
<td>English Composition II, any option</td>
<td>3</td>
</tr>
<tr>
<td>SPE 101</td>
<td>Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENG 203</td>
<td>American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 204</td>
<td>American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>HIS 105</td>
<td>History of the American People to 1865</td>
<td>3</td>
</tr>
<tr>
<td>HIS 106</td>
<td>History of the American People since 1865</td>
<td>3</td>
</tr>
<tr>
<td>POL 101</td>
<td>American Politics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

*Behavioral Science Core: 3
*Science/Math Core: 9-12

Elective Choice

American Studies (Any 3 courses from the list below) 9
General Electives (Any 4 courses) 12
TOTAL 60-63

Electives — American Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 105</td>
<td>American Art and Architecture I</td>
<td>3</td>
</tr>
<tr>
<td>ART 106</td>
<td>American Art and Architecture II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 215</td>
<td>American Folklore</td>
<td>3</td>
</tr>
<tr>
<td>ENG 219</td>
<td>The Black in American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 253</td>
<td>Valley Writers</td>
<td>3</td>
</tr>
<tr>
<td>ENG 255</td>
<td>Valley Folklore</td>
<td>3</td>
</tr>
<tr>
<td>ENG 257</td>
<td>MacLeish Seminar</td>
<td>3</td>
</tr>
<tr>
<td>HIS 109</td>
<td>American Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>HIS 111</td>
<td>The American Dream</td>
<td>3</td>
</tr>
<tr>
<td>HIS 115</td>
<td>Valley Religious History</td>
<td>3</td>
</tr>
<tr>
<td>HIS 117</td>
<td>American Economic History</td>
<td>3</td>
</tr>
<tr>
<td>HIS 119</td>
<td>Valley Ethnic History</td>
<td>3</td>
</tr>
<tr>
<td>HIS 121</td>
<td>Valley/American Economic History</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTES: From among the American Studies electives, a student may take no more than 6 credits in English and no more than 12 credits in courses from any other single discipline.

Coordinator: Helen E. Ellis

*See page 23 for specific requirements.
**Liberal Arts/Art Concentration**

The Liberal Arts concentration in Art emphasizes art history, art appreciation and studio skills for non-art majors who plan to pursue careers in education, museum or exhibit curatorship, gallery operation or other fields in which an understanding of art is essential. It is transferable for students wishing to continue higher education at a 4-year college or university.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101, 103 or 105 English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114 or 116 English Composition II, any option</td>
<td>3</td>
</tr>
<tr>
<td>SPE 101 Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>ART 103 or ART 104 Art History I or Art History II</td>
<td>3</td>
</tr>
<tr>
<td>*Behavioral Science Core</td>
<td>9</td>
</tr>
<tr>
<td>*Humanities Core</td>
<td>6</td>
</tr>
<tr>
<td>*Science/Math Core</td>
<td>9-12</td>
</tr>
</tbody>
</table>

**Elective Choice**

Art Electives (choose 2 courses from Group I below and 2 courses from Group II)  
General Elective                              3
Liberal Arts Elective                         9

**TOTAL** 60-63

---

**Group I — Select 2**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 111</td>
<td>Intro. to Studio I</td>
<td>3</td>
</tr>
<tr>
<td>ART 112</td>
<td>Intro. to Studio II</td>
<td>3</td>
</tr>
<tr>
<td>ART 117</td>
<td>Intro. to Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 161</td>
<td>Intro. to Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Group II — Select 2**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 231</td>
<td>Life Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 232</td>
<td>Life Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 233</td>
<td>Printmaking I</td>
<td>3</td>
</tr>
<tr>
<td>ART 234</td>
<td>Printmaking II</td>
<td>3</td>
</tr>
<tr>
<td>ART 241</td>
<td>Painting I</td>
<td>3</td>
</tr>
<tr>
<td>ART 242</td>
<td>Painting II</td>
<td>3</td>
</tr>
<tr>
<td>ART 251</td>
<td>Photography I</td>
<td>3</td>
</tr>
<tr>
<td>ART 252</td>
<td>Photography II</td>
<td>3</td>
</tr>
</tbody>
</table>

**NOTES:** No more than 18 credits total may be taken in Art.

**Coordinator:** T. Budge Hyde.

*See page 23 for specific requirements.*
Liberal Arts/Business Administration Concentration

The Liberal Arts concentration in Business Administration is designed to provide a student with the necessary courses for successful transfer to most four-year programs in Business Administration. The program combines liberal arts courses having emphasis on mathematics with specific business core courses. Through appropriate selection of elective courses a student should be able to complete the same program of study offered in the first two years of four-year colleges or universities offering majors in Business Administration.

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101, 103 or 105</td>
<td>English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 112, 114 or 116</td>
<td>English Composition II, any option</td>
<td>3</td>
</tr>
<tr>
<td>SPE 101</td>
<td>Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>ACC 121</td>
<td>Intro. to Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACC 122</td>
<td>Intro. to Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 111</td>
<td>Intro. to Business</td>
<td>3</td>
</tr>
<tr>
<td>DAT 101</td>
<td>Data Processing for Business and Management</td>
<td>3</td>
</tr>
<tr>
<td>ECO 101 and 102</td>
<td>Principles of Economics I and II</td>
<td>6</td>
</tr>
<tr>
<td>Behavioral Science Core</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Humanities Core</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>*Science/Math Core (See 1 below)</td>
<td></td>
<td>9-12</td>
</tr>
</tbody>
</table>

**Elective Choice** (See 2 below)

<table>
<thead>
<tr>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
</tr>
</tbody>
</table>

**TOTAL** 60-63

1) Math courses to be chosen after consultation with faculty advisor and in consideration of the requirements of the transfer institution. Students expecting to transfer to the University of Massachusetts, School of Business Administration must take MAT 151 and MAT 152 Calculus for the Managerial and Social Sciences I and II, and MAT 114 Probability and Statistics.

2) To be chosen in consultation with faculty advisor and in consideration of requirements of the transfer institution. Suggested electives are: BUS 103 Intro. to Marketing, BUS 155 and 156 Business Law I and II, and BUS 205 Principles of Management.

*Program Coordinator: Office, Division of Business Administration*

*See page 23 for specific requirements.*
Liberal Arts/Data Processing Concentration

The Data Processing concentration within the Liberal Arts program is designed for those students who want the Liberal Arts major for a general education, yet desire a basic knowledge of computers and data processing. This will allow the student to transfer to a four year program in computer science, information systems, or a related field. The graduate earns the Associate in Arts degree.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101, 103 or 105</td>
<td>English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114 or 116</td>
<td>English Composition II, any option</td>
<td>3</td>
</tr>
<tr>
<td>SPE 101</td>
<td>Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>DAT 101 or DAT 123</td>
<td>Data Processing for Business and Management or Intro. to Computers</td>
<td>3</td>
</tr>
<tr>
<td>DAT 103 or DAT 105 or DAT 107</td>
<td>Intro. to ANSI COBOL or FORTRAN Programming or Intro. to Computer Programming</td>
<td>3</td>
</tr>
<tr>
<td>DAT 201</td>
<td>Intro. to Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>ENG 123</td>
<td>Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>MAT 107</td>
<td>Fundamental Concepts of Math or higher level math course</td>
<td>3</td>
</tr>
<tr>
<td>MAT 114</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>*Behavioral Science Core</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>*Humanities Core</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>*Science/Math Core (Non-science)</td>
<td></td>
<td>3-4</td>
</tr>
</tbody>
</table>

Elective Choice

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Liberal Arts Electives</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**TOTAL** 60-61

Coordinator: Office, Division of Natural Science

*See page 23 for specific requirements.
Liberal Arts/Math/Science Concentration

This concentration is designed for the student who plans to transfer to a four-year degree program with a major in Mathematics or one of the Sciences. It is consistent with the first two years of a university program and allows the student to transfer into a four-year degree program without loss of time and/or academic credit.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101, 103 or 105</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114 or 116</td>
<td>3</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3</td>
</tr>
<tr>
<td>CHE 101</td>
<td>4</td>
</tr>
<tr>
<td>CHE 102</td>
<td>4</td>
</tr>
<tr>
<td>MAT 107, 108, 201 or 202 (any two)</td>
<td>6-8</td>
</tr>
<tr>
<td>PHY 101 and PHY 102 or PHY 111 and PHY 112</td>
<td>8</td>
</tr>
<tr>
<td>*Behavioral Science Core</td>
<td>9</td>
</tr>
<tr>
<td>*Humanities Core</td>
<td>9</td>
</tr>
</tbody>
</table>

**Elective Choice**

**General Electives to be selected as appropriate to the area of interest for the 4-year degree in consultation with the academic advisor from the list below:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101 Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 102 Botany</td>
<td>4</td>
</tr>
<tr>
<td>BIO 105 Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 106 Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>BIO 107 Basic Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 108 Basic Biology II</td>
<td>4</td>
</tr>
<tr>
<td>CHE 201 Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHE 202 Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>EAS 101 Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>EAS 102 Historical Geology</td>
<td>4</td>
</tr>
<tr>
<td>EAS 103 The Earth's Surface</td>
<td>4</td>
</tr>
<tr>
<td>EAS 104 Introduction to Oceanography</td>
<td>4</td>
</tr>
<tr>
<td>EAS 107 Geology of our National Parks</td>
<td>4</td>
</tr>
<tr>
<td>EAS 201 Rocks and Minerals</td>
<td>4</td>
</tr>
<tr>
<td>MAT 112 Finite Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>MAT 114 Probability and Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MAT 201 Calculus with Analytic Geometry I</td>
<td>4</td>
</tr>
<tr>
<td>MAT 202 Calculus with Analytic Geometry II</td>
<td>4</td>
</tr>
<tr>
<td>MAT 203 Multivariate Calculus</td>
<td>4</td>
</tr>
<tr>
<td>MAT 205 Elementary Linear Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>

**Coordinator:** Office, Division of Natural Sciences

*See page 23 for specific requirements.
Liberal Arts/Pioneer Valley Studies Concentration

The Pioneer Valley Studies Concentration examines the culture, history and environment of the Pioneer Valley in the national context. Students will learn to recognize cultural artifacts and become familiar with the rich natural and historical resources of the region. Designed for persons planning to pursue careers in teaching, public service, museum and library studies, journalism and art organizations, the 60-credit concentration, offered through both day and continuing education division, leads to an Associate in Arts degree. The concentration meets the requirements of the Massachusetts Transfer Compact.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101, 103 or 105</td>
<td>3 English Composition I, any option</td>
</tr>
<tr>
<td>ENG 112, 114 or 116</td>
<td>3 English Composition II, any option</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3 Oral Communication</td>
</tr>
<tr>
<td>ANT 107</td>
<td>3 Valley Archeology</td>
</tr>
<tr>
<td>ART 105 or ART 106</td>
<td>3 Valley/American Art and Architecture I or Valley/American Art and Architecture II</td>
</tr>
<tr>
<td>EAS 103</td>
<td>3 Valley Geology</td>
</tr>
<tr>
<td>ENG 203 or ENG 204 or ENG 253</td>
<td>3 American Literature I or American Literature II or Valley Writers (See 1 below)</td>
</tr>
<tr>
<td>HIS 107</td>
<td>3 Valley/American History I (See 2 below)</td>
</tr>
<tr>
<td>HIS 108</td>
<td>3 Valley/American History II (See 2 below)</td>
</tr>
<tr>
<td>HUM 113</td>
<td>3 Valley Perspectives and Retrospectives</td>
</tr>
<tr>
<td>HUM 115</td>
<td>3 Valley Contemporary Directions and Issues</td>
</tr>
<tr>
<td>*Behavioral Sciences Core</td>
<td>6</td>
</tr>
<tr>
<td>*Natural Sciences Core</td>
<td>6</td>
</tr>
</tbody>
</table>

Elective Choice

<table>
<thead>
<tr>
<th>Elective</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Electives</td>
<td>9</td>
</tr>
<tr>
<td>Valley Studies Electives (chosen from below or from alternatives above)</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60</td>
</tr>
</tbody>
</table>

Valley Studies Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 225</td>
<td>3 Valley Folklore</td>
</tr>
<tr>
<td>ENG 257</td>
<td>3 MacLeish Seminar</td>
</tr>
<tr>
<td>HIS 115</td>
<td>3 Valley Religious History</td>
</tr>
<tr>
<td>HIS 117</td>
<td>3 Valley Ethnic History</td>
</tr>
<tr>
<td>HIS 119</td>
<td>3 Valley Economic History</td>
</tr>
<tr>
<td>HUM 117</td>
<td>3 History of Pioneer Valley Education</td>
</tr>
<tr>
<td>HUM 231</td>
<td>3 Valley Research Project</td>
</tr>
</tbody>
</table>

NOTE: No more than 18 credits may be taken in one discipline toward the completion of the Associate in Arts Degree.

Program Coordinator: Bernard A. Drabeck

1) In lieu of ENG 203 or ENG 204 in the Humanities Core
2) In lieu of HIS 105 or HIS 106 in the Humanities Core

*See page 23 for specific requirements.
Career Programs are organized programs of specialized education leading to the degree of Associate in Science. They may include studies in the Behavioral Sciences, Humanities and the Natural Sciences.

The career programs are designed to prepare students for employment in a variety of occupational fields and, in some cases, to provide the foundation for transfer to a four-year baccalaureate degree program.

The College offers 16 Career Programs in a wide variety of technological and service fields (see below). Students interested in pursuing a Career Program may wish to discuss their vocational goals with a Program Coordinator or with their academic advisor.

The degree requirements for each career program are listed under its program title. In most career programs elective credits are required in Liberal Arts. The following code definitions are to be used in course selection:

1. A *General Elective* may be satisfied by completing any credit course offered at Greenfield Community College, regardless of code.

2. A *Liberal Arts Elective* may be satisfied by completing any credit course coded (HC), (NC), (BC), (HL), (BL), (NL), or (L).

3. Electives from specific subject areas can be satisfied as defined below:

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Acceptable Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Science elective</td>
<td>BC or BL</td>
</tr>
<tr>
<td>Humanities elective</td>
<td>HC or HL</td>
</tr>
<tr>
<td>Math/Science elective</td>
<td>NC or NL</td>
</tr>
</tbody>
</table>

**NOTE:** Some electives in particular career programs are footnoted, and specific courses are suggested.
Accounting Associate

The Accounting Associate program is an occupational curriculum which prepares students to work at the paraprofessional level in industry, retail enterprises, or public accounting offices. The graduate earns the degree of Associate in Science and should be qualified for entry level positions such as accounts payable clerk, accounts receivable clerk, inventory manager, cost accounting clerk, junior accountant in public accounting firms, and motel or restaurant full charge bookkeeper.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>Intro. to Accounting I</td>
</tr>
<tr>
<td>ACC 122</td>
<td>Intro. to Accounting II</td>
</tr>
<tr>
<td>ACC 201, 202 or ACC 205, 206</td>
<td>Intermediate Accounting I and II or Cost Accounting I and II</td>
</tr>
<tr>
<td>BUS 111</td>
<td>Intro. to Business</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Mathematics for Business</td>
</tr>
<tr>
<td>BUS 155</td>
<td>Business Law I</td>
</tr>
<tr>
<td>BUS 156</td>
<td>Business Law II</td>
</tr>
<tr>
<td>BUS 205</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>BUS 235</td>
<td>Business Policy</td>
</tr>
<tr>
<td>DAT 101</td>
<td>Data Processing for Business and Management</td>
</tr>
<tr>
<td>ECO 101</td>
<td>Macro Economics</td>
</tr>
<tr>
<td>ECO 102</td>
<td>Micro Economics</td>
</tr>
<tr>
<td>ENG 101, 103 or 105</td>
<td>English Composition I, any option</td>
</tr>
<tr>
<td>ENG 123</td>
<td>Report Writing</td>
</tr>
</tbody>
</table>

**Electives:**

- Program electives — Any two courses from the list below | 6
- Liberal Arts electives — Any 3 other courses with a code of (BC), (BL), (HC), (HL), (NC), (NL) | 9

**TOTAL** | 62

**Program Elective Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 201</td>
<td>Intermediate Accounting I</td>
</tr>
<tr>
<td>ACC 202</td>
<td>Intermediate Accounting II</td>
</tr>
<tr>
<td>ACC 205</td>
<td>Cost Accounting I</td>
</tr>
<tr>
<td>ACC 206</td>
<td>Cost Accounting II</td>
</tr>
<tr>
<td>ACC 251</td>
<td>Cooperative Work Experience in Acct.</td>
</tr>
<tr>
<td>BUS 107</td>
<td>Intro. to Personal Income Taxes</td>
</tr>
<tr>
<td>BUS 201</td>
<td>Financial Management</td>
</tr>
<tr>
<td>DAT 103</td>
<td>Intro. to ANSI COBOL</td>
</tr>
<tr>
<td>DAT 201</td>
<td>Business Systems Analysis and Design</td>
</tr>
<tr>
<td>MAT 114</td>
<td>Probability and Statistics</td>
</tr>
</tbody>
</table>

**Coordinator:** Office, Division of Business Administration
Art

The Art curriculum provides the first two years of professional art training. This curriculum is intended as a transfer program offering the degree of Associate in Science and leads to the degree of Bachelor of Fine Arts in art or the degree of Bachelor of Science in art education in a four year institution.

Ours is a preprofessional program intended to lay the groundwork that will ultimately produce a functioning, creative artist or teacher.

Students may choose to take some of the required or elective Liberal Arts courses in the summer session between their first and second years in order to lighten their academic work during their first year. This will still enable the student to complete his/her program in two years; in some cases it may be advisable for a student to plan his/her program over a three-year period.

This curriculum is approved by the Massachusetts Board of Regional Community Colleges under the title of “Fine Arts”.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 103 and 104</td>
<td>Art History I and II</td>
<td>6</td>
</tr>
<tr>
<td>ART 115 and 116</td>
<td>Sensory Phenomena I and II</td>
<td>2</td>
</tr>
<tr>
<td>ART 121 and 122</td>
<td>Design I and II</td>
<td>2</td>
</tr>
<tr>
<td>ART 131 and 132</td>
<td>Drawing I and II</td>
<td>2</td>
</tr>
<tr>
<td>ART 231 and 232</td>
<td>Life Drawing I and II</td>
<td>2</td>
</tr>
<tr>
<td>ENG 101, 103 or 105</td>
<td>English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114, 116 or 123</td>
<td>English Composition II, any option or Report Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Science elective</td>
<td>3</td>
</tr>
<tr>
<td>Humanities elective</td>
<td>3</td>
</tr>
<tr>
<td>General electives</td>
<td>3</td>
</tr>
<tr>
<td>Liberal Arts electives</td>
<td>9</td>
</tr>
<tr>
<td>Art Studio electives</td>
<td>12</td>
</tr>
</tbody>
</table>

TOTAL 62

The following are the Art Studio electives open to Art and Graphic Design majors:

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 215</td>
<td>Options in Career Development</td>
<td>1</td>
</tr>
<tr>
<td>ART 233</td>
<td>Printmaking I</td>
<td>3</td>
</tr>
<tr>
<td>ART 241</td>
<td>Painting I</td>
<td>3</td>
</tr>
<tr>
<td>ART 251</td>
<td>Photography I</td>
<td>3</td>
</tr>
<tr>
<td>ART 271</td>
<td>Graphic Design I</td>
<td>3</td>
</tr>
<tr>
<td>ART 295</td>
<td>Directed Study in Art</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 234</td>
<td>Printmaking II</td>
<td>1-3</td>
</tr>
<tr>
<td>ART 242</td>
<td>Painting II</td>
<td>3</td>
</tr>
<tr>
<td>ART 252</td>
<td>Photography II</td>
<td>3</td>
</tr>
<tr>
<td>ART 272</td>
<td>Graphic Design II</td>
<td>3</td>
</tr>
<tr>
<td>ART 296</td>
<td>Directed Study in Art</td>
<td>1-3</td>
</tr>
</tbody>
</table>

NOTES: Students may, with the permission of the Coordinator of the Art curriculum, take an additional course each semester.

It is understood that students must complete introductory level studios, before taking advanced level studios.

Coordinator: T. Budge Hyde
Criminal Justice

The curriculum in Criminal Justice leads to the degree of Associate in Science. It is designed to present a broad education in the operations, functions and objectives of the Criminal Justice system and its component parts. It examines the Police, the Courts and Corrections. Graduates of this program are prepared for entry into a number of different baccalaureate programs or for certain careers within the Criminal Justice System.

Required Courses Credits
CRJ 101 Introduction to Criminal Justice 3
CRJ 103 Criminal Law 3
CRJ 105 Police Process 3
CRJ 107 Adjudication Process 3
CRJ 109 Corrections Process 3
CRJ 121 Criminology 3
CRJ 215 Field Experience Practicum\(^1\) 3
ENG 101, 103 or 105 English Composition I, any option 3
ENG 112, 114, 116 or 123 English Composition II, any option or Report Writing 3
POL 101 American Government 3
PSY 101 Principles of Psychology 3
SOC 101 Principles of Sociology 3
SOC 201 Social Problems 3
SPE 101 or 121 Oral Communications or Group Discussion 3
CRJ electives (see below) 9
General elective 3
Natural Science and/or Humanities electives\(^2\) 6
TOTAL 60

CRJ Electives — Any 3 of the following:
CRJ 113 Juvenile Justice Process 3
CRJ 115 Introduction to Security 3
CRJ 117 Principles of Loss Prevention 3
CRJ 203 Criminal Investigation 3
CRJ 205 Criminal Evidence and Procedure 3
CRJ 207 Police Standards and Goals 3
CRJ 209 Criminal Justice Standards and Goals 3
CRJ 211 Current Issues in Criminal Justice 3

\(^1\)To be selected with the assistance of the program advisors.

\(^2\)Students who wish to take advantage of the Commonwealth Transfer Compact (see p. 17) will have to select their electives with those requirements in mind.

Program Coordinator: Gerard Richard
Early Childhood Education

This curriculum prepares students for professional employment in early childhood settings and for positions as aides in elementary schools and social service agencies. It also provides the foundation for further study in early childhood education, elementary education, special education, and other human service curricula.

The field work component of the program provides direct experience in different early childhood settings and assures the acquisition of practical skills. Students graduating from this program are qualified to serve as assistant teachers in early childhood classrooms and, upon completion of a required period of experience, can be licensed as head teachers.

A student planning to pursue a baccalaureate program at one of the Massachusetts public colleges or universities should take advantage of the Commonwealth Transfer Compact (see page 000 for details. Students seeking to satisfy Compact requirements will have to select their electives with care and will need three credits beyond the number required for graduation. In some cases it may be advisable for the potential transfer student to plan to complete the program in a two and one-half year period or to take some courses during the intervening summer session.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 101</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 103</td>
<td>Creative Experiences in Art, Music, Drama and Dance</td>
<td>3</td>
</tr>
<tr>
<td>ECE 115, 116, 215, 216</td>
<td>Field Experience I, II, III, IV</td>
<td>15</td>
</tr>
<tr>
<td>ECE 201</td>
<td>Early Childhood Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>ECE 203</td>
<td>Survey of Current Learning Programs</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101, 103, 105</td>
<td>English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114, 116</td>
<td>English Composition II, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 241 or 242</td>
<td>Survey of Children's Literature or Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Principles of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 217</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101 or ANT 104</td>
<td>Principles of Sociology or Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>SPE 101</td>
<td>Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>ECE/LED electives (see offerings below)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Natural Science/Math elective</td>
<td>3-4</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL 60-61

ECE/LED electives — Any 2 of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 221</td>
<td>Science for Children</td>
</tr>
<tr>
<td>ECE 223</td>
<td>Mathematics for Children</td>
</tr>
<tr>
<td>ECE 225</td>
<td>Social Studies for Children</td>
</tr>
<tr>
<td>ECE 229</td>
<td>Nature Activities for Children</td>
</tr>
</tbody>
</table>

and

Any 1 of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 231</td>
<td>Movement with Children</td>
</tr>
<tr>
<td>ECE 227</td>
<td>Designing Learning Environments for Children</td>
</tr>
<tr>
<td>LED 153</td>
<td>New Games</td>
</tr>
<tr>
<td>LED 191</td>
<td>Recreational Dance</td>
</tr>
<tr>
<td>LED 193</td>
<td>Contemporary Food Experience</td>
</tr>
<tr>
<td>LED 199</td>
<td>Creative Dramatics</td>
</tr>
</tbody>
</table>

Students may petition or be chosen to enter ECE 216 without completing ECE 215. Those who do this will substitute a general elective to make up the needed credits.

Program Coordinator: Nancy Winter
Engineering Science

The Engineering Science curriculum is primarily a transfer program, including a solid science-engineering fundamentals base. It offers considerable flexibility in overall program design, whereby students may select engineering courses appropriate to several different majors. The program meets the Commonwealth Transfer Compact guidelines and awards the degree of Associate in Science.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 101 General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>DAT 105 FORTRAN Programming</td>
<td>3</td>
</tr>
<tr>
<td>EGR 101 Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>EGR 103 Engineering Orientation</td>
<td>1</td>
</tr>
<tr>
<td>ENG 101, 103 or 105 English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 123 Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>MAT 201 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MAT 202 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MAT 203 Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHY 111 General Physics I with Calculus</td>
<td>4</td>
</tr>
<tr>
<td>PHY 112 General Physics II with Calculus</td>
<td>4</td>
</tr>
<tr>
<td>SPE 101 Oral Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**

- Humanities Electives: 6
- Behavioral Science Electives: 9
- Engineering and/or Science electives chosen from courses designated by CIV, EGR, ELT, IND or science courses with advising code N C: 9-12

**TOTAL Credits:** 64-67

**Recommended Elective Packages for Selected Majors**

*(Note: Special circumstances may warrant some variations)*

**Chemical Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 102 General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHE 201 Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHE 202 Organic Chemistry II</td>
<td>4</td>
</tr>
</tbody>
</table>

**Civil Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIV 101 Surveying I</td>
<td>3</td>
</tr>
<tr>
<td>EGR 205 Statics</td>
<td>3</td>
</tr>
<tr>
<td>CIV 102 Surveying II or</td>
<td>3</td>
</tr>
<tr>
<td>EGR 206 Mechanics of Materials</td>
<td>4</td>
</tr>
</tbody>
</table>

**Electrical Engineering**

- Science elective: 3 or 4
- Two EGR electives: 6-8

**Environmental Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 102 General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>BIO elective</td>
<td>3 or 4</td>
</tr>
<tr>
<td>BIO 205 Microbiology</td>
<td>4</td>
</tr>
</tbody>
</table>

**Industrial Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR 205 Statics</td>
<td>3</td>
</tr>
<tr>
<td>EGR 206 Mechanics of Materials</td>
<td>4</td>
</tr>
<tr>
<td>IND elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Mechanical Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR 205 Statics</td>
<td>3</td>
</tr>
<tr>
<td>EGR 206 Mechanics of Materials</td>
<td>4</td>
</tr>
<tr>
<td>EGR elective</td>
<td>3 or 4</td>
</tr>
</tbody>
</table>

*Program Coordinator: David C. Bartlett, P. E.*
Fire Science Technology

The Fire Science Technology curriculum provides technical and legal training in various aspects of fire prevention, fire protection, and hazardous materials handling. Graduates of this program receive the degree of Associate in Science and may look forward to careers with local fire departments, in insurance and building inspection, and in fire protection work with private firms. The program is designed for high school graduates interested in fire protection as a career and to provide opportunities for professional advancement for firefighters in service. Fire Science Technology courses are available only in the evening division, although students in this program may take liberal arts courses in either the day or evening division.

This curriculum is approved by the Massachusetts Board of Regional Community Colleges under the title of “Fire Protection and Safety Technology”.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 105</td>
<td>Basic Principles of Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>SCI 101</td>
<td>Physical Science I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 103</td>
<td>English Composition II, any option or Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>FST 101</td>
<td>Introduction to Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>FST 103</td>
<td>Fundamentals of Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>FST 109</td>
<td>Hazardous Materials</td>
<td>4</td>
</tr>
<tr>
<td>FST 111</td>
<td>Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>FST 113</td>
<td>Fire Hydraulics with Applied Math</td>
<td>4</td>
</tr>
<tr>
<td>FST 201</td>
<td>Fire Protection Systems and Equipment I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Principles of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SPE 101</td>
<td>Oral Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Type</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FST electives</td>
<td>14</td>
</tr>
<tr>
<td>General elective</td>
<td>3</td>
</tr>
<tr>
<td>Liberal Arts electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

Notes

'FST electives consist of all courses designated FST not specifically required in the curriculum.

Program Coordinator: Carleton P. Stinchfield
Graphic Design

The Graphic Design curriculum is for students interested in design and photography who wish to channel their creative talents into an occupation. The curriculum will broaden and refine the talents needed to enter the job market or to form the basis for advanced study. Experience in the Graphic Design program will prepare the individual to face abstract problems and interpret those problems into creative and practical solutions. The student will become familiar with the tools of advertising and develop skills in typography, illustration, layout, mechanical work, photography, and printing production.

Students may choose to take some of the required or elective Liberal Arts courses in the intervening Summer Session if it seems desirable to lighten the course load during the first year. In some cases, it may be advisable for a student to plan his/her program for a three-year period.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 103 and 104</td>
<td>6</td>
</tr>
<tr>
<td>ART 115 and 116</td>
<td>2</td>
</tr>
<tr>
<td>ART 121 and 122</td>
<td>6</td>
</tr>
<tr>
<td>ART 131 and 132</td>
<td>6</td>
</tr>
<tr>
<td>ART 271 and 272</td>
<td>6</td>
</tr>
<tr>
<td>ENG 101, 103 or 105</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114, 116 or 123</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Science elective</td>
<td>3</td>
</tr>
<tr>
<td>Humanities elective</td>
<td>3</td>
</tr>
<tr>
<td>General elective</td>
<td>3</td>
</tr>
<tr>
<td>Liberal Arts elective</td>
<td>9</td>
</tr>
<tr>
<td>Art Studio/Audio-visual electives</td>
<td>12</td>
</tr>
</tbody>
</table>

**TOTAL** 62

The following are the Art Studio electives open to Art and Graphic Design majors:

**Fall Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 215 Options in Career Development</td>
<td>1</td>
</tr>
<tr>
<td>ART 231 Life Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 233 Printmaking I</td>
<td>3</td>
</tr>
<tr>
<td>ART 241 Painting I</td>
<td>3</td>
</tr>
<tr>
<td>ART 251 Photography I</td>
<td>3</td>
</tr>
<tr>
<td>ART 295 Directed Study in Art</td>
<td>1-3</td>
</tr>
</tbody>
</table>

**Spring Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 232 Life Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 234 Printmaking II</td>
<td>3</td>
</tr>
<tr>
<td>ART 242 Painting II</td>
<td>3</td>
</tr>
<tr>
<td>ART 252 Photography II</td>
<td>3</td>
</tr>
<tr>
<td>ART 296 Directed Study in Art</td>
<td>1-3</td>
</tr>
</tbody>
</table>

**NOTES:** It is understood that students must complete introductory level studios before taking advanced level studios. Students may, with the permission of the Coordinator of the Art Curriculum, take an additional course each semester.

*Program Coordinator:* T. Budge Hyde
Industrial Technologies Cluster

This program consists of a cluster of technologies utilizing a common core of general educational courses (24 credit hours) and basic technical courses (18 credit hours). The Technologies Program core is designed to be supplemented by seven concentration elective courses (21 plus credit hours) available under specific major program title or options which serve also to determine the degree awarded. Under this program the Associate in Science degree would be awarded in each of the following majors: Chemical Technology, Civil Engineering Technology, Electronics Technology, Industrial Engineering Technology, Surveying/Construction Technology, and Water and Wastewater Technology. These program offerings are designed to prepare the graduate to work as a technician in the chosen major area.

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAT 105</td>
<td>FORTRAN Programming</td>
<td>3</td>
</tr>
<tr>
<td>EGR 101</td>
<td>Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>EGR 103</td>
<td>Engineering Orientation</td>
<td>1</td>
</tr>
<tr>
<td>EGR 106</td>
<td>Drafting for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101, 103 or 105</td>
<td>English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 123</td>
<td>Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>MAT 103</td>
<td>Applied Math I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 104</td>
<td>Applied Math II</td>
<td>3</td>
</tr>
<tr>
<td>MAT 207</td>
<td>Applied Math III</td>
<td>3</td>
</tr>
<tr>
<td>PHY 101</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHY 102</td>
<td>General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>SPE 101</td>
<td>Oral Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

### Electives

<table>
<thead>
<tr>
<th>Type of Elective</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Science/Humanities electives</td>
<td>6</td>
</tr>
<tr>
<td>Concentration electives (five) from selected major</td>
<td>15</td>
</tr>
<tr>
<td>Concentration electives/Business electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**TOTAL 63**

Concentration electives must come from selected major; Business electives from available Business Management offerings.

### Concentration Elective Majors for Industrial Technologies Cluster

#### Chemical Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 101</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHE 102</td>
<td>General Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHE 201</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHE 211</td>
<td>Analytical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHE 221</td>
<td>Chemical Processes</td>
<td>3</td>
</tr>
<tr>
<td>CHE electives (0-2)/BUS electives (0-2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Civil Engineering Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIV 101</td>
<td>Surveying I</td>
<td>3</td>
</tr>
<tr>
<td>CIV 102</td>
<td>Surveying II</td>
<td>3</td>
</tr>
<tr>
<td>EGR 205</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>EGR 206</td>
<td>Mechanics of Materials</td>
<td>4</td>
</tr>
<tr>
<td>CIV electives (1-3)/BUS electives (0-2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Electronics Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT 101</td>
<td>Basic Electricity I - DC</td>
<td>4</td>
</tr>
<tr>
<td>ELT 102</td>
<td>Basic Electricity II - AC</td>
<td>4</td>
</tr>
<tr>
<td>ELT 103</td>
<td>Basic Electronics I</td>
<td>4</td>
</tr>
<tr>
<td>ELT 104</td>
<td>Basic Electronics II</td>
<td>4</td>
</tr>
<tr>
<td>ELT 105</td>
<td>Digital Circuit Theory</td>
<td>3</td>
</tr>
<tr>
<td>ELT electives (0-2)/BUS electives (0-2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Industrial Engineering Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND 101</td>
<td>Machine Processes</td>
<td>3</td>
</tr>
<tr>
<td>IND 111</td>
<td>Productivity Management</td>
<td>3</td>
</tr>
<tr>
<td>IND 112</td>
<td>Quality Control</td>
<td>3</td>
</tr>
<tr>
<td>IND 113</td>
<td>Motion and Time Study</td>
<td>3</td>
</tr>
<tr>
<td>IND 204</td>
<td>Facilities Engineering</td>
<td>3</td>
</tr>
<tr>
<td>IND electives (0-2)/BUS electives (0-2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Surveying/Construction Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIV 101</td>
<td>Surveying I</td>
<td>3</td>
</tr>
<tr>
<td>CIV 102</td>
<td>Surveying II</td>
<td>3</td>
</tr>
<tr>
<td>CIV 203</td>
<td>Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>EGR 205</td>
<td>Statics</td>
<td>4</td>
</tr>
<tr>
<td>EGR 207</td>
<td>Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CIV 215</td>
<td>Construction Estimating</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>BUS electives (0)</td>
<td></td>
</tr>
</tbody>
</table>

### Water and Wastewater Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 106</td>
<td>Chemistry of Air and Water</td>
<td>3</td>
</tr>
<tr>
<td>CIV 211</td>
<td>Introduction to Water and Wastewater Technology</td>
<td>3</td>
</tr>
<tr>
<td>CIV 213</td>
<td>Engineering Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>CIV 217</td>
<td>Water and Wastewater Treatment Plant Operations</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIO elective in Microbiology</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>CHE, CIV, or IND (0-2)/BUS electives (0-2)</td>
<td></td>
</tr>
</tbody>
</table>

### Program Coordinator: David C. Bartlett, P. E.
Leadership Development in Recreation and Human Services

This curriculum provides leadership training and practical skills in recreation and human services. The program leads to the degree of Associate in Science. It is designed to prepare students for employment in a variety of public and private agencies as recreation leaders and supervisors. Students desiring to be executives and administrators in leisure and human service agencies may transfer to baccalaureate degree programs in recreation administration, therapeutic recreation, outdoor education, physical education, special education, or related social service areas.

This curriculum is approved by the Massachusetts Board of Regional Community Colleges under the title of "Recreation Leadership".

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101, 103, 105</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114, 116</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>3</td>
</tr>
<tr>
<td>REC 101</td>
<td>3</td>
</tr>
<tr>
<td>REC 103</td>
<td>3</td>
</tr>
<tr>
<td>REC 107</td>
<td>3</td>
</tr>
<tr>
<td>REC 109</td>
<td>3</td>
</tr>
<tr>
<td>REC 111</td>
<td>3</td>
</tr>
<tr>
<td>REC 115, 215, 216</td>
<td>9</td>
</tr>
<tr>
<td>REC 119</td>
<td>3</td>
</tr>
<tr>
<td>REC 205</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral Science elective</td>
<td>3</td>
</tr>
<tr>
<td>General elective</td>
<td>3</td>
</tr>
<tr>
<td>Humanities electives</td>
<td>6</td>
</tr>
<tr>
<td>Leisure Education electives&lt;sup&gt;1&lt;/sup&gt;</td>
<td>8</td>
</tr>
<tr>
<td>Science/Math elective</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL 65

Recommended Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 217 American Folklore</td>
<td>3</td>
</tr>
<tr>
<td>ENG 242 Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>LED 109 Basic White Water Canoeing I</td>
<td>1</td>
</tr>
<tr>
<td>LED 139 Hiking and Backpacking</td>
<td>1</td>
</tr>
<tr>
<td>LED 153 New Games</td>
<td>1</td>
</tr>
<tr>
<td>LED 163 Physical Education and Fitness</td>
<td>2</td>
</tr>
<tr>
<td>LED 191 Recreational Dance</td>
<td>2</td>
</tr>
<tr>
<td>LED 199 Creative Dramatics</td>
<td>2</td>
</tr>
<tr>
<td>PSY 213 Psychology of Interpersonal Behavior</td>
<td>3</td>
</tr>
<tr>
<td>PSY 217 Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>REC 131 Introduction to Therapeutic Recreation</td>
<td>3</td>
</tr>
<tr>
<td>SPE 121 Group Discussion</td>
<td>3</td>
</tr>
</tbody>
</table>

<sup>1</sup>The Leisure Education electives must include 2 credits in the area of aquatics, 1 credit in the area of land sports, and 1 credit in the area of outing sports.

Program Coordinator: Jeanne A. Ashley
Management

The Management curriculum is designed for students planning to begin careers immediately after earning the degree of Associate in Science and for students wishing to transfer appropriate four-year degree programs. The program includes a State-mandated minimum of liberal arts courses, a core of management course, and optional electives of interest to the student either for career or transfer purposes. Those utilizing the Management curriculum as an occupational program may look forward to entry level management positions in business and public organizations.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>Intro. to Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACC 122</td>
<td>Intro. to Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>BUS 103</td>
<td>Intro. to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Mathematics for Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 111</td>
<td>Intro. to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 155</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 156</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 201 or 225</td>
<td>Financial Management or Small Business Management and Finance</td>
<td>3</td>
</tr>
<tr>
<td>ECO 101</td>
<td>Principals of Economics I (Macro)</td>
<td>3</td>
</tr>
<tr>
<td>ECO 102</td>
<td>Principals of Economics II (Micro)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101, 103 or 105</td>
<td>English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114, 116 or 123</td>
<td>English Composition II, any option or Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Principles of Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Business Admin.: Any 2 courses with a BUS, ACC, or DAT prefix 6
Liberal Arts: Any 2 courses with a BC, BL, NC, NL, HC or HL code 6
General elective: Any other 3-credit course with an ACC, ADM, BUS or DAT prefix or a course with a BC, BL, HC, NC, or NL advising code 3

TOTAL 62

Program Coordinator: Office, Division of Business Administration
Management/Data Processing

The concentration in Data Processing is an option available to Management students. This concentration is intended primarily for the student interested in transferring to a baccalaureate degree program in Business Administration and/or Business Data Processing. However, through selection of appropriate elective courses the graduate should be qualified for entry level management training programs with or without data processing applications. The graduate earns the degree of Associate in Science in Management/Data Processing.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121 Introduction to Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACC 122 Introduction to Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>BUS 103 Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 111 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 155 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 156 Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 205 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>DAT 101 Data Processing for Business and Management</td>
<td>3</td>
</tr>
<tr>
<td>DAT 103 or 107 Introduction to ANSI COBOL or Intro. to Computer Programming</td>
<td>3</td>
</tr>
<tr>
<td>DAT 201 Introduction to Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>ECO 101 Principles of Economics I (Macro)</td>
<td>3</td>
</tr>
<tr>
<td>ECO 102 Principles of Economics II (Micro)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101, 103 or 105 English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114, 116 or 123 English Composition II, any option or Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>MAT 107 Fundamental Concepts of Math (or any higher level Math course)</td>
<td>3</td>
</tr>
<tr>
<td>MAT 114 Probability and Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Program electives: Any two courses carrying a DAT, ACC, BUS, or ADM prefix
Liberal Arts: Any course carrying a BC, BL, HC, HL, NC or NL advising code
General elective: Any other 3-credit course

TOTAL 62

Program Coordinator: Office, Division of Business Administration
Marketing

The Marketing curriculum is designed for those interested in pursuing careers in marketing and merchandising after earning the Associate in Science degree. Graduates may qualify for entry level management or sales positions at the retail, wholesale, and industrial levels. The program includes selected liberal arts courses, a core of business administration courses and specialized marketing courses including a co-operative work placement.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 103</td>
<td>Analysis of Financial Statements</td>
<td>3</td>
</tr>
<tr>
<td>BUS 103</td>
<td>Introduction to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Mathematics for Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 111</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 155</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 156</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 205</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 211</td>
<td>Retail Merchandising</td>
<td>3</td>
</tr>
<tr>
<td>BUS 213</td>
<td>Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>BUS 223</td>
<td>Marketing Problems</td>
<td>3</td>
</tr>
<tr>
<td>BUS 251</td>
<td>Cooperative Work Experience in Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ECO 101</td>
<td>Principals of Economics I (Macro)</td>
<td>3</td>
</tr>
<tr>
<td>ECO 102</td>
<td>Principals of Economics II (Micro)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101, 103 or 105</td>
<td>English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114, 116 or 123</td>
<td>English Composition II, any option or Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Principles of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**

- Business Admin.: Any course with an ACC, BUS or DAT prefix 3
- Liberal Arts: Any course having an NC, NL, HC, HL, BC or BL advising code 3
- Elective: Any other 3-credit with and ACC, ADM, BUS or DAT prefix or a BC, BL, HC, HL, NC, or NL advising code 3

**TOTAL** 60

Program Coordinator: Office, Division of Business Administration
Media Communication

The Media Communication curriculum is designed for persons with interest in the design, production, and dissemination of Media Communications or for those currently involved with information production and dissemination, and/or training. Students completing the program are prepared for positions as communications facilitators in education, business and industry. The program is normally transferrable for study in media beyond the Associate in Science degree.

Required Courses Credits
ENG 101, 103 or 105 Eng. Comp. I, any option 3
ENG 112, 114, or 116 Eng. Comp. II (ENG 116 recommended) 3
ENG 123 Report Writing 3
LIB 101 Library Resources and Reference Materials 3
MCM 101 Intro. to Media Communication 3
MCM 103 Production of Audio-Visual Materials 3
MCM 109 Television Production 3
MCM 205 Photography and Graphics 3
MCM 215 Media Communication Technology 3
MCM 217 Media Systems Design 6
SPE 101 Oral Communication 3

Liberal Arts Electives 6

Suggested courses:
ART 111 Intro. to Studio I 3
ART 161 Intro. to Photography 3
ART 251 Photography 3
ELT 101 Basic Electricity I 4
HUM 201 Mass Media in America 3
JOU 101 Intro. to Journalism 3
MUS 101 An Intro. to Music 3

Behavioral Science Electives

Suggested courses:
PSY 101 Principles of Psychology 3
SOC 101 Principles of Sociology 3

General Electives

TOTAL 60

NOTE: Students should select the appropriate number of courses to meet Elective area requirements. Other courses may be substituted as agreed on with advisor.

Program Coordinator: Thomas W. Boisvert
Nursing

The Nursing Curriculum prepares men and women for careers as nurses who will provide direct and competent bedside care for adults and children according to their level of adaptation on the health-illness continuum and using all elements of the nursing process. The student who successfully completes the prescribed curriculum earns the degree of Associate in Science and is eligible to take the Registered Nurse Licensing Examination. In addition to classroom and laboratory work in the College, the Nursing curriculum provides clinical experience at Franklin County Public Hospital, Farren Memorial Hospital, Franklin Nursing Home, Cooley Dickinson Hospital, Northampton State Hospital, Northampton Nursing Home and Brattleboro Retreat.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 105 and 106</td>
<td>Anatomy and Physiology I and II</td>
<td>8</td>
</tr>
<tr>
<td>BIO 205</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101, 103 or 105</td>
<td>English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114 or 116</td>
<td>English Composition II, any option</td>
<td>3</td>
</tr>
<tr>
<td>NUR 101</td>
<td>Fundamentals of Nursing</td>
<td>7</td>
</tr>
<tr>
<td>NUR 102</td>
<td>Family-Centered Nursing</td>
<td>7</td>
</tr>
<tr>
<td>NUR 201 and 202</td>
<td>Adaptation to Illness: Medical-Surgical Nursing</td>
<td>17</td>
</tr>
<tr>
<td>NUR 203</td>
<td>Mental Health Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NUR 204</td>
<td>Historical and Professional Trends in Nursing</td>
<td>2</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Principles of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 217</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Humanities electives 3

TOTAL 67

Program Director: Carolyn Sue Bradley, R.N., M.S.N., Acting
Office Administration

Office Administration is primarily an occupational program designed to develop skills and training necessary for office occupations. The program provides the flexibility for students to develop a curriculum to meet their individual career goals.

Courses in typewriting, word processing, career planning in office occupations, English and speech are required. The remaining courses are selected from Office Administration, liberal arts, and general electives. Program graduates may expect to find employment in executive, legal, medical, and administrative office positions.

The graduate earns an Associate in Science degree and will be qualified to assume an administrative or secretarial role on the management team. Opportunities also exist for transfer to baccalaureate degree programs.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM 105</td>
<td>Career Planning in Office Occupations</td>
<td>1</td>
</tr>
<tr>
<td>ADM 111 and 113 Typewriting Development I and II</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>ADM 205</td>
<td>Principles of Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101, 103 or 105 English Composition I, any option</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 112, 114, 116 or 123 English Composition II, any option or Report Writing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SPE 101</td>
<td>Oral Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Office Administration — to be earned from any course coded ADM and ACC 111, ACC 112, and BUS 123

Liberal Arts — to be earned from any course with a BC, NC, HC, BL, NL or HL advising code

General — to be earned in any other College credit courses

TOTAL 60

Program Coordinator: Earl Morgan
Production Management Technology

Production Management Technology is an occupational program preparing students to work principally, though not exclusively, in manufacturing industries. The graduate earns the degree of Associate in Science and should be qualified for entry level positions in production control, quality control, motion and time study, manufacturing supervision, purchasing, drafting, and maintenance supervision. Industrial Engineering courses are at present available only in the evening through the Division of Continuing Education; however, students in this program may take liberal arts and some of the specialized courses in either the day or evening programs.

This curriculum is approved by the Massachusetts Board of Regional Community Colleges under the title of "Industrial Technology".

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 111</td>
<td>3</td>
</tr>
<tr>
<td>BUS 131</td>
<td>3</td>
</tr>
<tr>
<td>BUS 132</td>
<td>3</td>
</tr>
<tr>
<td>DAT 101 or 105</td>
<td>3</td>
</tr>
<tr>
<td>EGR 101</td>
<td>3</td>
</tr>
<tr>
<td>EGR 106</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101, 103 or 105</td>
<td>3</td>
</tr>
<tr>
<td>ENG 123</td>
<td>3</td>
</tr>
<tr>
<td>IND 101</td>
<td>3</td>
</tr>
<tr>
<td>IND 111</td>
<td>3</td>
</tr>
<tr>
<td>IND 112</td>
<td>3</td>
</tr>
<tr>
<td>IND 113</td>
<td>3</td>
</tr>
<tr>
<td>IND 204</td>
<td>3</td>
</tr>
<tr>
<td>MAT 103 and 104</td>
<td>6</td>
</tr>
<tr>
<td>MAT 121</td>
<td>3</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Science/Humanities Electives</td>
<td>6</td>
</tr>
<tr>
<td>IND or BUS Electives</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60</td>
</tr>
</tbody>
</table>

Program Coordinator: David C. Bartlett, P.E.
Certificate Programs

Certificate programs provide a concentration of specialized course-work and do not include general education courses required for the Associate degree. They are designed to prepare the student for early job entry and/or update specific career oriented skills. At least 15 credits or 2/3 of the credit hours required for a specific Certificate program, whichever is less, must be completed in residence at Greenfield Community College.

In most cases, the courses required for a certificate are also required for an identified Associate degree in a career field. In those cases where a student simultaneously completes the requirements for an Associate degree in the same field, only the Associate degree will be conferred.

Greenfield Community College offers two separate and distinct types of certificate programs.

1. Board Approved Certificates
   Such certificates are approved by the Massachusetts Board of Regional Community Colleges, are signed by the President of the Board and require the successful completion of at least 30 semester credits, as defined for each program.

2. Greenfield Community College Certificate of Completion
   A Certificate of Completion is a local program, approved by the Greenfield Community College Curriculum Review Committee, signed by the President of the College and requires the successful completion of less than 30 semester credits, as defined for each program.
Engineering Communications Certificate Program

This program is designed to develop skills and abilities in written and graphic communication, primarily at the technical level. Further, it enhances mathematical competence which is desirable as an adjunct to this communication.

The program may be used to gain access to the degree programs in Engineering or Technologies, or to career positions in such areas as drafting or technical writing.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR 101 and 106</td>
<td>Engineering Drawing I and II</td>
<td>6</td>
</tr>
<tr>
<td>ENG 101, 103 or 105</td>
<td>English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 123 Report Writing</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MAT 103 and 104 Applied Mathematics I and II</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

NOTES: MAT 103 and 104 may be replaced by MAT 105 and 106 Algebra and Coordinate Geometry I and II.

Program Coordinator: David C. Bartlett, P.E.

Fire Science Technology Certificate Program

The Division of Natural Sciences offers a Fire Science Technology Certificate Program for the benefit of those students wishing to obtain maximum technical training in fire protection, fire prevention, and hazardous materials handling in a minimum of time.

The courses required are offered through the Division of Continuing Education and Community Services on a rotating basis. CHE 103 or CHE 101 may be taken in the day division in place of CHE 105.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 105</td>
<td>Basic Principles of Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>FST 101</td>
<td>Introduction to Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>FST 103</td>
<td>Fundamentals of Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>FST 109</td>
<td>Hazardous Materials</td>
<td>3</td>
</tr>
<tr>
<td>FST 111</td>
<td>Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>FST 113</td>
<td>Fire Hydraulics with Applied Math</td>
<td>4</td>
</tr>
<tr>
<td>FST 201</td>
<td>Fire Protection Systems and Equipment I</td>
<td></td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FST electives</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

Program Coordinator: Carleton P. Stinchfield
Graphic Communications Certificate Program

This 28-credit program in graphic design, leading to a Certificate of Completion, is for practicing artists wishing to apply their technical and aesthetic skills through visual communication and increase their awareness of graphic design application in the social environment.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 121 and 122</td>
<td>Design I and II</td>
<td>6</td>
</tr>
<tr>
<td>ART 131 and 132</td>
<td>Drawing I and II</td>
<td>6</td>
</tr>
<tr>
<td>ART 215</td>
<td>Options in Art Careers</td>
<td>1</td>
</tr>
<tr>
<td>ART 271 and 272</td>
<td>Graphic Design I and II</td>
<td>6</td>
</tr>
<tr>
<td>ART 295</td>
<td>Independent Study</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives — 6 credits from among the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART</td>
<td>2 Art electives</td>
<td>6</td>
</tr>
<tr>
<td>BUS 103</td>
<td>Intro. to Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 125</td>
<td>Intro. to Advertising</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL 28

NOTES: Students with background experience may waive any required course based on portfolio of work submitted.

Program Coordinator: T. Budge Hyde

Licensure for Early Childhood Educators

This certificate program provides the courses required by the Massachusetts' Office for Children for those seeking to be licensed as head teachers in pre-school settings. These four courses, when combined with twenty-seven months of classroom experience, qualify the person for this licensure. The program is recommended for those who are working as aides or who are interested in working with young children.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 101</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 103</td>
<td>Creative Experiences in Art, Music, Drama and Dance</td>
<td>3</td>
</tr>
<tr>
<td>ECE 201</td>
<td>Curriculum in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>PSY 217</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL 12

Program Coordinator: Nancy Winter
Mathematics and Physical Science for Technicians Certificate Program

This program provides technical training; in mathematics, physics and electronics for technicians. English report writing skills are also developed.

This program provides an opportunity for professional development and the improvement of math-science competency for technicians.

Required Courses

<table>
<thead>
<tr>
<th>Course(s)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101, 103 or 105 English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>ENG 123 Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>MAT 107 Fundamental Concepts of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MAT 108 Elementary Functions</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121 Applied Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PHY 101 and 102 General Physics I and II</td>
<td>8</td>
</tr>
<tr>
<td>PHY 105 Introductory Electronics</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

Program Coordinator: Office of the Division of Natural Sciences

Office Assistant Certificate Program

The Department of Office Administration offers a one-year Office Assistant Certificate Program for the benefit of those students wishing to obtain the maximum office skills in a minimum of time. This program is especially designed for the student who desires to enter the employment market as quickly as possible. The program is offered with a shorthand option so that the student may elect to take two semesters of Gregg shorthand or one semester of Business Communications and a program elective.

Required Courses

<table>
<thead>
<tr>
<th>Course(s)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 111 and 112 Basic Accounting I and II</td>
<td>6</td>
</tr>
<tr>
<td>BUS 123 Business Communications I²</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101, 103 or 105 English Composition I, any option</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101 Principles of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ADM 111 and 113 Typewriting I¹  and II</td>
<td>6</td>
</tr>
<tr>
<td>SPE 101 or 121 Oral Communication or Group Discussion</td>
<td>3</td>
</tr>
<tr>
<td>ADM 210, 211, 212, 213 Office Technology</td>
<td>3</td>
</tr>
<tr>
<td>— Any combination totaling 3 credits</td>
<td></td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course(s)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Elective²</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

NOTES:

¹Typing course entry level to be determined.
²Students desiring shorthand will omit BUS 123 and Program elective.

Program Coordinator: Earl Morgan
*Outdoor Leadership Certificate Program*

This year long program provides students with the skills and knowledge required to lead Challenge Adventure and other outdoor programs. Highly experiential in its emphasis, the program activities are primarily field oriented, with theoretical and informational aspects being carefully integrated with the hands-on training. After completing two semesters of training, students will be expected to take summer employment in an approved work setting. Placement assistance will be provided through the program staff. Those completing the program will qualify for employment opportunities in educational, recreational and human service settings.

Classes and training groups are small, and the instruction is highly individualized. Evaluation is based upon demonstrated performance of the required skills, knowledge and behavior competencies.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OLP 107 Canoeing</td>
<td>2</td>
</tr>
<tr>
<td>OLP 110 White Water Canoeing for Outdoor Leaders</td>
<td>1</td>
</tr>
<tr>
<td>OLP 111 Introduction to Outdoor Programs and Services</td>
<td>3</td>
</tr>
<tr>
<td>OLP 112 Counseling and Human Services for Outdoor Leaders</td>
<td>3</td>
</tr>
<tr>
<td>OLP 116 and 216 Field Experience in Outdoor Leadership I and II</td>
<td>8</td>
</tr>
<tr>
<td>OLP 120 Advanced First Aid and Emergency Care</td>
<td>3</td>
</tr>
<tr>
<td>OLP 124 Environmental Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>OLP 127 Outdoor Adventure Methods and Materials</td>
<td>3</td>
</tr>
<tr>
<td>OLP 131 and 133 Outing Sports I and II</td>
<td>6</td>
</tr>
<tr>
<td>OLP 295 and 296 Independent Study in Outdoor Leadership I and II</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL** 35

*Program Coordinator: Larry Buell*

*Pending approval by the Massachusetts Board of Regional Community Colleges and the Massachusetts Board of Higher Education.*
**Pioneer Valley Studies Certificate Program**

This program, leading to a one-year Board approved certificate, is designed for persons interested in increasing their knowledge of the historical and cultural resources of the Pioneer Valley, and in learning to recognize, understand and preserve cultural artifacts. The program is applicable to a degree for those wishing to continue in the 2-year program.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 107 and 108 Valley/American History</td>
<td>6</td>
</tr>
<tr>
<td>HUM 111 Historical Research Orientation</td>
<td>2</td>
</tr>
<tr>
<td>HUM 113 Valley Perspectives and Retrospectives</td>
<td>3</td>
</tr>
<tr>
<td>HUM 115 Valley Contemporary Directions and Issues</td>
<td>3</td>
</tr>
<tr>
<td>Valley Studies electives</td>
<td>18</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

**Valley Studies Electives**

- ANT 107 Valley Archeology 3
- ART 105 and 106 Valley/American Art and Architecture I and II 6
- EAS 103 Valley Geology 3
- ENG 203 and 204 American Literature I and II 6
- ENG 253 Valley Writers 3
- ENG 255 Valley Folklore 3
- ENG 257 MacLeish Seminar 3
- HIS 115 Valley Religious History 3
- HIS 117 Valley Ethnic History 3
- HIS 119 Valley Economic History 3
- HUM 117 History of Pioneer Valley Education 3
- HUM 231 Valley Research Project 3

**NOTE:** 3 credits each are required in literature and art.

*Program Coordinator: Bernard A. Drabeck*

**Studio Arts Certificate Program**

This 27-credit program in Studio Arts, leading to a Certificate of Completion, is for practicing artists wishing to improve their technical and aesthetic skills and their awareness and performance in areas such as drawing, painting, printmaking and photography.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 121 and 122 Design I and II</td>
<td>6</td>
</tr>
<tr>
<td>ART 131 and 132 Drawing I and II</td>
<td>6</td>
</tr>
<tr>
<td>ART 231 and 232 Life Drawing I and II</td>
<td>6</td>
</tr>
</tbody>
</table>

**Electives**

- ART Three art electives 9

(Electives will depend on studio interests beyond the required courses. i.e., Painting I and II, Printmaking I and II or Photography I and II).

**TOTAL** 27

**NOTES:** Students with background experience may waive any required course based on a portfolio of work submitted.

Students interested in photography are not required to take ART 231 and 232, Life Drawing I and II.

*Program Coordinator: T. Budge Hyde*
The Developmental Studies Program is designed for students who wish to reinforce basic academic skills and/or explore through Human Development courses topics and learning experiences which lead to increased academic, social, and career effectiveness. Students may be advised to take academic Developmental Studies courses based upon pre-registration assessment, or they may elect to take a single course or any combination of courses to meet their individual needs at any time during their academic careers at G.C.C. All courses carry the advising code X.

**Tutoring Services**

English, Reading, Mathematics, and ESL 100 level courses are staffed by student tutors as well as faculty instructors, both in the classrooms and in the labs. In addition, any student can receive or get tutorial help in any subject by applying at the Learning Center. Appointments will be made at the student's convenience, for as long as the tutoring support is needed.

**Courses Available**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 100</td>
<td>Basic Communication Skills</td>
<td>3</td>
</tr>
<tr>
<td>ESL 100</td>
<td>English As a Second Language</td>
<td>3</td>
</tr>
<tr>
<td>HUD 101</td>
<td>Study Skills Workshop</td>
<td>1</td>
</tr>
<tr>
<td>HUD 103</td>
<td>The 24-Hour Growth Experience</td>
<td>1</td>
</tr>
<tr>
<td>HUD 105</td>
<td>Cross Country Skiing and Personal Growth</td>
<td>1</td>
</tr>
<tr>
<td>HUD 107</td>
<td>Rock Climbing and Personal Growth</td>
<td>1</td>
</tr>
<tr>
<td>HUD 109</td>
<td>Career Planning and Self-Assessment</td>
<td>1</td>
</tr>
<tr>
<td>HUD 111</td>
<td>Interpersonal Communication and Assertiveness</td>
<td>1</td>
</tr>
<tr>
<td>MAT 100</td>
<td>Mathematics: A Human Endeavor</td>
<td>3</td>
</tr>
<tr>
<td>REA 100</td>
<td>Developmental Reading Skills</td>
<td>3</td>
</tr>
</tbody>
</table>

**Program Coordinator:** Phyllis Nahman
Courses

Advising Codes

Each course offered for credit has been given an advising code which appears in parenthesis at the end of the course title. This code should be used in the selection of appropriate courses which meet Career Programs, Liberal Arts Programs and/or Massachusetts Transfer Compact requirements.

Code
A - Career courses that may be used as Liberal Arts electives in the Liberal Arts Programs
B - Behavioral Science/Social Science Courses
C - Core Courses
E - English Courses
H - Humanities/Fine Arts Courses
L - Liberal Arts Courses
N - Natural Science/Math Courses
S - Speech Courses
X - Career Courses

Course Descriptions

The courses described in the following pages include all those offered for College credit and some non-credit courses.

Courses numbered 000-009 do not carry collegiate credit. Those courses numbered 100-199 are normally introductory level or first year courses. Those numbered 200-299 are intermediate to advanced in academic level. If two courses are to be taken as a two-semester sequence, they are numbered consecutively with the second semester portion given an even number. Courses which are normally complete one semester units are given odd numbers.

NOTE: Not all courses are offered each semester. Please refer to the appropriate class schedule.

Accounting

ACC 111 Basic Accounting I (X) 3 credits
Fundamentals of accounting. Review of arithmetic manipulation including interest, payroll, insurance, and discounts. Emphasis on accrual as well as cash basis of accounting.
Prereg: None

ACC 112 Basic Accounting II (X) 3 credits
Preparing and interpreting financial reports; keeping records, forms and documents common to business; social security and income tax withholding procedures.
Prereg: ACC 111

ACC 121 Introduction to Accounting I (X) 4 credits
Business transactions and their relationship to financial statements; procedures and techniques of recording business transactions; consideration of end-of-period adjustments; determination of periodic income and financial condition; preparation of work sheet and financial statements; analysis of basic elements of the balance sheet; completion of practical exercise for a sole proprietorship.
Prereg: None

ACC 122 Introduction to Accounting II (X) 4 credits
Accounting for partnerships and corporations, introduction to managerial accounting, the manufacturing concern; analysis of financial statements; preparation of funds statements and cash flow analysis.
Prereg: ACC 121

ACC 201 Intermediate Accounting I (X) 3 credits
Introduction to accounting postulates, principles, and contemporary financial statements, practices, and forms. A theoretical framework for current accounting practices; valuation and reporting problems of working capital elements.
Prereg: ACC 122

ACC 202 Intermediate Accounting II (X) 3 credits
Income tax allocation procedures, non-current assets and liabilities valuation; measurements of stockholder equities, legal factors governing accounting for the corporation; treasury stock transactions; stock options; retained earnings distribution; book value and earnings per share; special accounting problems involved in accounting changes, error corrections, and accounting for inflation.
Prereg: ACC 201

ACC 205 Cost Accounting I (X) 3 credits
Basic purposes, practices, and procedures of accumulating costs and allocating them to products. Includes accounting for material, labor and manufacturing overhead under a job order and process cost system.
Prereg: ACC 122

ACC 206 Cost Accounting II (X) 3 credits
Continues examination of basic concepts of cost accounting. Uses tools such as standard costs, budgets, and profitability analysis to explore ways in which information generated by a cost accounting system is utilized by management to control and analyze operations.
Prereg: ACC 205
ACC 251 Cooperative Work 3 credits
Experience in Accounting (X)
Supervised employment in either a cost accounting department of a local industrial concern or a public accounting office, combined with a seminar coordinating the employment situation with the classroom education experience.
Prereq: Last semester student in Accounting Associate program, completion of either ACC 201 or 205 with a grade of B- or above and simultaneous enrollment in ACC 202 or 206.

Office Administration

ADM 101 Shorthand I (X) 3 credits
Gregg Shorthand, Series 90, daily drill for mastery of outlines, brief forms, phrasing, other abbreviating principles; pretranscription training including attention to spelling, grammar, and punctuation.
Prereq: None

ADM 102 Shorthand II (X) 3 credits
Review of Gregg Shorthand, Series 90, with emphasis on vocabulary building and speed building through dictation. Minimal standards set at 60 wpm for three minutes.
Prereq: ADM 101 or equivalent.

ADM 105 Career Planning in Office Occupation 1 credit
Exploration of the career opportunities in office occupations. Analysis of individual interests and aptitudes. Development of personal career goals. This course is graded on a Credit/No Credit basis.
Prereq: None

ADM 111 Typewriting Development I (X) 3 credits
The keyboard, accuracy and speed; parts of the machine and preventive maintenance; centering horizontal and vertical typing; business letters. Laboratory required.
Prereq: None

ADM 113 Typewriting Development II (X) 3 credits
Skill building through daily accuracy and speed drills; timed writings. Business letters and forms; tabulations; manuscripts; rough drafts. Laboratory required.
Prereq: ADM 113 or permission of the instructor.

ADM 115 Production Typewriting (X) 3 credits
Daily accuracy and speed drills; timed writings. Technical, statistical, professional, governmental, and executive typing. Laboratory required.
Prereq: ADM 113

ADM 117 Typewriting Projects (X) 3 credits
Improvement of the office typing ability by simulating some of the challenges presented in an actual office setting. Production skills and decision-making are stressed. Laboratory required.
Prereq: None

ADM 201 Stenography (X) 3 credits
Intensive review of shorthand theory principles. Speed building dictation. Minimal standards set at 80 words per minute for 3 minutes.
Prereq: ADM 102 and ADM 113, or permission of instructor.

ADM 202 Transcription (X) 3 credits
Advanced stenography. Shorthand transcription for mailability.
Prereq: ADM 102 and ADM 113 or permission of instructor.

ADM 205 Principles of Word Processing (X) 3 credits
Reinforces foundational language arts skills. Improves speed and efficiency in machine transcription. Introduces magnetic keyboarding to the transcription process.
Prereq: ADM 113 or permission of instructor.

ADM 207 Secretarial Office Procedures (X) 3 credits
Students assume the role of executive, legal, or medical secretary and apply skills and knowledge to a variety of activities under realistic conditions. Self-direction and resourcefulness are emphasized.
Prereq: ADM 113

ADM 209 Office Management (X) 3 credits
The role of the office administrator as a manager of information. The tools of management science, human relations, and cost control are logically integrated throughout the course.
Prereq: None

ADM 210 Office Technology—Records Management (X) 2 credits
Provides a foundation in the methods and systems of storing and retrieving information.
Prereq: None

ADM 211 Office Technology—Reprographics (X) 1 credit
Provides an overview of modern duplicating techniques. The student will operate a variety of duplicating machines.
Prereq: ADM 113 or permission of the instructor.
ADM 212 Office Technology
Business Calculator Operations (X)
Develops touch operation proficiency on
calculating and adding machines. Students
will learn how to solve business problems
and strengthen their mathematical skills.
Prereq: None

ADM 213 Office Technology
Intro. to Machine Transcription
(X)
Provides basic instruction for operating a
transcribing machine. Students will learn
techniques and procedures to use tran-
scription equipment efficiently.
Prereq: ADM 113 or permission of the
instructor.

ADM 226 Office Internship (X) 3 credits
A work-experience opportunity for qualified
students in cooperating offices in the
community to observe and obtain on-the-
job experience in an office environment.
Available only to advanced students in the
Office Administration program.
Prereq: ADM 113 or permission of instructor.

ADM 231 Medical Terminology 3 credits
(X)
Word roots, prefixes, suffixes, combining
forms, and abbreviations used in medicine.
Spelling, pronunciation, definitions, and
the analyzing of components of medical
terms common to the medical and allied
health disciplines.
Prereq: Permission of the instructor.

ADM 232 Medical Machine
Transcription (X)
Extension of medical vocabulary. Intro-
duction to medical machine transcription
of appropriate medical-related materials.
Development of vocational competence.
Prereq: ADM 113 and ADM 231, or per-
mssion of the instructor.

ADM 241 Legal Terminology (X) 3 credits
Knowledge and understanding of common
legal terms including spelling, pronuncia-
tion, definitions and usage.
Prereq: ADM 102, ADM 113

Agriculture

AGR 101 Principles of
Agriculture (N L) 3 credits
An introduction toward a better under-
standing of traditional and contemporary
agricultural practices as they apply to
management of farm animals, crops and
orchards.
Prereq: None

AGR 103 Equine Management (N L) 3 credits
A comprehensive and detailed examination
of the biology, health, selection and proper
care necessary for the successful mainte-
nance and enjoyment of horses.
Prereq: None.

Anthropology

ANT 101 Introduction to
Anthropology (B C) 3 credits
Theory and method in relation to pre-
history, evolution, and the nature of cul-
ture. Concentration on cross societal
comparisons, technology and economics,
social and political organization, art, religion
and ideology.
Prereq: None

ANT 103 Introduction to Physical
Anthropology (B C) 3 credits
The human species' place in nature from
an evolutionary and ecological perspec-
tive; the interaction between biology, cul-
ture, and environment in shaping human
evolution and human adaptive patterns;
the significance of racial classifications
and modern theories of variation.
Prereq: None

ANT 104 Introduction to Cultural
Anthropology (B C) 3 credits
The comparative study of contemporary
human populations; analysis of variations
in social and political organizations, eco-
nomic systems, religion, myth and ritual;
the dynamics of culture change and the
role of the anthropologist.
Prereq: None

ANT 107 Valley Archeology (B L) 3 credits
The prehistory of the Pioneer Valley
region; emphasis on scientific methods in
archaeological field investigation, the
nature of past human adaptations to the
Western Massachusetts environment, and
their application as a model for under-
standing the prehistoric cultural ecology
of North America in general; several field
trips to local archaeological sites.
Prereq: None

ANT 201 North American Indians 3 credits
(B C)
Historical, cultural, and ecological per-
spective on Indian tribes north of Mexico
with emphasis on variations in procure-
ment strategies, settlement patterns, social
organization and belief systems; contem-
porary problems of assimilation and ad-
justment among Indian Americans as a
result of contact with non-Indian society.
Prereq: ANT 101 or ANT 104 or permission
of the instructor.
ART 101  **An Introduction to the Visual Arts** (H C)  3 credits

Such phenomena as the elements and principles of art, media and technique, style and the role of the artist in society are studied as a means of understanding art. Field trips required. Not available for credit to art majors.

Prereq: None

ART 103  **Art History I** (H C)  3 credits

Vocabulary of art introduced through the study of contemporary art forms. Art of pre-history through the Gothic period studies in traditional chronology. Emphasis on development of visual awareness, understanding change in aesthetics and style, causal factors, and the role of the artist. Field trips required.

Prereq: None

ART 104  **Art History II** (H C)  3 credits

History of Western Art from the Early Renaissance to the present.

Prereq: ART 103 or permission of the instructor.

ART 105  **Valley/American Art and Architecture I** (H L)  3 credits

A survey of American art and architecture from 1600 to 1860; the course will be supplemented by correlated examples from the Pioneer Valley. The study will include decorative and functional arts. Field trips and independent study are required.

Prereq: None

ART 106  **Valley/American Art and Architecture II** (H L)  3 credits

A comprehensive survey of American art and architecture from 1860 to the present; the course will include appropriate examples of work created or presently existing in the Pioneer Valley. Field trips are required.

Prereq: None

ART 111  **Introduction to Studio I** (H C)  3 credits

Drawing and painting in a variety of media, developing basic understanding of physical and aesthetic properties. Not available to students majoring in Art.

Prereq: None

ART 112  **Introduction to Studio II** (H C)  3 credits

Continuation of principles and practices introduced in ART 111. Not available for credit to students majoring in Art.

Prereq: ART 111 or permission of the instructor.

ART 115  **Sensory Phenomena I** (H L)  1 credit

Examination of non-object making aspects and aesthetics of art production. Exploration of communication methods and modes with emphasis on individual involvement. Required of art and graphic design majors; available to others only by permission of the instructor. Evaluated on a credit-no credit basis.

Prereq: None

ART 116  **Sensory Phenomena II** (H L)  1 credit

Continues exploration of communication methods and modes. Required of art and graphic design majors; available to others only by permission of the instructor. Evaluated on a credit-no credit basis.

Prereq: ART 115 or permission of the instructor.

ART 117  **Introduction to Drawing** (H L)  3 credits

Drawing materials and techniques. Work from studio models, setups, and location landscapes. Elements of proportion, composition, and perspective. For non-art majors only.

Prereq: None

ART 121  **Design I** (H L)  3 credits

An investigation into the nature of two-dimensional order. Specific problems with field, line, shape, negative space, value, texture, and color.

Prereq: None

ART 122  **Design II** (H L)  3 credits

A continuation of Design I: The articulation of structure, space and form as they relate to content. Students encouraged to develop personal directions within specified areas.

Prereq: ART 121 or permission of instructor.

ART 131  **Drawing** (H L)  3 credits

Drawing materials and techniques. Work from studio models, setups, and location landscapes. Elements of proportion, composition, and perspective.

Prereq: Art majors or permission of instructor.
ART 132 Drawing II (H L) 3 credits
Continued work from studio models, setups, and landscapes. Drawing of the human figure. Relationship of drawing to other artistic disciplines.
Prereq: ART 131 or permission of the instructor.

ART 161 Introduction to Photography (H L) 3 credits
Introduction to basic camera operation, processing and printing. Students must provide their own cameras, film and paper. Processing and darkroom equipment furnished. Not available to students majoring in Art.
Prereq: None

ART 215 Options in Career Development (H L) 1 credit
Exploration of career opportunities for art and graphic design students. Includes field trips to work places, guest speakers, on-the-job training, resume writing, portfolio presentation, job-search techniques and job interview skills. Pass/Fail.
Prereq: None

ART 231 Life Drawing I (H L) 3 credits
Drawing and painting from the live model and other life forms. Exploration of anatomy, structure and design qualities of various media and techniques.
Prereq: Second year standing as an Art major or permission of instructor.

ART 232 Life Drawing II (H L) 3 credits
A continuation of Life Drawing I: Emphasis on the model in an environment. Qualities and expressive uses of media and techniques.
Prereq: ART 231 or permission of the instructor.

ART 233 Printmaking I (H L) 3 credits
An introduction to the materials, techniques and aesthetic considerations peculiar to each of the graphic media: woodcut, lithography, and intaglio. Graphics as an independent creative form of expression from drawing to finished print. Prints pulled both in black and white and color.
Prereq: Second year standing as an art major or permission of the instructor.

ART 234 Printmaking II (H L) 3 credits
Exploration and perfection of the print as an aesthetic form. Advanced study of one of the graphic media with emphasis on the concepts and techniques of color printing. An introduction to silkscreen and photoprint making.
Prereq: ART 223 or permission of the instructor.

ART 241 Painting I (H L) 3 credits
An introduction to the technique of oil painting, composition and construction. Emphasis on the properties of materials and the approaches to representational and non-representational forms.
Prereq: ART 121 and ART 131, or permission of the instructor.

ART 242 Painting II (H L) 3 credits
A continuation of the disciplines of painting in oils and acrylic. Expression through exploration of the continuing problems of painting. Work from the model and a variety of sources.
Prereq: ART 241 or permission of the instructor.

ART 251 Photography I (H L) 3 credits
Basic camera operation, processing, printing, photographic history, and aesthetics. Emphasis on individual expression and fine print quality. Students will provide their own cameras, film, paper, and processing equipment. Darkroom, finishing equipment furnished.
Prereq: Art majors or permission of instructor.

ART 252 Photography II (H L) 3 credits
Continuation of Photography I. Emphasis on the quality and range possibilities in the print.
Prereq: ART 251 or permission of the instructor.

ART 261 Sculpture (H L) 3 credits
An exploration of the fundamentals of form and space using the figure as a point of reference. Demonstration and work in the techniques of modeling, carving, construction and casting using plaster, clay and wax. Individualized projects to meet the particular needs of each class.
Prereq: ART 121 and ART 131, or permission of the instructor.

ART 271 Graphic Design I (X) 3 credits
Examination of graphic design processes with emphasis on typographical elements and their applications for the printed page. Problems in type design, type structures, and typographical communications.
Prereq: ART 122 and ART 132 or permission of the instructor.

ART 272 Graphic Design II (X) 3 credits
Significant problems in graphic design, requiring practical solutions with aesthetic integrity. Design factors involving psychological/sociological concerns in the mass market.
Prereq: ART 271 or permission of the instructor.

Biology

BIO 101 Zoology (N C) 4 credits
The animal kingdom, with emphasis on comparative structure and function of the organ systems and evolutionary relationships. Laboratory required.
Prereq: None
BIO 102 Botany (N C) 4 credits
Structure, function, and the inheritance of seed-bearing plants. Classification of major plant types and some basic plant ecology. Laboratory required.
Prereq: None

BIO 103 Natural Science 3 credits
(N C)
Environmental studies with emphasis on weather, plants, and the ecology of forest, field and stream. Laboratory required.
Prereq: None

BIO 104 Natural Science 3 credits
(N C)
Environmental studies with emphasis on natural history, climate, life zones and conservation of natural resources. Laboratory required.
Prereq: None

BIO 105 Anatomy and Physiology I (N C) 4 credits
Mammalian anatomy and physiology with emphasis on anatomy. Laboratory required.
Prereq: None

BIO 106 Anatomy and Physiology II (N C) 4 credits
Mammalian anatomy and physiology with emphasis on physiology. Laboratory required.
Prereq: High School chemistry and BIO 105.

BIO 107 Basic Biology I (N C) 4 credits
Basic biological concepts in the areas of chemical and cellular basis of life and the various life forms and their interrelationships. Selected study in such subjects as birth control, pollution, and origins of life. Choice of instruction: Lecture and/or audio-tutorial. Laboratory required.
Prereq: None

BIO 108 Basic Biology II (N C) 4 credits
Basic biological concepts in the areas of structure and function of organ systems and distribution of genes. Selected study in such subjects as drugs, ecology, and sex selection of offspring. Choice of instruction: lecture and/or audio-tutorial. Laboratory required.
Prereq: None

BIO 111 Basic Horticulture (N C) 3 credits
Theory and practice of plant propagation and cultivation, including care of house plants and preparation of gardens.
Prereq: None

BIO 121 Woodlot Management 3 credits
(N L)
Thinning, weeding, planting, and harvesting trees in woodlot for insurance of reaping the greatest, long-term profits from it in regards to firewood, lumber, Christmas trees, maple sugar, game, recreation, and aesthetics.
Prereq: None

BIO 203 Genetics (N C) 3 credits
Fundamental principles of genetics, including the nature and action of genes. Experimental genetics, bacterial genetics, genetic aspects of evolution, application of genetics.
Prereq: One year of college Introductory Biology.

BIO 205 Microbiology (N C) 4 credits
Introduction to the biology of micro-organisms with emphasis on the properties of micro-organisms and their relation to disease. Laboratory required.
Prereq: BIO 101 or BIO 105, or BIO 108

BIO 207 Histology (N C) 4 credits
The study of normal human cells, organs and tissues. Includes the detailed structure regenerative ability, diagnostic features, and function correlations. Laboratory required.
Prereq: BIO 106 or permission of the instructor.

Business

BUS 103 Introduction to Marketing (A) 3 credits
The distribution of goods and services from producer to consumer. Structure of marketing institutions, price determination and policies; consumer and industrial marketing, market research; legislation affecting marketing.
Prereq: None

BUS 105 Mathematics for Business (X) 3 credits
Designed to meet the needs of business students. Aims to provide the mathematical background for success in the study of finance, accounting, and other business subjects.
Prereq: None

BUS 107 Introduction to Personal Income Taxes (A) 3 credits
Designed to acquaint the student with the Federal Income Tax System and its voluntary compliance approach. Emphasis is on the basic concepts of income recognition, deductible business and non-business expenses, and the preparation of typical non-business income tax returns.
Prereq: None

BUS 111 Introduction to Business (A) 3 credits
Introduces students to management, marketing, and financial considerations of business. Establishes economic and historical perspectives, as well as daily operation of a business.
Prereq: None
BUS 115 Labor-Management Relations (A) 3 credits
History and growth of the American-labor movement, union policies and practices; collective bargaining and union security; and state and federal labor legislation.
Prereq: None

BUS 119 Principles of Real Estate 3 credits (X)
Surveys the principles and practices of real estate. Designed for those who want to know more about the field for personal knowledge or for possible employment. Of help to those who intend to take a state real estate examination. Includes the legal, financial, brokerage, marketing and other important aspects of the real estate business.
Prereq: None

BUS 121 Fundamentals of Banking (A) 3 credits
Development of the American Banking System, basic banking functions, operations, and special banking services.
Prereq: None

BUS 123 Business Communications 3 credits (X)
Principles of effective writing as applied to various business letters. Oral communication with stress on telephone techniques.
Prereq: None

BUS 141 Introduction to Small Business Management (A) 3 credits
This course will provide someone planning to own or owning a small business with the practical information necessary to begin or continue operations. Topics covered include management, marketing, financial and legal aspects of small business management.
Prereq: None

BUS 153 Survey of Business Law (A) 3 credits
Contracts, sales, bailments; negotiable instruments; agency; partnerships and corporations; insurance. Emphasizes day-to-day problems of the business office.
Prereq: None

BUS 155 Business Law I (A) 3 credits
An introduction to the law as it pertains to transactions in the business and commercial field. Laws of contracts, social forces and legal rights, agency and commercial paper.
Prereq: None

BUS 156 Business Law II (A) 3 credits
Operation of the law in the business and commercial field with emphasis on the day-to-day problems of the business manager. Laws of partnerships, corporations, insurance, personal property and bankruptcy.
Prereq: BUS 155 or permission of the instructor.

BUS 201 Financial Management 3 credits (X)
Survey course in the broad area of business finance. Integrated with the overall administration of the firm and viewed from the place of the financial manager of a growing concern; financial problems of planning and directing the use of capital; evaluating management's use of capital, and taking remedial action in managing the capital.
Prereq: ACC 122 or permission of the instructor.

BUS 203 Personnel Management 3 credits (A)
Personnel management, with practical emphasis on the major tasks of recruiting, training, maintaining, and using an effective work force.
Prereq: BUS 101

BUS 205 Principles of Management 3 credits (A)
Fundamentals of the management of organizations. Introduces students to the process of management, including decision making and the role of the individual. Emphasis on the functions of management.
Prereq: BUS 111, PSY 101 recommended.

BUS 211 Retail Merchandising (X) 3 credits
Price lines, advertising, and the quantitative approach to retailing.
Prereq: BUS 103 or permission of the instructor.

BUS 213 Salesmanship (X) 3 credits
A practical approach to salesmanship and sales promotion at various levels of distribution with emphasis on retail selling. Actual sales presentations are made and video-taped for analysis by the student and instructor.
Prereq: BUS 103 or permission of the instructor.

BUS 223 Marketing Problems (X) 3 credits
Designed as a capstone to the program. Emphasizes statistics applied to marketing; practical application of primary and secondary data and projects related to the student's individual work experiences.
Prereq: BUS 211, BUS 213
BUS 225 Small Business Management and Finance (X)
Introductory course for all persons interested in small-business operations. Particular emphasis will be placed on financial considerations and their involvement in most of the decision-making processes of a small business.
Prereq: ACC 121 or permission of instructor.

BUS 235 Business Policy (X) 3 credits
Ties together topics in law, finance, marketing and related business subjects by having students apply them to case problems. Develops policy and strategy using basic managerial functions of planning, organizing, staffing, directing and controlling.
Prereq: Second year student in a business major program.

BUS 251 Cooperative Work Experience in Marketing I (X) 3 credits
Supervised employment in the various channels of distribution combined with a seminar coordinating the employment situation with educational experience.
Prereq: Completion of one academic year in the marketing program.

BUS 252 Cooperative Work Experience in Marketing II (X) 3 credits
Supervised employment in the various channels of distribution combined with a seminar coordinating the employment situation with educational experience.
Prereq: BUS 251

Chemistry

CHE 001 Chemical Calculations 0 credit Workshop
Applications of elementary mathematics to chemical calculations.
Prereq: CHE 101 concurrently.

CHE 101 General Chemistry I (N C) 4 credits
Interrelated theoretical and descriptive topics of chemistry including nature of matter, atomic and molecular structure, chemical bonding, nomenclature, chemistry of oxygen, oxidation reduction, chemistry of hydrogen, the gaseous state, the liquid state, the solid state, water, and the periodic properties of the elements. Laboratory required.
Prereq: High School Algebra II or equivalent; or CHE 001 concurrently.

CHE 102 General Chemistry II (N C) 4 credits
Interrelated descriptive and theoretical topics of chemistry including the chemical families, chemical energy, chemical kinetics, chemical equilibrium acids and bases, electrochemical cells, nuclear phenomena, transition elements, organic chemistry, chemistry of life, and natural resources. Includes qualitative analysis. Laboratory required.
Prereq: CHE 101, or CHE 103 with permission of the instructor.

CHE 105 Basic Principles of Chemistry (N C) 3 credits
A survey course for students interested in the basics of chemistry from a descriptive point of view. Includes matter, properties of families of elements and their characteristic compounds, mixtures, acids and bases, chemical reactions, introductory biochemistry. Could be the basis for course work in selected technical areas, but not intended as a substitute for CHE 101-102 General Chemistry or CHE 103 Introductory Chemistry.
Prereq: None

CHE 106 Chemistry of Air and Water (N L) 3 credits
Physical, chemical and biological characteristics of substances found in air and water, methods of field and laboratory analysis and purification treatments. Laboratory required.
Prereq: None

CHE 201 Organic Chemistry I 4 credits (N C)
Introduction to the chemistry of carbon compounds. Survey of methods used to characterize molecular structures and establish mechanisms of reaction. Systematic study of aliphatic and aromatic hydrocarbons and classes of compounds with the various functional groups. Laboratory required.
Prereq: CHE 102

CHE 202 Organic Chemistry II 4 credits (N C)
Comprehensive survey of amines, amides, nitro compounds, and other nitrogen bearing organic compounds. Study of the relation of optical activity to molecular structure. Examination of various classes of natural products and introduction to biochemistry. Study of photosynthetic processes, polymers and polymerization. Laboratory required.
Prereq: CHE 201
CHE 211 Analytical Chemistry  (X)  4 credits
Accuracy and precision, record keeping and reporting, gravimetric methods, volumetric methods, electrometric methods, photometric methods, paper chromatography, vapor phase chromatography, microscopy, and polarimetry. Analytical separations. Laboratory required.
Prereq: CHE 102 General Chemistry II or permission of the instructor.

CHE 221 Chemical Processes  (X) 3 credits
Survey of unit operations, refining, fermentation, isolation of natural products, forest products, pulping and papermaking, polymerization, heavy chemicals, organic syntheses, specialty chemicals, and formulations. Manufacturing control, material balance, and plant safety.
Prereq: CHE 101, 102, 201.

Civil Engineering

CIV 101 Surveying I  (X)  3 credits
Elements of plane surveying. Taping, theory and use of instruments. Leveling, traversing, and computation. Laboratory required.
Prereq: MAT 103 may be taken concurrently; or equivalent.

CIV 102 Surveying II  (X)  3 credits
Stadia, topographic surveying, mapping, instrument adjustment, photogrammetry, simple curves, office computations using topographic maps.
Prereq: CIV 101, MAT 104 may be taken concurrently.

CIV 201 Surveying III  (X)  3 credits
Construction surveys, property surveys, astronomical work, office work to plot data and make computations. Laboratory required.
Prereq: CIV 102

CIV 203 Soil Mechanics  (X)  3 credits
Engineering properties and uses of soils, stability, consolidation, permeability, testing procedures. Elementary design of footings and retaining walls.
Prereq: EGR 206 may be taken concurrently.

CIV 207 Transportation Engineering  (X)
Highway economics, location, curves, earthwork. Sight distances, drainage, pavements, airports and railroads. Laboratory required.
Prereq: CIV 102

CIV 209 Structural Design  (X)  3 credits
Analysis and design of determinate and indeterminate structures. Steel and concrete design theory, formulas, codes.
Prereq: EGR 206 may be taken concurrently.

CIV 211 Introduction to Water and Wastewater Technology  (X)
Fundamental concepts of the technology of municipal water supply and wastewater disposal. Water supply: sources, treatment systems and distribution. Wastewater disposal: sewer and treatment plant components and functions. Domestic systems; land disposal techniques; practical hydraulics.
Prereq: None

CIV 213 Engineering Hydraulics  (X) 3 credits
Fluid statics and dynamics. Measuring devices; open and closed flow; hydraulic machinery; pipe networks.
Prereq: MAT 104 and PHY 101, or equivalents, or permission of the instructor.

CIV 215 Construction Estimating  (X)  2 credits
Estimating quantities and costs for labor, materials and equipment. Basic concepts of overhead and profit and their relationship to project costs. Construction contracts and specifications.
Prereq: None

CIV 217 Water and Wastewater Treatment Plant Operations  (X)
Purification processes, water and wastewater facilities, primary methods, secondary methods, special or tertiary methods, maintenance, safety, sampling, analysis, reporting, data analysis, and troubleshooting. Laboratory and field work experience required.
Prereq: CHE 106 Chemistry of Air and Water, CIV 211 Introduction to Water and Wastewater Technology.

Criminal Justice

CRJ 101 Introduction to Criminal Justice  (A)  3 credits
Agencies and processes involved in the criminal justice system including the legislature, the police, the prosecutor, the public defender, the courts, and corrections. An analysis of the roles and problems of the criminal justice system in a democratic society with an emphasis upon inter-agency relations and checks and balances.
Prereq: None

CRJ 103 Criminal Law  (A)  3 credits
The legal definition of crime and defenses: purposes and functions of the substantive criminal law; historical foundations; the limits of the criminal law.
Prereq: None
CRJ 105 Police Process (X) 3 credits
Social and historical perspectives on the police; police role and career; police discretion; police values and culture; police organization and control.
Prereq: CRJ 101 or permission of the instructor.

CRJ 107 Adjudication Process (X) 3 credits
Role and structure of prosecution; public defense, and the courts; basic elements of the substantive criminal law; procedural law and its relation to constitutional guarantees.
Prereq: CRJ 101 and CRJ 103, or permission of the instructor.

CRJ 109 Corrections Process (X) 3 credits
Post conviction correction process; the development of correctional philosophy, theory and practice; a description of institutional operation, programming, and management; community based corrections; probation and parole.
Prereq: CRJ 101 or permission of the instructor.

CRJ 113 Juvenile Justice Process (A) 3 credits
Definitions of delinquent behavior, contributing social problems; adolescence as a subculture; the adjudication process of juveniles; philosophy and practice; treatment procedures.
Prereq: CRJ 101 or permission of the instructor.

CRJ 115 Introduction to Security (X) 3 credits
Historical, philosophical, and legal bases of security. Role of security and the security individual in modern society; the concept of professionalism. A survey of the administrative, personnel and physical aspects of the security field.
Prereq: None

CRJ 117 Principles of Loss Prevention (X) 3 credits
Functional operations of various specialized areas of security such as theft and risk control, security surveys, and loss prevention in proprietary and governmental institutions.
Prereq: CRJ 101 and CRJ 115, or permission of the instructor.

CRJ 121 Criminology (A) 3 credits
Deviant behavior as it relates to the definition of crime; crime statistics; theories of crime causation; crime typologies.
Prereq: None

CRJ 201 Analysis of Police Operations (X) 3 credits
Problems of police organization and management; the allocation of police resources; information systems, community relations concerns; determinants of police policy.
Prereq: CRJ 101 and CRJ 103, or permission of the instructor.

CRJ 203 Criminal Investigation (X) 3 credits
Fundamentals of investigation; crime scene search and recording; collection and preservation of physical evidence; scientific aids; modus operandi; sources of information; interview and interrogation; follow-up and case preparation.
Prereq: CRJ 101 or permission of the instructor.

CRJ 205 Criminal Evidence and Procedure (X) 3 credits
Constitutional and procedural considerations effecting arrest, search and seizure, post-conviction treatment; origin, development, philosophy, constitutional basis evidence; kinds and degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies; utilizes the case study approach.
Prereq: CRJ 101 or permission of the instructor.

CRJ 207 Police Standards and Goals (X) 3 credits
Standards designed for efficient police operation and administration. Emphasis on those programs that have a proven record of effectiveness in procedural areas.
Prereq: CRJ 101 and CRJ 103, or permission of the instructor.

CRJ 209 Criminal Justice Standards and Goals (X) 3 credits
Elements of the criminal justice system relative to the necessity for interaction and cooperation among elements and with the communities they serve. The standards and recommendations advocated for improving the system are explored in depth.
Prereq: CRJ 101 and CRJ 103, or permission of the instructor.

CRJ 211 Current Issues in Criminal Justice (X) 3 credits
A review of current and administrative and operational concerns of the components of the criminal justice system which are influencing both the system itself and the quality of justice being rendered to the public.
Prereq: None

CRJ 215 Field Experience (X) 3 credits
A required supervised field experience with an approved agency within the criminal justice system. The integration of classroom theory with practical experience.
Prereq: CRJ 101 and CRJ 103 or permission of the instructor.
Data Processing

DAT 101 Data Processing for Business and Management (A) 3 credits
Introduction to the application of computers to business. Topics covered include: information processing, data processing systems, computer concepts, programming, data storage and retrieval techniques, data management, timesharing, and multiprogramming. Presentation and solution of selected problems common to the business environment using the BASIC programming language.
Prereq: ACC 121, BUS 111, and knowledge of Basic Algebra recommended.

DAT 103 Introduction to ANSI COBOL (A) 3 credits
A detailed study of the computer programming language most widely used in the business environment. Problem analysis, flowcharting, source coding, and documentation techniques are learned through "hands on" use of interactive terminals.
Prereq: DAT 101 or 105 recommended.

DAT 105 FORTRAN Programming (A) 3 credits
Introduction to a computer programming language with wide scientific and general-purpose application. Student facility in using the computer as a problem-solving tool is emphasized through extensive program assignments and direct contact with computer terminals.
Prereq: MAT 105, or equivalent, or permission of instructor.

DAT 107 Introduction to Computer Programming (L) 3 credits
This course is designed to introduce the student to the fundamental concepts of computer programming. Program structures and flowcharting will be used in demonstrating problem solving techniques. Students will learn how to write programs in BASIC using interactive computer terminals.
Prereq: DAT 101 or DAT 123 recommended.

DAT 123 Introduction to Computers (L) 3 credits
A non-technical survey course in computers. The capabilities and limitations, uses and abuses of electronic technology will be explored through current events, popular literature, household gadgetry, and programming experience. Emphasis will be placed on designing, coding, and running computer programs using the "BASIC" language.
Prereq: None

Directed Study

DS 295 & 296 (L) 1 to 3 credits each
Projects for advanced individual study by special arrangement with the instructor and approval of the Division Chairperson having jurisdiction over the subject field. Approval of a 296 project requires the prior completion of a 295 project in the same general subject field.
Prereq: Approval of the appropriate Division Chairperson.

Early Childhood Education

ECE 101 Introduction to Early Childhood Education (A) 3 credits
Purposes of early childhood education and the role of the teacher. Consider the developmental needs of young children. Attention to physical environment, recording progress, and administration.
Prereq: None

ECE 115 Field Experience in Early Childhood Education I (X) 3 credits
Work experience supervised by the Early Childhood Education faculty in cooperation with appropriate agencies and schools. Prereq: Early Childhood Education major.

ECE 116 Field Experience in Early Childhood Education II (X) 3 credits
Work experience with limited responsibility for planning classroom activities in various developmental areas.
Prereq: ECE 115
ECE 201 Early Childhood Curriculum (X) 3 credits
Provides exposure to the research, theory, methods and materials needed when developing a curriculum for young children. Emphasis on reading readiness and language skills.
Prereq: ECE 101, or permission of the instructor.

ECE 203 Survey of Current Early Childhood Learning Programs (X) 3 credits
Contemporary early childhood practices and issues are reviewed. Social, cultural, and technological changes of the 20th century are discussed.
Prereq: ECE 201 or permission of the instructor.

ECE 215 Field Experience in Early Childhood Education III (X) 3 credits
Work experience with limited responsibility for program planning in early childhood settings.
Prereq: ECE 116

ECE 216 Field Experience in Early Childhood Education IV (X) 6 credits
Work experience with extensive responsibility for program planning and classroom management.
Prereq: ECE 215 or permission of the program coordinator and approval of the Chairperson of the Division of Behavioral Sciences.

ECE 221 Science for Children (X) 1 credit
An introduction to methods and materials used in science activities for children; use of the classroom environment to promote curiosity and questioning skills. An appreciation of the scientific method to assist a child's perception of the world.
Prereq: None

ECE 223 Mathematics for Children (X) 1 credit
The beginnings of mathematics as a logical system, with dual emphasis on theory and practice. Focus will be on the progression of mathematical thinking and ways to foster that progression in children.
Prereq: None

ECE 225 Social Studies for Children (X) 1 credit
An introduction to the basic principles underlying a social studies curriculum for early childhood education, and the practical application of these principles within classroom activities.
Prereq: None

ECE 227 Designing Learning Environments for Children (X) 1 credit
An introduction to the basic principles and methods of designing optimum classroom environments. Examines the needs of the young child and incorporates these into the design of learning centers. The special needs of the handicapped child are explored.
Prereq: None

ECE 229 Nature Activities for Children (X) 1 credit
The study of science for young children using nature activities as the prime source. An activity oriented approach; focuses on the use of the area available to local centers.
Prereq: None

ECE 231 Movement Activities for Children (X) 1 credit
Movement exploration with children; uses movement exploration as a foundation for developing sensory, motor, perceptual and problem solving skills. Promotes awareness of self and enhancement of self-image through movement experiences.
Prereq: None

Earth Science

EAS 101 Physical Geology (N C) 4 credits
Nature and origin of the landscape; features of the earth's surface; common rocks and minerals; agents of erosion; role of earthquakes, volcanoes, and the mountain building process. Particular attention to regional geology. Laboratory and field trips required.
Prereq: None

EAS 102 Historical Geology (N C) 4 credits
Origin and age of the earth; evolution of life as revealed through the fossil record; development of the continents and ocean basins. Laboratory and field trips required.
Prereq: None

EAST 103 Valley Geology (N C) 3 credits
An introduction to the unique geology and geohistory of our region. Topics include: rocks, minerals, rivers, glaciers, dinosaurs, Continental drift, resources, and geologic hazards. Field trips.
Prereq: None

EAS 104 Introduction to Oceanography (N C) 4 credits
The nature of the ocean realm—its physical, chemical, biologic, and geologic characteristics and importance. Topics to be discussed: origin and characteristics of ocean basins, physical and chemical nature of sea water, origin and movement of water masses, importance of the oceans to man and life on earth. Laboratory and field trips required. Credit will be granted for EAS 104 or EAS 105, but not for both.
Prereq: None
EAS 105 Survey of Oceanography (N C) 3 credits
Introduction to ocean science. Deals with how the oceans affect man and the earth, and how man is affecting the oceans. Topics include: ocean life and ecosystem, origin of sea water and ocean basins, coastal zones, mineral and fishery resources. Field trips. No laboratory. Credit will be granted for EAS 104 or EAS 105, but not for both.
Prereq: None

EAS 107 Geology of our National Parks (N C) 4 credits
Geographical settings of our national parks and geological processes which carved out or built up their outstanding landforms. Current environmental hazards and pressures. Laboratory and field trips required.
Prereq: None

EAS 201 Rocks and Minerals (N C) 3 credits
An introduction to rocks and minerals based on their broad physical, chemical, and biological characteristics. Laboratory and field trips required.
Prereq: None but previous earth science course recommended.

Economics

ECO 101 Principles of Economics I 3 credits (Macro) (B C)
Economic processes in the United States. Emphasis on the vital problems of our economy and the technical tools of economic analysis. Unemployment; business cycles; economic growth at home and in under-developed countries; the banking system; monetary and fiscal policies.
Prereq: None

ECO 102 Principles of Economics II 3 credits (Micro) (B C)
Economics of the firm and resource allocation. Monopolies; agricultural problems; labor unions; social control of industry; poverty; international trade; the economic system of USSR; pollution.
Prereq: None

ECO 107 Consumer Economics (L) 3 credits
The individual living in this complex world; determination of personal goals and values, planning and budgets. An examination of the choices available to the consumer and the need to recognize a consumer trap. Topics include: wise buying, credit, advertising, housing, insurance, investing and the high costs of living and dying.
Prereq: None

Education

EDU 101 Principles of Education (L) 4 credits
Overview of education. Aims, organizations, programs, and pupil population in the contemporary school. Field work required.
Prereq: None

EDU/REC 103 Creative Experiences 3 credits in Art, Music, Drama and Dance (X)
A survey course dealing with the methods, materials, content, and theory of the arts. Concentration on rationale, leadership, attitude, and exposure. Credit will be granted for REC 103 or EDU 103, but not for both.
Prereq: ECE or REC major, or permission of instructor.

EDU 111 Introduction to Special Education (L) 3 credits
Overview of developmental, physical and behavioral disabilities; basic principles of intervention techniques; overview of legislation (Chap. 766) and its implications for the young child.
Prereq: None

EDU 113 Screening and Assessment Techniques for Young Children (X) 3 credits
Principles of screening and assessment for teachers of young children; description of a variety of assessment and evaluation techniques (medical, intellectual/cognitive, perceptual, motor and educational). Discussion of the intervention process, including individual program planning and evaluation.
Prereq: None

EDU 115 Family, School and Community Interaction (X) 3 credits
Analysis of changing roles of parents and families in today's society. Focus on communication skills, communicating with parents, and types of parental participation in education. Examination of child advocacy, current legislative issues and types of community resources for teachers of young children.
Prereq: None

Electronics

ELT 101 Basic Electricity 4 credits I - DC (X)
Basic theory and principles upon which subsequent courses in electricity and electronics technology are dependent. Topics include: electrical nature of matter; current; voltage; sources of e.m.f.; resistance; work; power and energy; series, parallel, and series-parallel resistive circuits; capa-
ELT 102 Basic Electricity II - AC (X) 4 credits
A continuation of Basic Electricity I, but dealing with alternating current phenomenon. Topics include, but not limited to: A.C. generation; reactance; impedance; impedance networks; power in A.C. circuits; resonance; coupled circuits; harmonics; A.C. machines and devices; A.C. measurement techniques. Laboratory required.
Prereq: MAT 104 or equivalent concurrently.

ELT 103 Basic Electronics I (X) 4 credits
Circuit elements and their characteristics and function. Topics include: vacuum tube theory; transistor and other solid state devices; integrated circuits; transformers; bridges; transducers; rectifiers; filter networks; voltage doublers; regulation; biasing; semi-conductor circuit configurations. Laboratory required.
Prereq: None

ELT 104 Basic Electronics II (X) 4 credits
Typical circuit configurations and their functions and characteristics. Topics include, but are not limited to: amplifiers; detectors; power supplies; waveform generators; modulation, demodulation; receivers; transmitters; transmission lines and antennas; miscellaneous circuits. Laboratory required.
Prereq: None

ELT 105 Digital Circuit Theory (X) 3 credits
Binary numbers; logic gates, AND, OR, NAND, NOR, ADD: Boolean algebra; logic circuits, DTL, TTL, ECL: flip-flop circuits; counters; registers; displays; memory circuits; applications. Two hours lecture, three hours laboratory.
Prereq: None

Engineering
EGR 101 Engineering Drawing I 3 credits (X)
Introduction to drafting techniques. Orthographic projection and isometric drawing; use of engineering standards and handbooks; dimensioning, sectional views; oblique and perspective systems drafting; skill in freehand sketching.
Prereq: None

EGR 103 Engineering Orientation (X) 1 credit
An introduction to the field of engineering. The work of the technician and his relationship to the engineer. Typical engineering projects.
Prereq: None

EGR 106 Engineering Drawing II 3 credits (X)
Introduction to descriptive geometry; auxiliary views; surface developments and intersections; graphical methods for engineering communication; design and communications drawing in specialized fields.
Prereq: EGR 101 or equivalent.

EGR 205 Statics (X) 3 credits
Prereq: PHY 111 or 101; MAT 104 or equivalent.

EGR 206 Mechanics of Materials 4 credits (X)
Axial and shear stress and strain. Torsion, bending, shear and moment diagrams. Deformation, columns, connections, indeterminate beams. Credit will be granted for EGR 206 or IND 207, but not for both. Laboratory required.
Prereq: EGR 205

English
ENG 100 Basic Communications 3 credits (E)
Intensive study of the structure of the sentence, paragraph, and essay through analysis of language. Emphasis on understanding of reading and writing, developing vocabulary, and examining language history. For students who need to build language skills, admission to English Composition I is contingent upon successful completion of this course. NOTE: This course does not satisfy the composition requirements at the college.
Prereq: None

English Composition I
Study of various aspects of reading and writing expository prose, including clear and effective organization of ideas, convincing expression of ideas in writing and analysis of prose samples. Three options are available; students may receive credit for only one:

ENG 101 English Composition I: Structures for Composition (E)
Introductory study of expository writing from the point of view of structures for the organization of material. Chronological and logical structures with emphasis on patterns of development appropriate to papers and examinations for various college courses.
Prereq: None

ENG 103 English Composition I: Purposes and Techniques of Prose (E)
An analytic approach to the study of expository writing for students who feel confident of their compositional skills. Readings provide models for writing assignments, but the subjects are chosen by the student.
Prereq: None
ENG 105 English Composition 1.3 credits
The Impact of Language (E)
Creative and persuasive approach to writing, with an emphasis on the use of the written language for the expression of personal ideas and feelings.
Prereq: None

English Composition II
Study of the imaginative and symbolic use of language. Emphasis on development of critical standards and written responses to fiction, poetry and drama. Three options are available; student may receive credit for only one:

ENG 112 English Composition 3 credits
II: Exploring Literature (E)
Prose, fiction poetry and drama with emphasis on the literary expression of ideas, particularly the relation of technique to theme. Writing assignments, allowing a range of experience from experimental literary creations to formal analysis.
Prereq: ENG 101, 103, or 105

ENG 114 English Composition II 3 credits
Literature and Creative Writing (E)
Examination of the creative modes of writing: short fiction, poetry, drama, and song. Writing assignments include creative experiments and literary analysis.
Prereq: ENG 101, 103 or 105 and permission of the instructor.

ENG 116 English Composition 3 credits
II: Literature and Film (E)
Study of film as well as short stories, poetry, and drama. Some exploration of other media, including song and television. Film critiques as well as critical evaluation of written works.
Prereq: ENG 101, 103, or 105

ENG 123 Report Writing (L) 3 credits
Intensive study and practice in the writing of reports related to specific technical and service occupations. Emphasis on persuasive techniques, including graphics, for project proposals.
Prereq: ENG 101, 103, or 105

ENG 201 Western Literature I (H C) 3 credits
Reading and critical analysis of selected literary masterpieces from Homer to Shakespeare.
Prereq: ENG 112, 114, or 116

ENG 202 Western Literature II (H C) 3 credits
Reading and critical analysis of selected literary masterpieces from Shakespeare to Frost.
Prereq: ENG 112, 114, or 116

ENG 203 American Literature I (H C) 3 credits
Critical study of significant achievements in American literature from the Puritan period through the period of the Reconstruction. Emphasis on the growth of an American literature, its modes and purposes.
Prereq: ENG 112, 114, or 116

ENG 204 American Literature II (H C) 3 credits
Critical study of significant achievements in American literature from the late 19th century to the present. Emphasis on literary modes and thought as they reflect the modern society.
Prereq: ENG 112, 114, or 116

ENG 205 English Literature I (H C) 3 credits
Readings in English literature from the Anglo-Saxon period to the late 17th century. Major emphasis on Chaucer and Shakespeare.
Prereq: ENG 112, 114, or 116

ENG 206 English Literature II (H C) 3 credits
Readings in English literature from the late 17th century to the present.
Prereq: ENG 112, 114, or 116

ENG 207 Advanced Creative Writing (H C) 3 credits
Techniques and approaches in narrative, lyric, and dramatic forms of writing. Intensive practice.
Prereq: ENG 114 or permission of the instructor.

ENG 209 Modern Drama (H C) 3 credits
Selected works by major playwrights since Ibsen.
Prereq: ENG 112, 114, or 116

ENG 211 Modern Novel (H C) 3 credits
Themes and methods of novelists of the modern western world. Exploration of such typically modern themes as alienation and the failure of communication. Attention given to modern experiments in point of view, structure and style.
Prereq: ENG 112, 114, or 116

ENG 217 American Folklore (H C) 3 credits
An introduction to the materials and methods of the study of American folklore with emphasis on its appreciation, on its relevance to the development of literature, and its relationship to life styles. Folklore and folk literature of southern Appalachia serve as models for study.
Prereq: ENG 112, 114, or 116

ENG 219 The Black in American Literature (H C) 3 credits
Achievement in literature of black Americans with some attention to the characterization of the Negro in the works of white writers.
Prereq: ENG 112, 114, or 116
ENG 221 *Shakespeare* (H C) 3 credits
A selected group of plays by Shakespeare, approached by theme, with consideration of contemporary presentations or adaptations. Field trips to film and/or theatre performances.
Prereq: ENG 112, 114, or 116

ENG 225 *Satirical Fiction* (H C) 3 credits
A survey of absurdist and political satire in fiction. Attention will be given to representative 18th and 19th Century writers. Ultimate focus will be on Kurt Vonnegut and Flannery O'Connor, developing an analysis of their differing responses to the contemporary world.
Prereq: ENG 112, 114, or 116

ENG 241 *Survey of Children's Literature* (H C) 3 credits
Wide reading of classic and current children's literature, including the history and development of the various genre. Criteria for judging children's books. Classroom techniques in story-telling and related activities. Required of students majoring in Early Childhood Education.
Prereq: ENG 112, 114 or 116

ENG 242 *Storytelling* (H L) 3 credits
Folktales from American, European and other ethnic folktales traditions are examined from a contemporary perspective. Attention will be given to structure, content, language, literary and social issues, and technique. Students will learn to tell the folktales within the context of their own cultural experience.
Prereq: ENG 112, 114 or 116.

ENG 243 *Modern Poetry* (H C) 3 credits
Forms, methods, and ideas of 20th century American and British poets. In-depth study of a few major innovators, together with a broader survey of recent poetic work.
Prereq: ENG 112, 114 or 116

ENG 247 *Women in Literature* (H C) 3 credits
A study of poems, plays, short stories, and novels by and about women, specifically dealing with the following areas of concern: growing up as a female, female sexuality, female identity, female creativity, and the search for wholeness.
Prereq: ENG 112, 114 or 116

ENG 251 *Grammar and Editing* (H C) 3 credits
Study of functional grammar, punctuation, and syntax; organization of sentences; paragraphs and papers; orthography; definition; etymology; logic and semantics; editing skills; the philosophy of language.
Prereq: ENG 112, 114, or 116, or permission of the instructor.

ENG 253 *Valley Writers* (H L) 3 credits
A study of the geographic, social, and cultural influences of the Valley on major and minor writers. The course will begin with Jonathan Edwards of Northampton and include such figures as Emily Dickinson, Mark Twain, William Cullen Bryant, Robert Frost, Archibald MacLeish, Sylvia Plath, and Richard Wilbur.
Prereq: ENG 112, 114 or 116 or permission of instructor.

ENG 255 *Valley Folklore* (H L) 3 credits
An examination of the evolving traditions of oral and material folk culture in the Pioneer Valley. Attention will be given to music, stories, popular attitudes, folk architecture and folk art.
Prereq: ENG 112, 114 or 116 or permission of instructor.

ENG 257 *MacLeish Seminar* (H L) 3 credits
Focusing on taped biographical and critical interviews with Archibald MacLeish, the seminar will examine the periods of the poet's development, assessing the influences on his literary achievement of non-literary careers, environment and personal experiences. Extensive reading of poetry, drama, and essays will be required.
Prereq: One course in either American Literature, Modern Poetry or the equivalent.

ESL 100 *English As A Second Language* (X) 1-3 credits
Focus on the writing and aural-oral skills needed for the student to participate in a full G.C.C. academic program. Individualized programs allow ESL students to progress from their present level proficiency to more advanced levels in writing and oral communication. Intensive drills in writing mechanics, vocabulary and sentence study. Credit awarded on the basis of level of competency acquired: beginning — 1 credit; intermediate — 2 credits; advanced — 3 credits. May be repeated until a total of 3 credits is earned.
Prereq: None

**Environmental Science**

ENV 101 *Environmental Design* (N L) 3 credits
History of designed human environments; aesthetic considerations of physical and natural environments; application of design principles to utilization of physical and plant materials in planning environments. Laboratory and field trips required.
Prereq: None

ENV 102 *Conservation of Natural Resources* (N L) 3 credits
An examination of the use and abuse of the world's natural resources and the societal implications of their availability.
Prereq: None
ENV 106 Principles of Urban and Rural Landscaping (N L)
An introduction to the basics of landscape design and plant materials and their application to man in urban and rural environments. Laboratory and field trips required.
Prereq: None

ENV 107 Principles of Land Use 3 credits
(N L)
Historical and legal aspects of land ownership, property rights and land use; urban geography; ecological and social considerations influencing community and regional planning.
Prereq: None

ENV 109 Historic Preservation 3 credits
(N L)
An analytical survey of the need, methods, and mechanisms of preservation and restorative techniques of the natural and man-made environments in urban and rural settings. Field trips required.
Prereq: None

Fire Science Technology

FST 101 Introduction to Fire Protection (X) 3 credits
Philosophy and history of fire protection: history of loss of life and property by fire; municipal fire defenses; organization and function of federal, state, county and private fire protection agencies. Professional fire protection career opportunities.
Prereq: None

FST 103 Fundamentals of Fire Prevention (X) 3 credits
Organization and function of fire prevention. Organization, inspection, surveying and mapping procedures, recognition of fire hazards, engineering as a solution of the hazard, enforcement of the solution. Public relations as affected by fire prevention.
Prereq: None

FST 105 Organization and Management of Fire Departments (X) 3 credits
The fire administrator's responsibility for the total community fire problem. Insurance and fire defenses; personnel and equipment; water supply; departmental functions; administrative problems.
Prereq: None

FST 109 Hazardous Materials (X) 3 credits
Review of basic chemistry. Storage and handling of hazardous materials. Laws, standards and fire fighting practices within extreme fire hazard areas.
Prereq: FST 101 and FST 103, or equivalent.

FST 111 Building Construction (X) 3 credits
Exploration of building construction and design with emphasis on fire protection concerns. Review of statutory and suggested guidelines, local, state and national.
Prereq: None

FST 113 Fire Hydraulics with Applied Math (X) 4 credits
Hydraulic laws and formulas as applied to fire science. Application of formulas and mental calculations to hydraulic problems; water supply problems; underwriters' requirements for pumps. Math components included.
Prereq: None

FST 201 Fire Protection Systems & Equipment (X) 3 credits
Basic plant organization for fire safety and inspection in domestic, industrial and public enterprises; introduction to protection systems.
Prereq: FST 109

FST 202 Fire Prevention Systems & Equipment II (X) 3 credits
Advanced considerations in plant organization for fire safety and inspection; standards and specialized protection systems. Case studies and problems.
Prereq: FST 201

FST 203 Fire Fighting Tactics (X) 3 credits
Review of fire chemistry, equipment and manpower. Basic fire fighting tactics and strategy; methods of attack; pre-planning fire problems. Fire situations for analysis and study.
Prereq: FST 101, FST 103 and FST 113

FST 205 Legal Aspects of Fire Administration (X) 3 credits
Fire and arson laws and the origin of fires. Locating witnesses, conducting investigations, libel and slander, arson motives, interviewing witnesses, interrogating suspects, criminal confessions, searching the fire scene, evidence and photography; methods of establishing the corpus delicti in an arson fire.
Prereq: FST 101 and FST 103

FST 207 Fire Codes and Ordinances (X) 3 credits
National, state and local laws and ordinances which influence the field of fire protection. Emphasis on local situations.
Prereq: FST 101 and FST 103

FST 275 Emergency Medical Technology (X) 6 credits
An 81 hour course in the emergency primary care of injuries, acute illnesses, birth and people under stress. Rescue extraction, transportation, communication; legal implications; anatomy and physiology; M.D. participation, ambulance training, and
CPR. Lectures, slides, demonstrations and practice. Students completing the course will be able to take the National Registry Examination at the college.
Prereq: None

French

FRE 101 Elementary French I 3 credits (H C)
Introduction to the language by means of intensive oral work and systematic study of grammar and phonetics. Laboratory required. For beginners and students who have not successfully completed one year of high school French.
Prereq: None

FRE 102 Elementary French II 3 credits (H C)
Introduction to the language by means of intensive oral work and systematic study of grammar and phonetics. For students who have not successfully completed two years of high school French. Laboratory required.
Prereq: FRE 101 or equivalent

FRE 201 Intermediate French I 3 credits (H C)
Refinement of written and conversational skills through selected readings in literature.
Prereq: FRE 102 or permission of the instructor.

FRE 202 Intermediate French II 3 credits (H C)
Study of chosen representative literary works from French literature. Outside readings and reports required.
Prereq: FRE 202 or permission of the instructor.

FRE 251 French Composition and Conversation (H C)
Refinement of writing and speaking skills on an advanced level. Written and oral assignments required weekly.
Prereq: FRE 202 or equivalent and permission of the instructor.

History

HIS 101 Western Civilization to 1500 A.D. 3 credits (H C)
The major ideas, institutions and developments of Western Civilization from ancient times to the Renaissance. Themes include the nature of man, relationship of the individual to society; relationship of man to his universe; role of the religion; the individual in history; the transition to modern modes of life and thought.
Prereq: None

HIS 102 Western Civilization Since 1500 A.D. 3 credits (H C)
Analysis of ideas, attitudes and developments of Western Civilization from the dawn of the modern age to the present. Topics include the scientific and industrial revolutions; the rise and triumph of nation states; the French and Russian revolutions; European imperialism in Asia and Africa; socialism, communism and fascism; dictatorships and World War II; challenge of the non-western world.
Prereq: None

HIS 105 History of the American People to 1865 (H C)
Economic, social and cultural development of the American people prior to the Civil War. Utopianism; the Revolutionary Era; the development of national consciousness; consensus and conflicts; constitutionalism; the roots of American Foreign policy; race relations; slavery and war.
Prereq: None

HIS 106 History of the American People since 1865 (H C)
Reconstruction; industrialism and triumphant capitalism; the capitalist model of society; business and the Protestant ethic; labor populism and dissent; imperial expansion and the progressive politics: crisis in the American Dream—the Great Depression and the New Deal; minorities and change; the roots of contemporary American foreign policy to Vietnam.
Prereq: None

HIS 107 Valley/American History I (H L)
Analysis and examination of major developments—political, social, economic—in American history from colonial times to the Civil War period with the focus on the local and national levels. Emphasis on local resources; field trips required.
Prereq: None

HIS 108 Valley/American History II (H L)
Analysis and examination of major developments—political, social, economic—in American history from the latter part of the nineteenth century to the present with the focus on the local and national levels. Emphasis on local resources; field trips required.
Prereq: None

HIS 109 American Foreign Policy (H C)
Development of and responses to America as a world power; the ideas, economic interests, and political considerations affecting the formulation of American foreign policy; overseas expansionism; moral idealism; the importance of personalities and styles; the pursuit of national self-interests.
Prereq: None
HIS 111 The American Dream 3 credits (H C)
A comparison of traditional goals and ideals—liberty, equality, individual rights; rugged individualism; unlimited opportunity; democracy; education; change; progress—the basis of the American Dream, with realities of the past and present and the responses and reactions of Americans to their ideals.
Prereq: None

HIS 113 The Evolution of Modern 3 credits
Asian Society (H C)
Emphasizes patterns and social change in the 19th and 20th centuries. Topics include: Chinese society and the Revolution; Indian nationalism; roots of conflict in Indo-China; the modernization of Japan.
Prereq: None

HIS 115 Valley Religious History 3 credits (H L)
A survey of the religious history of the Pioneer Valley with emphasis on movements and personalities originating in the Valley and their broader effect, including Jonathan Edwards, the Great Awakening, Dwight Moody, Shakers, and the New Spirituality.
Prereq: None

HIS 117 American Economic 3 credits
History (H C)
The development of American economic life from colonial times to the present; industrialization, technology, and the rise of big business; workers and work; depressions, booms, and the momentum of growth; changes in the economic role of government; and the impact of economic growth on the quality of life.
Prereq: None

HIS 119 Valley Ethnic History 3 credits (H L)
Significant contributions to the cultural life and historic development of the Valley by people of various ethnic origins. The process by which these contributions and developments took place will be explored through a variety of approaches, both in the field and in the classroom.
Prereq: None

Human Ecology

HEC 115 Laboratory 1 or 2 credits
Experience in Human Ecology (X)
The use of simulation and experiential learning in the study of human ecology; a series of connected experiences within controlled environments in which students can serve as participants and/or observers.
Prereq: Permission of instructor.
1 credit (30+ hours) 2 credits (60+ hours)

Human Development

HUD 101 Study Skills Workshop 1 credit (X)
A survey course to provide knowledge of basic study techniques and practice in applying those techniques to actual course work. Emphasis will be placed on taking lecture notes, underlining and outlining textbook material, and studying effectively for examinations.
Prereq: None

HUD 103 The 24-Hour Growth Experience (X)
The four course sessions and central 24-hour experience, all facilitated by both outdoor leaders and counselors, focus on group problem-solving, familiarity with the night, interpretation of the natural and man-made environment, and examination of personal and interpersonal issues. Learning about oneself and the workings of the group are stressed.
Prereq: Permission of instructor.

HUD 105 Cross-Country Skiing 1 credit
and Personal Growth (X)
The four course sessions and central weekend experiences all facilitated by both outdoor leaders and counselors, focus on group problem-solving, cross-country ski instruction and practice, interpretation of the natural and man-made environment, and examination of personal and interpersonal issues. Emphasis is placed on personal growth and understanding of the workings of the group.
Prereq: Permission of instructor.

HUD 107 Rock Climbing and Personal Growth (X)
The four course sessions and central weekend experience, all facilitated by both outdoor leaders and counselors, focus on group problem-solving, rock-climbing instruction practices, orienteering and interpretation of the natural and man-made environment. Throughout the course, students are encouraged and helped to discuss the experience and, through it, to gain a clearer view of themselves and the workings of the group.
Prereq: Permission of instructor.

HUD 109 Career Planning and Self-Assessment (X)
An individualized introduction to the career/planning process. Examines and stresses the importance of 1) self-assessment (of interests, values and aptitudes) and 2) knowledge of career information. Emphasis on career development
as a series of decisions, with satisfactoriness of outcomes depending on accuracy of information about self and world of work

Prereq: None

HUD 111 Interpersonal Communication and Assertiveness

(X)

An introduction to theory and application of attitudes and behaviors for interacting effectively with others in personal and work life; assertiveness as a constructive means of making and refusing requests and of expressing positive and negative emotions; exploration of barriers against successful communication; listening and responding skills.

Prereq: None

Humanities

HUM 101 Humanities in the Western World I (H C)

Illustrates the relationships among the literature, music, visual art, history, and ideas of the Western World. Concentrates on the Classical World, the Middle Ages, and the Renaissance.

Prereq: None

HUM 102 Humanities in the Western World II (H C)

Continuation of HUM 101. This course concentrates on the Baroque, Romantic, and Modern periods.

Prereq: None

HUM 111 Historical Research Orientation (H L)

A survey of techniques and resources needed in directed and independent study. Depending on past experience, for some students it will be an introduction and for others a refresher course in methods of study and research facilities at GCC and the larger Valley community.

Prereq: None

HUM 113 Valley Perspectives and Retrospectives (H L)

An intensive one-semester introduction to the Valley. Geographical, geological, historical, cultural overview from 1630 to the present: National developments; major Valley events and figures; growth of an agrarian/industrial society. Field trips are required.

Prereq: None

HUM 115 Valley Contemporary Directions and Issues (H L)

Current concerns which impact on the quality of life in the Valley; structures of town governance; land use, population pressures; utilization of resources; aesthetic and historical considerations in town planning and growth; the arts in the Valley. Special reports and field trips.

Prereq: None

HUM 201 Mass Media in America (H L)

The history, development, purposes, values and effects of the mass media in America, including the press, radio, film and television. Emphasis on contemporary issues, such as freedom of the press, dominance of commercialism, role of technology, and media monopolies.

Prereq: Eng. Comp. II (Eng. 116 recommended) or permission of instructor.

HUM 231 Valley Research Project (H L)

A course designed as a cooperative research project for students who have an interest in local history, research, and writing. A topic will be chosen each semester from fields such as art, biography, genealogy, industry, or society. The goal of the course will be to produce a paper for publication.

Prereq: None

HUM 117 History of Pioneer Valley Education (H L)

Designed to familiarize the student with the diversity and wealth of educational opportunity in the Valley through a study of the history of its institutions. Educational trends will be identified and their impact on the community examined. Field trips and a term paper required.

Prereq: None
Industrial Engineering

IND 101 Machine Processes (X) 3 credits
Prereq: None

IND 107 Contracts and Specifications (X) 3 credits
Basic principles of contract law and their application to industrial situations. Specifications relating to materials and workmanship, and the basic concept of estimating costs.
Prereq: None

IND 111 Productivity Management (X) 3 credits
Industrial organization, job evaluation. Production control functions. Scheduling and dispatching.
Prereq: None. BUS 101 and IND 101 recommended.

IND 112 Quality Control (X) 3 credits
Scheduling. Inventory control. Statistical concepts. Sampling.
Prereq: IND 111 or permission of instructor.

IND 113 Motion and Time Study (X) 3 credits
Prereq: IND 111 or permission of instructor.

IND 204 Facilities Engineering 3 credits
Plant layout. Heating; ventilating; air conditioning; safety; OSHA regulations; materials handling; maintenance.
Prereq: IND 111 or permission of instructor.

IND 206 Thermodynamics (X) 3 credits
Heat theory and equipment; gas laws; first and second laws of thermodynamics; heat exchangers; Rankine and Carnor cycles.
Prereq: MAT 207 or equivalent.

IND 207 Strength of Materials (X) 3 credits
Axial and shear stress and strain. Torsion, bending, shear and moment diagrams, deflections, columns, connections, interde-terminate beams. Credit will be granted for IND 207 or EGR 206, but not for both.
Prereq: EGR 205

Joumalism

JOU 101 Introduction to Journalism (H C) 3 credits
Journalism in print, radio, television: History, major trends, communication theory, ethics. Laboratory practice includes gathering and writing news, editing, copy reading, headlining.
Prereq: ENG 101, 103, or 105, or permission of the instructor.

JOU 103 Journalism Workshop 3 credits
(H C)
A workshop in newspaper production bringing together students with skills in journalism, graphic arts, management and marketing. Students will produce the college newspaper—writing, designing, selling, advertising, and managing.
Prereq: One or more of the following: JOU 101, ART 121, ART 151, ART 171, BUS 101, BUS 103, and permission of the instructor.

Leisure Education

All LED courses are graded on a Credit/No Credit basis.

LED 101 Swimming (X) 1 credit
The art of swimming; emphasis on skill development and complementary water safety techniques. Course is available to all students, regardless of their present swimming ability. Approved for American National Red Cross certification.
Prereq: None

LED 103 Advanced Life Saving (X) 1 credit
Advanced techniques of rescue and water safety. Stresses practical application. Course leads to American National Red Cross certification in Advanced Life Saving.
Prereq: Successful completion of American National Red Cross competency test.

LED 105 Water Safety Instructor 1 credit
(X)
Designed to train and certify American National Red Cross Water Safety Instructors. Provides students with the knowledge, judgment, and teaching skills for training others in swimming, rescue and water safety.
Prereq: Successful completion of LED 103, or a current American National Red Cross Advanced Life Saving Certificate.

LED 107 Flat Water Tandem Canoeing (X) 1 credit
Skills and strategies of modern flat water canoeing; emphasis on safety and skills development in tandem paddling. Approved for American National Red Cross Basic Canoeing certification.
Prereq: None
LED 108 Flat Water Solo Canoeing (X) 1 credit
Skills and strategies of modern flat water canoeing; emphasis on safety and skills development while solo paddling.
Prereq: Successful completion of LED 107 or its equivalent.

LED 109 Basic White Water Canoeing I (X) 1 credit
Skills and strategies of modern river canoeing; emphasis on safety, skills development, and fun in tandem paddling.
Prereq: None

LED 110 Basic White Water Canoeing II (X) 1 credit
Advanced skills and strategies of modern white water canoeing. Emphasis on safety, skills development, and fun in tandem paddling in Class II and Class III rivers.
Prereq: LED 109 and permission of the instructor.

LED 111 Flat Water Canoeing Instructor (X) 1 credit
Designed to train and certify American National Red Cross Canoeing Instructors; provides people with the knowledge, judgement, and teaching skills for training others in basic flat water canoeing.
Prereq: Successful completion of LED 107 or LED 109, and permission of the instructor.

LED 112 American Canoe Association White Water Canoeing Instructor (X) 3 credits
Designed to train and certify American Canoe Association (ACA) instructors in flat water and white water open canoeing. Such people are considered to have the knowledge, judgement, and teaching methodologies necessary for training others in basic flat water and white water open canoeing skills. Specifically designed for educators and recreation leaders who have the responsibility for providing safe and effective canoeing programs.
Prereq: Permission of the instructor.

LED 113 Basic Sailing (X) 1 credit
Designed to teach the fundamentals of recreational sailing with an emphasis on safety and enjoyment of the sport. Approved for American National Red Cross certification in Basic Sailing.
Prereq: None

LED 115 Sailing Instructor (X) 1 credit
Designed to train and certify American National Red Cross Sailing Instructors; provides the knowledge, judgement, and teaching skills for training others in basic sailing.
Prereq: Successful completion of LED 113 or a current American National Red Cross Basic Sailing Certificate.

LED 117 Aquatic Games & Contests (X) 1 credit
Aquatic games and contests, categorized and presented consistent with the respective swimming ability groups; emphasis on expansion and development of fundamental skills through fun.
Prereq: American National Red Cross Swimmer Certification.

LED 119 Boating (X) 1 credit
Skills of rowing and outboard motor use; emphasis on safety, skills development, and enjoyment in the use of rowboats and small motorboats. Course is taught in conjunction with the LED sailing courses (LED 113, 115)
Prereq: None

LED 121 Solo White Water Canoeing (X) 1 credit
Skills and strategies of modern river canoeing; emphasis on safety, skills development and fun while paddling solo.
Prereq: Successful completion of LED 109 and 110 and permission of the instructor.

LED 124 Tree and Shrub Identification (X) 2 credits
The identification of the native and naturalized woody plants growing in Western Massachusetts. Includes summer and winter characteristics, commercial significance and value to wildlife.
Prereq: None

LED 125 Nature Interpretation (X) 1 credit
An introduction to the interpretation of the natural and cultural environment, including specific leadership techniques and related methods and materials of nature interpretation. A problem-centered course with direct experience in the field.
Prereq: None

LED 127 Outdoor Challenge/Adventure Education (X) 1 credit
An introduction to the basic challenge/adventure outdoor activities. Focus on physical, mental, and social challenge as a vehicle to individual confidence, group cooperation, and environmental understanding. Activities and experiences include the philosophy of challenge/adventure, as well as experiential learning through rope courses, initiative problems, rock climbing, river crossing, solo experience, and group problem solving.
Prereq: None
LED 131 Basic Rock Climbing (X) 1 credit
An introduction to the philosophy, skills, and techniques of basic rock climbing. Laboratory sessions will stress the activities of bouldering, top-rope climbing and rappelling. Participants will gain adequate experience to use the sport of rock climbing as a leisure time activity.
Prereq: None

LED 133 Bicycle Touring (X) 1 credit
Introduction to bicycling and bicycle touring. Focus upon the philosophy, skills, and techniques of lightweight bicycling and touring. Direct experience laboratory sessions will focus upon the selection of equipment, bicycling skills and techniques, physical conditioning, lightweight bicycle touring (camping), and personal first aid safety. Participants must provide their own equipment.
Prereq: None

LED 135 Alpine Skiing (X) 1 credit
The challenge/adventure activity of alpine skiing for the beginner through intermediate skier. Includes equipment selection, pre-skiing preparation, skills development and refinement, and the psychological obstacles which must be overcome to master the sport.
Prereq: None

LED 137 Cross Country Skiing (X) 1 credit
Beginning, intermediate, and advanced instruction in the philosophy, skills and techniques of cross country skiing and ski touring. Laboratory sessions stress consumer ski equipment, physical conditioning, care and repair of equipment, waxing, style and technique, winter personal safety, and first aid.
Prereq: None

LED 139 Hiking and Backpacking (X) 1 credit
An introduction to the basic skills and techniques of hiking and backpacking. Focus will be upon the proper use and selection of backpacking equipment, camp cookery, first aid and safety, tool craft, orienteering (map and compass), and wilderness survival. The course will stress skills for personal leisure activities and outdoor leadership, as well as concerns for environmental awareness and understanding. Laboratory sessions will take place in the back country of Franklin County, and there will be a four-day backpacking trip to the White Mountain National Forest in New Hampshire.
Prereq: None

LED 141 Winter Camping (X) 1 credit
The challenging/adventure activity of winter camping for the beginning cold weather wilderness traveler. Deals with the techniques of exploring and living in a white wilderness.
Prereq: None

LED 143 Orienteering (X) 1 credit
Provides the student with the skills of map reading and compass use. Hands-on training emphasized. Introduction to orienteering as a sport.
Prereq: None

LED 145 Homesteading Skills (X) 1 credit
Methods for meeting the basic human needs of food, shelter, and energy. Focus will be on activities such as making yogurt and cheese, cider pressing, trail shelter construction, wood as home fuel, and household crafts.
Prereq: None

LED 151 Archery (X) 1 credit
The basic skills and techniques involved in recreational archery. Emphasis on skill development and safety. Introduction to field archery, competition, and bow hunting.
Prereq: None

LED 153 New Games (X) 1 credit
An introduction to the fundamentals of a unique play program emphasizing "playing hard", "playing fair", "nobody hurt". The course takes a leadership development approach teaching the skills and concepts necessary to allow New Games to happen.
Prereq: None

LED 155 Badminton (X) 1 credit
The basic skills and techniques of recreational badminton. Rules, terminology and strategy used in singles and doubles play are covered.
Prereq: None

LED 157 Aerobics (X) 1 credit
Physical fitness exercises and techniques aimed at the development of the cardiovascular system. Increases resistance to fatigue through systematic approaches. Individual needs assessed and individual programs planned.
Prereq: Permission of the instructor.

LED 158 Advanced Aerobics (X) 1 credit
Advanced physical fitness. Includes isometric, isotonic and isokinetic muscle loading. Principles of diet and weight control. Exercises to promote flexibility, strength and cardio-respiratory endurance.
Prereq: LED 157 and permission of the instructor.
LED 159 Raquetball (X) 1 credit
The basic skills and techniques essential to recreational raquetball. Covers the rules, terminology and strategy used during singles and doubles play. The value of raquetball and other raquet sports as a lifetime recreational activity.
Prereq: None

LED 161 Golf (X) 1 credit
The basic skills of recreational golf. Students will advance at their own pace. Golf etiquette and strategy will be explained.
Prereq: None

LED 163 Physical Education and Fitness (X) 2 credits
Provides students with the knowledge, understanding and values of physical activity as a means to healthful living. Planning for exercise programs suitable to different needs and age groups. Physical fitness as a lifetime concern is stressed.
Prereq: None

LED 165 Tennis (X) 1 credit
Basic tennis instruction, emphasis upon the proper development of different strokes. Rules and strategies of singles and doubles will be covered.
Prereq: None

LED 166 Advanced Tennis (X) 1 credit
Advanced tennis instruction, emphasis upon individual practice and refinement of skills. Control and strategic use of slice and topspin.
Prereq: LED 165 or permission of the instructor.

LED 167 Basic Karate I (X) 1 credit
A basic introduction to the Korean Martial Arts. Emphasis on physical fitness, basic blocking techniques, kicking, and self-defense.
Prereq: None

LED 168 Basic Karate II (X) 1 credit
Intermediate level skills and techniques of the Korean Martial Arts. Refinement of basic techniques and introduction of more advanced skills and exercises.
Prereq: LED 167 or permission of instructor.

LED 173 Bowling (X) 1 credit
The skills and techniques needed to bowl with proficiency and enjoyment. The history of bowling, its present status and its value as a life-time sport.
Prereq: None

LED 175 Low Organized Sports (X) 1 credit
Acquaints the student with a variety of team sport modifications and with lesser known sports. Emphasis on adapting sports to varying capabilities and degrees of health.
Prereq: None

LED 177 Volleyball (X) 1 credit
The basic skills and techniques of modern power volleyball. Strategies of team play are emphasized.
Prereq: None

LED 181 Advanced Volleyball (X) 1 credit
Advanced training in the skills of power volleyball. Emphasis is placed upon the understanding of the 6-1 offense and defense, and the evaluation of advanced skills.
Prereq: LED 177 or permission of the instructor.

LED 191 Recreational Dance (X) 2 credits
Designed to provide the opportunity to increase basic dance skills. Introduction to basic rhythms, folk, square and social dances.
Prereq: None

LED 193 Contemporary Food Experiences (X) 1 credit
The basic principles and preparation techniques of natural foods. An activity oriented approach which will focus upon eating patterns, nutrition and consumerism. Class activities will range from food planning and preparation to utilization of the community as a learning resource.
Prereq: None

LED 199 Creative Drama (X) 2 credits
Prepares recreation leaders to direct informal creative dramas, for all age groups. Includes improvisation, pantomime, storytelling, charades, dramatic games, and acting combined with other art forms.
Prereq: None

Library Science

LIB 101 Library Resources and Reference Materials (A) 3 credits
The nature and extent of library resources with emphasis upon fundamental reference sources, their content, organization and use. Stresses practical experience in researching and locating different types of materials.
Prereq: None
MAT 100 Basic Mathematics 3 credits
Skills (X)

Designed for students who have been away from mathematics for a long time or who have a weak mathematics background. A basic premise of the course is that everyone can learn mathematics. Basic skills are stressed and rules developed which make sense to the student. The issue of mathematics anxiety is discussed and overcome. The process of mathematical discovery is emphasized with the goal of enabling the student to analyze and solve new problems using general techniques of mathematical reasoning. This course is useful as a foundation for other mathematics or science courses or for basic mathematical skills necessary in job situations.

Prereq: None

MAT 103 Applied Mathematics 3 credits
I (N C)

Applied mathematics with emphasis on developing general mathematical understanding and problem-solving skills. Basic algebraic operations, exponents, graphs, exponential equations, logarithms, solution of linear equations, and right triangle trigonometry with applications. Slide rule.

Prereq: Successful completion of at least two years of college preparatory secondary school mathematics, or MAT 106, or equivalent.

MAT 104 Applied Mathematics 3 credits
II (N C)

Applied mathematics with emphasis on developing general mathematical understanding and problem-solving skills. Oblique triangle trigonometry and vectors, graphs of trigonometric functions, complex numbers and polar forms, graphical and algebraic solutions of equations, determinants, topics from analytic geometry, quadratic equations.

Prereq: MAT 103 or equivalent.

MAT 105 Algebra and Coordinate Geometry I (N C) 3 credits

Modern notation and language of algebra. Signed numbers, exponents and radicals, factoring, and fundamental operations with rational expressions. First degree and quadratic equations, with applications to the physical and social sciences.

Prereq: None

MAT 106 Algebra and Coordinate Geometry II (N C) 3 credits

A continuation of MAT 105. Topics include simultaneous equations, graphs, radicals, and quadratic equations.

Prereq: MAT 105 or permission of the instructor.

MAT 107 Fundamental Concepts of Mathematics (N C) 3 credits

The basic principles and notation of modern mathematics. Logic and set terminology, the development of number systems including natural numbers, integers, rationals, reals, and complex numbers; an introduction to relations and functions, equations and inequalities; special topics from modern algebra. Formerly MAT 101

Prereq: Successful completion of at least two years of college preparatory secondary school mathematics, or MAT 106, or equivalent.

MAT 108 Elementary Functions 3 credits
(N C)

Preparation for calculus and physical sciences. The principles and properties of functions and their graphs. Inverses and composition of functions. Polynomial, rational, circular, exponential, and logarithmic functions. Topics from analytic geometry.

Prereq: MAT 107

MAT 112 Finite Mathematics 3 credits
(N C)

Techniques in modern mathematics that can be used to make the best decision. Topics include matrix algebra, logic, game theory, and linear programming. Emphasis on applications of mathematics to real life situations in which various choices of action are possible.

Prereq: MAT 107 or equivalent.

MAT 114 Probability and Statistics (N C) 3 credits

The organization, presentation, and interpretation of data; measures of central tendency and dispersion; probability theory; distribution of measurements; binomial and normal probability distributions; statistical interference and hypothesis testing; linear regression and correlation.

Prereq: MAT 107 or equivalent.

MAT 151 Calculus for the Man-agerial and Social Sciences I (N C) 3 credits

An intuitive introduction to some of the basic tools and methods of calculus. Models and applications from business, economics, and the social sciences. Functions and their graphs, limits and continuity, and the derivative with applications.

Prereq: Competence with algebra.

MAT 152 Calculus for the Man-agerial and Social Sciences II (N C) 4 credits

Anti-derivatives and the definite integral with applications; logarithmic and exponential functions; techniques of integration; functions of several variables. Also techniques for decision making such as expected monetary value, linear programming and Markov chains.

Prereq: MAT 151
MAT 201 Calculus with Analytic 4 credits
Geometry I (N C)
Prereq: MAT 108 or the equivalent.

MAT 202 Calculus with Analytic 4 credits
Geometry II (N C)
Prereq: MAT 201

MAT 203 Multivariate Calculus 4 credits
(N C)
Prereq: MAT 202

MAT 205 Elementary Linear Algebra (N C)
Prereq: MAT 202, or permission of the instructor.

MAT 207 Applied Mathematics 3 credits
III (N C)
Basic applied concepts of analytical geometry and calculus with emphasis on general mathematic understanding and problem-solving skills. Differentiation and integration. Practical rather than theoretical orientation.
Prereq: MAT 104 or equivalent.

Media Communications

MCM 101 Introduction to Media Communications (X)
3 credits
Designed to acquaint and familiarize the student with characteristics, applications, and implications of media and its related equipment. Emphasis will be placed upon mastering audiovisual equipment for traditional and innovative instructional uses.
Prereq: None

MCM 103 Production of Audio-Visual Materials (X)
3 credits
Basic audiovisual production processes, including illustration, preservation, lettering, coloring, photography, audio recording and mixing, and Super-8 film making.
Prereq: None

MCM 105 Filmmaking (X) 3 credits
Basic concepts of film production. Films of all types analyzed to understand the makeup of film. Emphasis on the making of instructional film in the SUPER 8 format both silent and sound. Individual projects in developing the single concept film.
Prereq: None

MCM 109 Television Production (X) 3 credits
Studio television production, including on-and-off camera functions. Emphasis on program direction and equipment operation.
Prereq: None

MCM 111 Audio Workshop (X) 3 credits
Theory and practices of audio materials production. Writing audio programs for tapes, records, and radio.
Prereq: AVM 101 or permission of the instructor.

MCM 205 Photography and Graphics (X)
3 credits
Photography and graphics techniques used in production of motion pictures, television, slide presentations, overhead transparencies, displays and publications for business, industry and education.
Prereq: MCM 103

MCM 209 Advanced Television Production (X)
3 credits
Producing, directing and performing in television programs. Creating for the video medium. Emphasis on special effect: the creative use of lighting, scenery and make-up. The student is encouraged to produce an original project.
Prereq: AVM 109 or equivalent.

MCM 215 Media Communication Technology (X)
3 credits
Theory and practice in the electronics related to media, maintenance and care of equipment.
Prereq: AVM 101 or permission of the instructor.

MCM 217 Media Systems Design 6 credits
(X)
Problems in the design of media facilities, distribution and retrieval systems, maintenance, purchase of equipment and materials, in-service education. Field experience and/or laboratory required.
Prereq: Media Technology majors.

MCM 297 Cooperative Work Experience in Media I (X)
3 credits
Work experience, supervised by media technology faculty in cooperation with appropriate institutions and agencies. Available only to students in the Media Communications program.
Prereq: AVM 101, AVM 103, and AVM 109.
MCM 298 Cooperative Work 3 credits
Experience in Media II (X)
Work experience, supervised by media technology faculty in cooperation with appropriate institutions and agencies. Available only to students in the Media Communications program.
Prereq: AVM 297 may be taken concurrently.

N.B. When AVM 298 is taken concurrently with AVM 297, only 3 additional credits may be taken in that semester without approval of the Director of the Division of Learning Resources.

Music

MUS 101 An Introduction to Music (H C) 3 credits
Examination of the major forms of music including the folk song, the symphony, and the opera. Concentration on contemporary forms with tracing of historical foundations.
Prereq: None

MUS 103 Fundamentals of Music 3 credits (H C)
Elementary theory for the student with little or no musical background. Music structure and the handling of musical materials. Includes notation, scales, melody construction, elementary theoretical concepts.
Prereq: None

MUS 105 Music Literature I (H C) 3 credits
Masterpieces of Western music from the Rococo, Classical, Romantic, and Contemporary eras. Representative works from each period analyzed.
Prereq: MUS 101 or permission of the instructor.

MUS 106 Music Literature II 3 credits (H C)
Masterpieces of Western music from the Medieval, Renaissance and Baroque eras. Representative works from each period analyzed.
Prereq: MUS 101, or permission of the instructor.

MUS 107 Music Theory I (H C) 3 credits
Basic chordal structures, voice leading, inversions, figured bass harmonic progressions and non-harmonic tones. Harmonic analysis of great composers' works. Keyboard harmony and ear training.
Prereq: MUS 103, or permission of the instructor.

MUS 108 Music Theory II (H C) 3 credits
Prereq: MUS 107

MUS 111 Chorus (H L) 1 credit per semester (maximum 4 credits)
Performance of choral works from the various style periods, folk music, and popular repertoire. Choral techniques. Required of the potential music major whose performance field is voice, keyboard or guitar. Available as an elective to qualified non-music majors. Also open for participation, without credit, to qualified members of the college staff and the community.
Prereq: None

MUS 115, 116, Applied Music 2 credits 215, 216 (H L) per semester (maximum 8 credits)
Individual instruction on the major instrument or voice. Includes technique, interpretation of literature and sight reading. A final jury examination required each semester. Required of the potential music major. Open on a limited basis to non-music majors with previous training. Applied music fee charged in addition to regular college tuition and fees.
Prereq: For MUS 115, permission of full-time music faculty; for MUS 116, MUS 115 required; for MUS 215, MUS 116 required; for MUS 216, MUS 215 required.

MUS 117, 118, Class Piano 1 credit 217, 218 (H L) per semester (maximum 4 credits)
Fundamentals of piano technique. Includes basic scales, melodic harmonization, transposition and sight reading. Required of potential music majors who lack keyboard proficiency. Open to non-music majors on a space-available basis.
Prereq: For MUS 117, permission of full-time music faculty; for MUS 118, MUS 117 required; for MUS 217, MUS 118 required; for MUS 218, MUS 217 required.

MUS 123 Instrumental Ensemble 1 credit (H L) per semester (4 credits maximum)
Study and performance of chamber music literature for orchestral instruments. Literature includes duos, trios, quartets from the various historical periods.
Prereq: Permission of the instructor.

MUS 133 Band (H L) 1 credit per semester (maximum 4 credits)
Study and performance of music arranged and scored for band instruments. Music covers various styles—jazz, Dixieland, popular, and rock. Includes some improvisation.
Prereq: Permission of the instructor.
NUR 101 Fundamentals of Nursing (X) 7 credits

Designed to provide a foundation for nursing practice. The student is introduced to the concepts of health, illness, and adaptation. The nursing process is presented as a foundation for nursing practice. Emphasis is placed on assessment of the individual's ability to adapt to stressors and on the basic skills needed to assist the individual in this process.

Prereq: High school chemistry or Chemistry 101.

NUR 102 Family-Centered Nursing (X) 7 credits

Designed to introduce the student to the uniqueness of the family within our changing society. Emphasis is placed upon assisting the family in the process of adapting to child bearing and child rearing. The nursing process is utilized as it relates to the nursing care of pregnant families and children. The course is divided into two units: the maternity unit and the pediatric unit. The maternity unit focuses on the normal maternity cycle, including the needs of the neonate, the newly delivered mother and the family. Emphasis in the pediatric unit is on the ability to recognize normal growth and development and to identify deviations within the acute and chronic setting.

Prereq: SOC 101 or concurrent enrollment in SOC 101, NUR 101, and PSY 217 or concurrent enrollment in PSY 217.

NUR 201 Adaptation to Illness: Medical-Surgical Nursing I (X) 8 credits

Designed to provide correlation between nursing theory and clinical practice. Emphasis is placed upon assessment of the level of adaptation and the nursing process. Individual needs of patients located at some point on the health-illness continuum form a basis for the integration of pharmacology, nutrition, diet therapy and interpersonal relationships into a developing framework of knowledge.

Prereq: NUR 101, NUR 102

NUR 202 Adaptation to Illness: Medical-Surgical Nursing II (X) 9 credits

A continuation of Nursing 201. Additional depth and breadth is provided focusing on pathophysiology. Emphasis is placed upon the mechanisms of adaptation and the use of the nursing process. In addition, concepts of rehabilitation, the teaching-learning process, family and community psychodynamics, and nursing leadership are presented to provide the student with a more comprehensive view of the nursing process and the ability to promote patient adaptation.

Prereq: NUR 201, NUR 203.

NUR 203 Mental Health Nursing 4 credits

Focuses on mental health nursing principles in the formulation of a therapeutic approach to patient care. People are viewed holistically as complex organisms in constant interaction with physiological and psychosocial stressors. The nurse is viewed as a facilitator of adaptation, using the nursing process to establish a plan of care based on an understanding of the individual, family and society.

Prereq: NUR 101, NUR 102.

NUR 204 Historical and Professional Trends in Nursing (X) 2 credits

Focuses on the political, social, economic and legal issues that influence the nursing profession. The history of nursing, professional organizations, educational and employment opportunities in nursing are considered. Nursing is viewed as a dynamic profession in which the nurse is a facilitator of adaptation to the changes which result from constant interaction with socio-economic and politicolegal forces in our health care delivery system.

Prereq: NUR 101, NUR 102, NUR 201, NUR 203.

Outdoor Leadership

OLP 107 Canoeing Workshops (X) 2 credits

The basic skills and strategies of both flat water and white water canoeing. The course emphasizes skills development and safety. Course can lead to qualification for the American Red Cross Basic Canoeing Certificate.

Prereq: OLP participants only.

OLP 110 White Water Canoeing 1 credit for Outdoor Leaders (X)

Advanced skills and strategies of white water canoeing, with special emphasis on the incorporation of white water events into challenge adventure programs. Students required to meet performance criteria in different skills areas.

Prereq: OLP participants only.

OLP 111 Introduction to Outdoor Adventure Programs and Services (X) 3 credits

Provides the information and training needed for planning and implementing outdoor leadership and challenge adventure programs. Includes the philosophy, content and methods of outdoor programs. Emphasis on the adaptation to different sets of circumstances and the needs of special populations. Students are required to meet specific performance criteria as a demonstration of competence.

Prereq: OLP participants only.
OLP 112 Counseling and Human Services for Outdoor Leaders (X)

An introduction to the basic concepts and techniques of interpersonal counseling, environmental psychology, and special needs' populations. The course emphasizes the mastery of techniques through problem solving and field applications. Incorporation of the skills and knowledge into outdoor activities is stressed.
Prereq: OLP participants only.

OLP 116 Field Work Experience 4 credits in Outdoor Leadership I (X)

Field experience in the basic stages of planning, organizing and evaluating outdoor leadership and challenge adventure programs. Settings will vary to permit exposure to different circumstances and the needs of different populations.
Prereq: For OLP participants only.

OLP 120 Advanced First Aid and 3 credits in Emergency Care (X)

Course based on American Red Cross standards. Includes CPR training and certification. Special emphasis on emergency care and the first-aid skills needed by outdoor leaders.
Prereq: OLP participants only.

OLP 124 Environmental Interpretation (X)

An introduction to the interpretation of the natural and cultural environments. Focus upon specific taxonomical understanding of environments. The development of specific leadership techniques and related methods and materials of interpretation. Field oriented in design and structure.
Course emphasizes the incorporation of interpretation aspects into outdoor programs.
Prereq: OLP participants only.

OLP 127 Outdoor Adventure, Methods and Materials (X)

An introduction to challenge adventure and outdoor activities. Presents these activities as vehicles for promoting individual confidence, group cooperation and environmental understanding. Students must meet certain performance criteria to demonstrate acquired competencies.
Prereq: OLP participants only.

OLP 131 Outing Sports I (X) 3 credits

Provides fundamental information and background, as well as basic skills training in the area of rock climbing, cross country skiing, and survival. The course emphasizes the mastery of techniques through practice, problem solving and field application approaches. Students will be required to meet certain performance criteria in each area.
Prereq: OLP participants only.

OLP 133 Outing Sports II (X) 3 credits

Provides fundamental background and information, as well as skills training, in the areas of bicycle touring, homesteading, and winter camping. The course emphasizes the mastery of techniques through practice, problem solving and field application. Students will have to meet certain performance criteria within each area.
Prereq: OLP participants only.

OLP 216 Field Work Experience 4 credits in Outdoor Leadership II (X)

Field experience in the advanced stages of planning, organizing and evaluating outdoor leadership and challenge adventure programs. Emphasis will be given to fashioning and modifying the design of program to suit particular agency and population requirements.
Prereq: OLP participants only.

Philosophy

PHI 101 Logic and Scientific Method (H C) 3 credits

Traditional logic; the deductive process of reasoning and method of knowing and handling the material of science; the inductive process.
Prereq: None

PHI 103 Introduction to Philosophy (H C) 3 credits

Introduction to the major, classical philosophical problems through a thematic approach. Emphasis on active, informal discussion of contemporary issues.
Prereq: None

PHI 105 Ethics and Contemporary Issues (H C) 3 credits

Moral and value systems; special attention to modern ethical thought. Method will be philosophical rather than descriptive or behavioral.
Prereq: None

PHI 107 Comparative Religion 3 credits (H L)

A survey of the beliefs and practices of the world's living religions; a definition of what religion is and an examination of the religious experience.
Prereq: None

Physics

PHY 101 General Physics I (N C) 4 credits

A non-calculus study of mechanics, heat, and sound for students without a calculus background, but who anticipate continued study in the fields of science, mathematics, engineering, or related fields. Laboratory required.
Prereq: Trigonometry, concurrent math, or permission of the instructor.
PHY 102 General Physics II (N C) 4 credits
A continuation of PHY 101, non-calculus treatment of the fields of light, electricity, and magnetism, and atomic and nuclear physics with some topics from modern physics. Laboratory required.
Prereq: PHY 101, concurrent math, or permission of the instructor.

PHY 111 General Physics I with Calculus (N C) 4 credits
A calculus-based physics course intended primarily for those students who are preparing for careers in science, mathematics, or engineering. Includes mechanics, heat, and sound. Laboratory required.
Prereq: MAT 201 concurrently or permission of the instructor.

PHY 112 General Physics II with Calculus (N C) 4 credits
A continuation of PHY 111 covering the fields of light, electricity, and magnetism, nuclear and atomic physics, and selected topics from modern physics. Laboratory required.
Prereq: PHY 111, MAT 202 concurrently, or permission of the instructor.

Political Science

POL 101 American Politics (B C) 3 credits
American national government and politics. The principles, processes, and institutions which make up the American political system: constitutional framework; federalism; interest groups, parties, elections; Congress; the Presidency; the judicial system. Policy-making and contemporary problems.
Prereq: None

POL 103 Comparative Politics 3 credits (B C)
Political institutions and processes in Great Britain, France, Germany, and the U.S.S.R. Selective comparisons with non-European political systems.
Prereq: None

POL 105 International Politics 3 credits (B C)
Traditional principles of international relations and emerging new problems from a political perspective—population, environment, energy, natural resources, economic interdependence, rapid technological change. Provides a global context for dealing with new and developing international considerations.
Prereq: None

POL 201 Government and Politics of the Soviet Union (B C) 3 credits
Emergence and development of the Soviet system; pre-communist Russian history; Marxism-Leninism; the Soviet system under leaders from Lenin to the present; Soviet foreign policy.
Prereq: POL 103 or permission of the instructor.

POL 203 American Civil Liberties 3 credits (B C)
Freedom of expression in history and in contemporary America; the role of the Supreme Court in the maintenance of civil liberties; the influence of official and popular pressures. Includes consideration of religion, assembly, the press, and speech, as well as the rights of the accused and constitutional standards of equality.
Prereq: None

Psychology

PSY 101 Principles of Psychology (B C) 3 credits
Introduction to the study of human behavior. Considers such topics as perception, motivation, learning, personality development, and the dynamics of maladaptive behavior.
Prereq: None

PSY 203 Child Psychology (B C) 3 credits
Understanding maturation stages and the process of socialization; deals with cognitive, moral, intellectual and personality development; covers birth to adolescence.
Prereq: PSY 101

PSY 205 Adolescent Psychology (B C) 3 credits
Principles of pre-adolescent and adolescent development examined from biological, sociocultural and psychodynamic perspectives.
Prereq: PSY 101

PSY 207 Psychology of the Exceptional Child (B C) 3 credits
Understanding the nature of physical, psychological and intellectual handicaps. Needs assessment, diagnostic procedures and remedial approaches. Levels and degrees of impairment, as well as special needs of the gifted child are also discussed.
Prereq: PSY 101

PSY 209 Abnormal Psychology 3 credits (B C)
Dynamics and symptomatology consistent with major organic and non-organic based problem behaviors including psychoses, neuroses, personality disorder, retardation, and brain damage.
Prereq: PSY 101
PSY 211 Psychology of Education (B C) 3 credits
Psychological principles and concepts related to educational settings; special emphasis on learning, motivation, psychological testing and measurement.
Prereq: PSY 101

PSY 213 Psychology of Interpersonal Behavior (B C) 3 credits
Interpersonal determinants of human behavior. Theoretical models by Adler, Horney, Fromm and Berne. Major emphasis on Transactional Analysis as developed by Berne.
Prereq: PSY 101

PSY 215 Theories of Personality 3 credits (B C)
An examination of the three major schools of psychology and their related personality theories. Psychoanalytic, behavioristic, and humanistic theory will be viewed through the works of Freud, Jung, Skinner, Rogers and Maslow.
Prereq: PSY 101

PSY 217 Human Growth and Development (B C) 3 credits
A survey of human physical, psychological, and social development from birth through death. Framework for the study of the individual's cumulative, integrative growth experience. Theories of development and their applications.
Prereq: PSY 101 or permission of the instructor.

PSY 221 Environmental Psychology (B C) 3 credits
Examines the relationship between built and natural environments and human behavior. Explores research methods, small group ecology, large group ecology, architectural design, social ecological design, future environments. Group projects and field trips required.
Prereq: PSY 101

Reading

REA 100 Developmental Reading Skills (X) 3 credits
Development of reading and study skills for increased comprehension and speed, vocabulary building, and critical reading. Techniques for effectively and efficiently obtaining information from reading materials especially textbooks.
Prereq: None

Recreation Leadership

REC 101 Introduction to Recreation and Human Services (A) 3 credits
Considers the growing field of recreation and human services, including its history, philosophy, and principles as related to the use of leisure; recreation as a social force. Especially designed to create an awareness of career opportunities in the profession of recreation.
Prereq: None

REC/EDU 103 Creative Experiences in Art, Music, Drama and Dance (X) 3 credits
A survey course dealing with the methods, materials, content and theory of the arts. Concentration on rationale, leadership, attitude, and exposure. Credit will be granted for REC 103 or EDU 103, but not for both.
Prereq: REC or ECE major or permission of instructor.

REC 107 Recreational Sports (X) 3 credits
Participation, demonstrations and lectures acquaint students with a variety of sports and games applicable to a recreation setting. Emphasis on organizing and conducting a community sports program. Includes teaching techniques utilized in recreational sports.
Prereq: None

REC 109 Program Planning (X) 3 credits
Principles and methods of program development. Emphasis on gaining a thorough understanding and working knowledge of recreational programs applied to a variety of settings. Analysis of program objectives. Development of leadership skills.
Prereq: None

REC 111 Environmental Recreation 3 credits (X)
The meaning and significance of Environmental Recreation in contemporary society. Deals with the needs of different age groups and special populations. Emphasizes planning, organizing, conducting, and evaluating programs and activities in the areas of outdoor recreation, outdoor education, and environmental education. Special concern for practical activities and experiences in the out-of-doors. Provides laboratory experiences, field trips, and leadership practice in the areas of nature-oriented activities, outing sports and environmental education. Field trips and outings in the Connecticut River Valley and Central New England.
Prereq: None

REC 115 Field Work I (X) 3 credits
Experience in planning, organizing, conducting, and evaluating recreation programs in a local agency. Settings change each semester.
Prereq: None
**RECAP Field Work II (X)  2 credits**
Experience in planning, organizing, conducting, and evaluating recreation programs in a local agency. Settings change each semester.
Prereq: None

**REC 119 Advanced First Aid and C.P.R. (X)  3 credits**
Diagnosis and treatment of emergency needs of the human body. Approved for American National Red Cross certification in standard first aid and personal safety as well as in cardiopulmonary resuscitation.
Prereq: None

**REC 120 Emergency Care (X)  1 credit**
Diagnosis and treatment of emergencies common to winter sports. Includes cardiopulmonary resuscitation with American National Red Cross certification.
Prereq: None

**REC 129 Survival (X)  1 credit**
An introduction to the basic techniques and methods of human survival in city, suburbs and backlands. Direct experience laboratories will focus upon the interaction of weather, terrain, body limitations, and personal attitudes in solving survival problems.
Prereq: None

**REC 205 Recreation Seminar (X)  3 credits**
A survey of the major philosophical and practical applications of recreation leisure and human services in a changing society. Special emphasis on personal development and on the "Humanistic Perspective" of the profession. The workshop/seminar format permits the application of previous learning to new settings and different populations. Includes proposal writing, publicity release principles, audio-visual techniques and counseling strategies.
Prereq: Sophomore Recreation majors only or permission of instructor.

**REC 215 Field Work III (X)  3 credits**
Experience in planning, organizing, conducting, and evaluating recreation programs in a local agency. Settings change each semester.
Prereq: None

**REC 216 Field Work IV (X)  3 credits**
Experience in planning, organizing, conducting, and evaluating recreation programs in a local agency. Settings change each semester.
Prereq: None

**Science**

**SCI 101 Physical Science I (N C)  3 credits**
A fused treatment of the major principles normally dealt with in chemistry and physics. Covers the broad areas of matter, matter in motion, energy and its transformations, interactions of matter and energy. No laboratory.
Prereq: High School algebra recommended but not required.

**SCI 102 Physical Science II (N C)  3 credits**
A fused treatment of the major principles normally dealt with in chemistry and physics. Emphasis upon modern developments and their impact upon society. Includes the philosophical and sociological influences of science in our modern culture. No laboratory.
Prereq: High School algebra recommended but not required.

**SCI 103 Astronomy (N C)  3 credits**
Topics to be covered include: The celestial sphere and the Copernican Revolution, Stellar evolution, stellar observation and measurement, the HR diagram, Novae, Pulsars, and Black Holes, the Big Bang, Relativity and the shape of the universe. Mathematics content will be minimal.
Prereq: None

**SCI 104 Energy—Issues, Principles, and Management (N L)  3 credits**
An ENERGY course, covering both the technical and economic aspects, designed on a need-to-know basis primarily for the non-science oriented student who feels the need to be informed about this field of critical importance to the survival of modern man. Includes some practical applications of conservation principles.
Prereq: None

**Sociology**

**SOC 101 Principles of Sociology  3 credits**
(B C)
The study of society through basic concepts and scientific methodology. Examines culture, social systems, institutions, status, role, norms, interaction, deviance, small groups, and social stratification.
Prereq: None
SOC 105 Sociology of Work  4 credits  
(B C)

The historical and cultural development of work with emphasis on economic and socio-
cial cycles developed through the process of socialization and stratification. The impor-
tance of understanding these cycles in determining individual career patterns. To include vocational testing and counseling.
Prereq: None

SOC 201 Social Problems  (B C) 3 credits

Major types of deviant behavior in American society: description, theories of causation, and ramifications for the future.
Prereq: SOC 101

SOC 203 Sociology of the Family  3 credits  
(B C)

Historical background and cross-cultural factors. Attention to the cycle of court-
ship, marriage, child raising, and marital dissolution. Contemporary trends and the future of the family in society.
Prereq: SOC 101

SOC 205 Myth, Magic and Religion: The Search for Meaning  (B C)

This course explores the various means, from childhood fairytale to myth and religion, whereby man transforms his day to day existence into an experience charged with greater force and meaning.
Prereq: SOC 101 or ANT 104.

SOC 207 Sociology of Law  (B C) 3 credits

The study of law with cross-cultural comparisons, the administration of justice, courts, lawyers, and the police from a socio-

cological perspective. The impact of the legal system on the rest of society.
Prereq: SOC 101

Spanish

SPA 101 Elementary Spanish I  3 credits  
(H C)

Introduction of the language through con-
versation followed by a systematic study of practical grammar and phonetics. Read-
ings correlated with what is learned through conversation. For beginners and students who have not successfully com-
pleted one year of high school Spanish. Laboratory required.
Prereq: None

SPA 102 Elementary Spanish II  3 credits  
(H C)

Development of basic language skills through conversation, study of grammar and phonetics, and correlated readings. For students who have successfully com-
pleted one year of high school Spanish. Laboratory required.
Prereq: None

SPA 201 Intermediate Spanish I  3 credits  
(H C)

Refinement of written and conversation skills, through selected readings in literature.
Prereq: SPA 102, or permission of the instructor.

SPA 202 Intermediate Spanish II  3 credits  
(H C)

Further development of conversational and technical fluency. Continued considera-
tion of Spanish literature to provide increased awareness of Spanish culture.
Prereq: SPA 201, or permission of the instructor.

SPA 251 Spanish Composition and Conversation  3 credits  
(H C)

Refinement of writing and speaking skills on an advanced level. Written and oral assignments required weekly.
Prereq: SPA 202, or equivalent, or permission of the instructor.

Speech

SPE 101 Oral Communication  3 credits  
(S L)

Principles and practice, stressing the concept of speaker-listener interaction. Participation in a variety of speech situations.
Prereq: None

SPE 107 Phonetics: Speech and Voice Development  (H L)

Emphasis on speech sounds and their production; hearing, anatomy of the vocal mechanism; causes of and corrective measures for certain common speech problems.
Prereq: None

SPE 121 Group Discussion: Problem Solving  3 credits  
(H L)

Communicating in small groups. The discussant as speaker and listener, causes and cures of communication breakdown, development of skills in effective communication and problem solving.
Prereq: None

SPE 201 Persuasive Speaking  3 credits  
(H L)

The art of persuasion. Emphasis on the roles of semantics, propaganda, human motivation, proof, evidence, ethics.
Prereq: SPE 101 or permission of the instructor.

SPE 203 Argumentation and Debate  3 credits  
(H L)

An introduction to the essential elements of debate with emphasis on preparation and presentation.
Prereq: SPE 101 or permission of the instructor.
**Theater**

**THE 103 Introduction to the Theatre (H L)**

Play reading and analysis, drama criticism, theatre history, forms of drama and the process of play production studied with the aim of increasing appreciation of the theatre and enjoyment of the dramatic experience. Field trips to plays and theatres.

Prereq: None

**THE 105 Oral Interpretation of Literatures (H L)**

Oral interpretation of the poem, essay, short story, and play; emphasis on literary analysis as the foundation of performance. Workshop method: small group preparation of individual selections.

Prereq: None

**THE 111 Fundamentals of Acting and Directing (H L)**

Introduction to the arts of acting and directing with emphasis on characterization and movement, using the techniques of improvisation and script analysis. Theatrical involvement includes monologues, duet scenes, and one act plays.

Prereq: None

**THE 115 Summer Theatre Workshop (H L)**

Intensive training in theatrical production, rehearsal and performance. Registration in advance required.

Prereq: Permission of the instructor.

**THE 133 College Theatre Workshop (H L)** per semester, maximum 4 credits

Practical experience in acting, house management, public relations, publicity, shop, and production crews. No more than one credit may be earned in any given semester. Work on the major production for the semester is required.

Prereq: None
Personnel

Greenfield Community College Advisory Board 1980-81
Robert F. Casey, Secretary/Treasurer  
Helen Doyle  
Margaret C. Dwyer  
William L. Hubbard  
Ward M. Hunting, Chairperson  
Dawn Peters  
Robert V. Poirier  
Morton A. Slavin, Vice Chairperson  
Greenfield  
Ashfield  
Hadley  
Sunderland  
New Salem  
Heath  
Greenfield  
Erving

Massachusetts Board of Regional Community Colleges 1980-81
Gregory R. Anrig  
John F. Bradshaw, Chairperson  
Muriel E. Camarra, Vice Chairperson  
Laura Clausen  
John S. Davagian II  
Stephen C. Drake (SAC Representative)  
Janet Eisner, Secretary  
Charles C. D. Hamilton  
John T. Hickey  
Errol Y. Jacobsen  
David C. Knapp  
Francis J. Pilecki  
Robert O. Simha  
Alan Sinclair  
Fred T. Thompson  
Donald Walker  
Boston  
Newburyport  
West Boylston  
Boston  
Concord  
Springfield  
Boston  
Holyoke  
Concord  
Boston  
Westfield  
Cambridge  
Providence, R.I.  
North Adams  
North Dartmouth

Office of the President
Nancy L. Goodwin  
B.A., MacMurray College  
M.A., University of Colorado  
Ph.D., University of Illinois  
Luella B. McLaughlin  
Robert L. Merriam  
B.A., Dartmouth College  
Robert D. DiCarlo  
B.A., Suffolk University  
M.A., Northeastern University  
Alice M. Ciapp  
President  
Secretary to the President  
Director of Development and Affirmative Action  
Director of Planning and Sponsored Research  
Secretary, Office of the President

Office of Academic Affairs
Toby B. Sutton  
B.A., University of California  
M.S.T., Cornell University  
Elizabeth T. Ballou  
Secretary to the Dean of Academic Affairs

Library/Learning Resources
Margaret E. C. Howland  
B.A., Hofstra University  
M.S.L.S., Southern Connecticut State College  
M.P.A., University of Massachusetts  
Marilyn R. Golosh  
Secretary/Senior Library Assistant  
Gloria K. L. C. Ku  
B.A., National Taiwan Cheng-Kung University  
M.S.L.S., Atlanta University  
Norma T. Spicher  
B.A., Keene State College  
M.L.S., University of Rhode Island  
Jo-Ann I. Williams  
Junior Library Assistant  
Vesta Keller  
Senior Clerk/Steno.

Media Services
Robert R. Tracey  
B.S.E., Westfield State College  
M.Ed., University of Massachusetts  
Thomas W. Boisvert  
Assistant Director of Instructional Media  
B.S., University of Maine at Portland-Gorham  
M.Ed., Utah State University  
Denis J. Daly  
A.S., Greenfield Community College  
Television Technician  
Garry M. Longe  
A.S., Greenfield Community College  
Media Technician  
Susan J. Markwell  
A.A., Greenfield Community College  
Media Assistant

Disadvantaged Student Program
Amy Pfeil  
B.S., Columbia University  
M.A., Teachers College  
M.A., Hunters College, CUNY  
Director
### Career Counseling

**Coordinator**
Garrett McAuliffe  
B.A., Queens College of the City University of New York  
M.S., Ed.S., State University of New York at Albany

### Office of Administrative Services

**Dean of Administrative Services**  
Charles E. Carter  
B.S.C.E., Duke University  
M.B.A., American International College

**Assistant Dean of Administrative Services**  
Henry G. Boucher, Jr.  
B.A. - M.B.A., University of Massachusetts

**Administrative Assistant**  
Martha Markwell

### Auxiliary Services

**Director**  
John R. Evans

**Junior Accountant**  
Elizabeth Rosewarne

**Senior Clerk/Typist**  
Lennie Togneri

**Clerk**  
Edith Bartos  
Carolyn Sautter  
Theresa Uniatis

### Business Office

**Junior Account**  
June Richardson  
Virginia Callaghan  
Dorothy Mullins  
Joyce Paciorek

### Data Processing

**Director**  
Frank Mirabello  
B.S., University of Massachusetts

**Computer Programmer**  
Sylvia Carey

**Computer Operator**  
Sandra Haughey

**Junior Operator**  
Michael Mills

### Personnel Office

**Personnel Administrator**  
Jeffrey Wallace

**Payroll/Personnel Clerk**  
Raymonde Pollard

### Plant Operations

#### Custodial & Grounds

- John A. Markwell, Jr.  
  A.A., Greenfield Community College  
- Working Foreman
- Robert Robarge  
  Head Custodian
- Hulbert Denison  
  Custodian
- Judith Flynn  
  Custodian
- Andrew Hernandez  
  Custodian
- Arthur Kelley  
  Custodian
- Phylis Schempp  
  Custodian
- Barry Webber  
  Custodian
- Robert Wyman  
  Custodian
- James Younger  
  Custodian
- William Symanski  
  Head Groundskeeper
- Joseph Audette  
  Motor Equipment Repairman  
  A.S., Stockbridge, University of Massachusetts
- Timothy Shippee  
  Groundskeeper  
  A.A., Greenfield Community College

#### Maintenance

**Institutional Maintenance Foreman**  
John Pride  
A.A./A.S., Greenfield Community College  
B.S., University of Massachusetts

- Carpenter
- Electrician
- Painter
- Mechanical Handyman

#### Plant

- Controls Specialist  
  Sterling Clark
- Instrument Technician  
  James Franklin  
  A.S., Wentworth Institute
- Refrigeration Technician  
  Frank Hill
- AV/TV Technician  
  Perry Cole

#### Security & Communications

- Security/Safety Officer  
  George McLaughlin
- Duplicating Services Technician  
  Jean Call
- Switchboard Attendant  
  Diane Kuzmeskus
- Switchboard Attendant  
  Phyllis Meyer
- Switchboard Attendant  
  James Williams
- Mail Clerk
Shipping & Inventory
Hubert Carignan
A.S., Greenfield Community College

Office of Continuing Education and Community Services
Ethel M. Case
B.A., Brooklyn College
M.A., Columbia University
M.P.A., University of Michigan
Raelee W. Cohen
Secretary to the Dean of Continuing Education

Elsa Bakalar
Ed. D.I.P., Bishop Otter College
Sussex, England

Diana Roberts
Evening Division Secretary

Office of Student Services
Ethel M. Case
B.A. Brooklyn College
M.A. Columbia University
M.P.A. University of Michigan

Helene A. Wegrzynek
A.A., Greenfield Community College

Student Personnel
Beryl Berndt
B.A., Bates College
M.Ed., University of Vermont

Donald W. Brown
B.S., M.Ed., Springfield College

Margaret Campbell
B.A., Drew University
M.Ed., Springfield College

Robert M. Yacubian
B.S., B.A., Babson College
M.Ed., C.A.G.S., University of Massachusetts

Jane Filkins
B.S.C., University of West Indies
Diploma of Education, University of West Indies
M.A., Ph.D., Columbia University

Student Activities
Merryl Sackin
B.S., Montclair State College

Sharon Fiske
Secretary, Student Activities

Health Services
Nancy L. Buchanan
R.N., Massachusetts General Hospital
Certificate in College Health Nursing, University of Massachusetts

William R. Buchanan, M.D.
B.A., Yale University
M.D., Harvard Medical School
Massachusetts General Hospital

John S. Follet, M.D.
B.S., LaSalle University
M.D., University of Colorado

Janet Kazar
R.N., Massachusetts General Hospital

Assistant Nurse

Athletics
John Palmer
B.S., M.Ed., Norwich University

Director of Athletics

Division of Behavioral Sciences
Arthur J. Hannan
Chairperson, Division of Behavioral Sciences, Psychology

Eleanor M. Maynard
Secretary, Division of Behavioral Sciences

Jeanne A. Ashley
Coordinator, Recreation Leadership

Lawrence H. Buell
B.S., Springfield College
M.S., Pennsylvania State University

Recreation Leadership

Edwin Chin-Shong
B.S.C., University of West Indies
Diploma of Education, University of West Indies

Sociology
Division of Business Administration

Alan F. Rainford  Chairperson, Division of Business Administration
B.S., Southeastern Mass. Univ.  Administration, Accounting
M.B.A., American International College

Ruth Gillett  Secretary, Division of Business Administration

Janet G. Balise  Office Administration
B.S., American International College
M.Ed., Boston University

Joseph J. Brouillette  Accounting
B.B.A., M.B.A., Western New England College

Shirley M. Evans  Office Administration
B.S., Salem State College
M.Ed., Boston University

Eleanor Goodman  Division Counselor
B.S., University of Utah
M.Ed., University of Massachusetts

Herbert T. Homme  Economics and Management
B.S., Roosevelt University
M.B.A., University of Massachusetts

Earl D. Morgan  Coordinator, Office Administration
B.S., Salem State College
M.A.T., American International College

Norman J. Muller  Office Administration
B.S., American International College
M.Ed., Westfield State College

John S. Reino  Marketing and Management
B.S., Boston College
M.B.A., Northeastern University

Albert L. Sheaffer  Management
A.A., Greenfield Community College
B.B.A., M.B.A., University of Massachusetts

Robert J. Welsh  Marketing and Management
B.S., M.S., Ed.D., Syracuse University

Division of Humanities

Helen E. Ellis  Chairperson, Division of Humanities
B.A., University of Massachusetts
M.A.T., Smith College
Ph.D., University of Massachusetts

Eleanor W. Stebbins  Secretary, Division of Humanities
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree(s)</th>
<th>Institution</th>
<th>Field</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federico L. Agnir</td>
<td>B.A., University of Phillipines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B.D., Silliman University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.A., Syracuse University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>George Bluh</td>
<td>B.S., M.A.A., University of Colorado</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thomas Boisvert</td>
<td>B.S., University of Southern Maine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.Ed., Utah State University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Bross</td>
<td>B.S., M.S., Indiana University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.A., M.F.A., University of Iowa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bernard Drabeck</td>
<td>A.B., College of Holy Cross</td>
<td></td>
<td>Coordinator, English</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.A., Ph.D., University of Massachusetts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peter H. Dudley</td>
<td>B.F.A., Rhode Island School of Design</td>
<td></td>
<td>Art</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.F.A., University of Massachusetts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. James Godwin</td>
<td>B.A., Kings College</td>
<td></td>
<td>English, Speech-Drama</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.A., Pennsylvania State University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saul Greenblatt</td>
<td>B.S., M.S., Emerson College</td>
<td></td>
<td>Speech</td>
<td></td>
</tr>
<tr>
<td>T. Budge Hyde</td>
<td>B.F.A., University of Utah</td>
<td></td>
<td>Coordinator, Art</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.F.A., University of Cincinnati</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia B. Low</td>
<td>B.A., William Smith College</td>
<td></td>
<td>English</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.A., University of Massachusetts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phyllis Nahman</td>
<td>B.A., M.Ed., University of Massachusetts</td>
<td>English and Coordinator, Developmental Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Divisional Counselor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>David Patrick</td>
<td>B.A., Brooklyn College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.S., Long Island College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hartley A. Pfeit</td>
<td>B.Ed., Keene State College</td>
<td></td>
<td>English</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.A., Middlebury College</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joan T. Rising</td>
<td>B.F.A., Syracuse University</td>
<td></td>
<td>Art</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.F.A., University of Massachusetts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wilson Roberts</td>
<td>B.A., Drew University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.A., Appalachian State University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pamela Sacher</td>
<td>B.A., Cleveland Institute of Art</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.A., University of Montana</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arthur W. Shaw</td>
<td>A.A., B.S., M.Div., D.Min., Boston University</td>
<td></td>
<td>Philosophy, Journalism, English</td>
<td></td>
</tr>
<tr>
<td>Saul Sherter</td>
<td>B.A., Northeastern University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.A., Boston University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>George Soulos</td>
<td>B.M., M.M., Hartt College of Music</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herbert F. Steeper</td>
<td>A.B., Stanford University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A.M., M.A.L.D., Ph.D., Fletcher School of Law and Diplomacy, Tufts-Harvard Universities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Margaret W. Stein</td>
<td>B.F.A., Syracuse University</td>
<td></td>
<td>Art</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.F.A., University of Massachusetts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>William R. Sweeney</td>
<td>B.A., M.A., Columbia University</td>
<td></td>
<td>English</td>
<td></td>
</tr>
<tr>
<td>Elizabeth W. Van Guilder</td>
<td>B.A., M.A., University of Massachusetts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thomas Young</td>
<td>B.A., Goddard College</td>
<td></td>
<td>Art</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M.F.A., Rhode Island School of Design</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Adjunct Faculty (Humanities)**

- **Anne C. Borton**
  - B.M., M.M., Westminster Choir College
  - Music

- **Elisabeth Leete**
  - Diploma de Estudios, University of Santrado
  - B.A., University of Massachusetts
  - French

- **Carolyn Nims**
  - A.A., Greenfield Community College
  - B.A., M.A.T., Smith College
  - English

- **Henry Perez**
  - A.A., Mass. Bay Community College
  - B.A., University of Massachusetts, Boston
  - M.A., Ph.D., University of Massachusetts, Amherst
  - Spanish
Howard Singer  
B.A., Colorado University  
M.F.A., Columbia University  
A.B.A., Florida State University

Robin Stone  
B.M., Eastman School of Music  
M.M., New England Conservatory of Music

Richard Wizansky  
B.A., Boston University  
M.A., Tufts University

Division of Natural Sciences

Carleton P. Stinchfield  
Chairperson, Division of Natural Sciences, Coordinator, Fire Science Chemistry  
B.A., Colby College  
M.S., Northeastern University

Crickett G. Spooner  
Secretary, Division of Natural Sciences

Judy Kennedy  
Secretary, Nursing Program

Jean A. Ball, R.N.  
A.S., Greenfield Community College  
B.S., St. Anselm's College

David C. Bartlett, P.E.  
Coordinator, Engineering Technologies  
A.E.E., Worcester Junior College  
B.S.C.E., M.S.C.E., University of Massachusetts

Carolyn Sue Bradley, R.N.  
Acting Director, Department of Nursing  
A.A., East Los Angeles College  
B.S.N., California State College, San Bernardino  
P.H.N., M.S.N., California State University, Los Angeles

Robert J. Cohen  
B.S., University of Pennsylvania  
M.A.T., Smith College

David A. Harvey  
B.A., Taylor University  
M.Ed., Bridgewater State College  
M.A., Ohio State University

Christina Krutsky, R.N.  
B.S., University of Massachusetts  
B.A., Earlham College

Arlene J. Laflamme, R.N.  
B.S.N., University of Massachusetts

Peter R. Letson  
M.A., Hofstra University  
Sc.M., Brown University

Richard D. Little  
B.A., Clark University  
M.A., University of Southern California

Joan M. Merrigan, R.N.  
B.S., Boston College

Donald P. Oberacker  
B.S., Utah State University  
M.S., University of Maryland  
C.A.G.S., University of Connecticut

Edwin C. Peck  
Professor Emeritus in Mathematics  
B.A., Colgate University  
M.A., Syracuse University

Ira H. Rubenzahl  
B.A., Princeton University  
Ph.D., Massachusetts Institute of Technology

Gertrude P. Sheaffer, M.T. (ASCP)  
B.S., Lycoming College  
M.Ed., East Stroudsburg State College

Ronald E. Smith  
A.S., Greenfield Community College

Peter C. Steve  
B.S., University of Rhode Island  
M.S., Ph.D., University of Massachusetts

M. Elaine Tagliareni, R.N.  
R.S.N., Georgetown University  
M.S., University of California

Jean B. Waite, R.N.  
B.S., University of Vermont

Lee A. Webster  
B.C.E., University of Delaware  
M.S., Ph.D., University of Illinois

Adjunct Faculty (Natural Sciences)

Karen A. Dufresne, R.N.  
B.S.N., University of Maine

Warren I. Jonasson  
B.S., M.S., Ph.D., University of Massachusetts

Jane Y. Lunt, R.N.  
B.S., Syracuse University

Doris H. Matte, R.N.  
B.S., Boston University

Earth Science  
Nursing  
Biology  
Physics and Mathematics  
Laboratory Technician  
Environmental Science  
Biology  
Nursing  
Engineering
Dee Harmon Reeves  
A.B., Vassar College  
M.A., Teachers College, Columbia University  

Mathematics

Robert C. Sanguinet  
B.A., St. Anselm's College  

Chemistry

Janet Weinstein  
B.S.N., Fitchburg College  

Nursing
Index

Academic calendar, IBC, 12-13
policies and procedures, 14-16
programs, 12, 22-56
standing, 14
Accounting Associate/Career Program, 31
Accreditation, 3
Adding a Course, 14
Admissions, 4
Advanced Placement, 4
Advising Codes, 58
Advisory Services, 12
American Studies Concentration/Liberal Arts Program, 24
Application admissions, 4
fee, 4
financial aid, 10
graduation, 13
Archibald MacLeish Collection, 20
Art/Career Program, 32
Art Concentration/Liberal Arts Program, 25
Attendance, 14
Book Store, see College Store
Business Administration Concentration/Liberal Arts Program, 26
Calendar, Academic, IBC
Career Counseling, 17
Career Programs, 30-49
Accounting Associate, 31
Art, 32
Criminal Justice, 33
Early Childhood Education, 34
Engineering Science, 36
Fire Science Technology, 37
Graphic Design, 38
Industrial Technologies, 40
Leadership Development in Recreation and Human Services, 42
Management, 43
Management/Data Processing, 44
Marketing, 45
Media Communication, 46
Nursing, 47
Office Administration, 48
Production Management Technology, 49
Certificate of Residency, 8
Certificate Programs, 50-55
Engineering Communications, 51
Fire Science Technology, 51
Graphic Communications, 52
Licensure for Early Childhood Education, 52
Mathematics and Physical Science for Technicians, 53
Office Assistant, 53
Outdoor Leadership, 54
Pioneer Valley Studies, 55
Studio Arts, 55
Classification of Students, 8
College
accreditation, 3
history, 3
philosophy, 3
Commonwealth Transfer Compact, 17
Community Services, 21
Continuing Education, Division of, 21
Continuing Education Program, 21
Cooperative Education Programs, 22
Counseling
career, 17
personal, 18
Course adding, 14
descriptions, 58-91
dropping, 15
repeating, 16
withdrawal, 15
Courses, 58-91
Accounting (ACC), 58
Administration, Office (ADM), 59
Agriculture (AGR), 60
Anthropology (ANT), 60
Art (ART), 61
Biology (BIO), 62
Business (BUS), 63
Chemistry (CHE), 65
Civil Engineering (CIV), 66
Criminal Justice (CRJ), 66
Data Processing (DAT), 68
Directed Study (DS), 68
Early Childhood Education (ECE), 68
Earth Science (EAS), 69
Economics (ECO), 70
Education (EDU), 70
Electronics (ELT), 70
Engineering (EGR), 71
English (ENG, ESL), 71
Environmental Science (ENV), 73
Fire Science Technology (FST), 74
French (FRE), 75
History (HIS), 75
Human Ecology (HEC), 76
Human Development (HUD), 76
Humanities (HUM), 77
Industrial Engineering (IND), 78
Journalism (JOU), 78
Leisure Education (LED), 78
Library Science (LIB), 81
Mathematics (MAT), 82
Media Communications (MCM), 83
Music (MUS), 84
Nursing (NUS), 85
Outdoor Leadership (OLP), 85
Philosophy (PHI), 86
Physics (PHY), 86
Political Science (POL), 87
Psychology (PSY), 87
Reading (REA), 88
Recreation Leadership (REC), 88
Science (SCI), 89
Sociology (SOC), 89
Spanish (SPA), 90
Speech (SPE), 90
Theater (THE), 91
Credit by Evaluation, 4
Credit Overload, 15
Criminal Justice/Career Program, 33
Data Processing Concentration/Liberal Arts Program, 27
Dean's List, 15
Degree Requirements
see Graduation Requirements
Developmental Studies Program, 56
Dining Facilities, 18
Division of
Behavioral Sciences, 94
Business Administration, 95
Continuing Education and Community Services, 21
Humanities, 95
Natural Sciences, 97
Dropping a Course, 15
Early Childhood Education/Career Program, 34
Engineering Science/Career Program, 36
Evening Division, 21
Expenses
estimated for foreign students, 5
estimated personal, 9
Faculty, 94-98
Fees
application, 4
graduation, 13
Laboratory/Institutional Materials (L/IMF), 9
Student Activities, 9
Financial Aid, 10-11
application procedures, 10
awards, 8
Financial Aid Programs, 10
Basic Educational Opportunities Grant, 10
College Work Study Program, 10
Mass. Higher Education Loan Program, 11
Mass. State Scholarship, 11
National Direct Student Loans, 10
### 1980 Fall Semester

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday-Friday</td>
<td>August 28-29</td>
<td>Registration</td>
</tr>
<tr>
<td>Monday</td>
<td>September 1</td>
<td>Labor Day</td>
</tr>
<tr>
<td>Tuesday</td>
<td>September 2</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>Wednesday-Tuesday</td>
<td>September 3-9</td>
<td>Period to Add Classes</td>
</tr>
<tr>
<td>Monday</td>
<td>October 6</td>
<td>Last Day to Withdraw-No Record</td>
</tr>
<tr>
<td>Monday</td>
<td>October 13</td>
<td>Columbus Day - No Classes</td>
</tr>
<tr>
<td>Wednesday</td>
<td>October 22</td>
<td>Deficiency Notices Due</td>
</tr>
<tr>
<td>Tuesday</td>
<td>November 4</td>
<td>Last Day to Withdraw - W</td>
</tr>
<tr>
<td>Tuesday</td>
<td>November 11</td>
<td>Veterans' Day - No Classes</td>
</tr>
<tr>
<td>Thursday-Friday</td>
<td>November 27-28</td>
<td>Thanksgiving Recess</td>
</tr>
<tr>
<td>Monday</td>
<td>December 1</td>
<td>Classes Resume</td>
</tr>
<tr>
<td>Wednesday</td>
<td>December 17</td>
<td>Classes End</td>
</tr>
<tr>
<td>Thursday-Tuesday</td>
<td>December 18-23</td>
<td>Exams</td>
</tr>
<tr>
<td>Monday</td>
<td>December 29</td>
<td>Grades Due in Registrar's Office</td>
</tr>
</tbody>
</table>

### 1981 Spring Semester

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday-Tuesday</td>
<td>January 19-20</td>
<td>Registration</td>
</tr>
<tr>
<td>Wednesday</td>
<td>January 21</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>Thursday-Wednesday</td>
<td>January 22-28</td>
<td>Period to Add Classes</td>
</tr>
<tr>
<td>Monday</td>
<td>February 16</td>
<td>Washington's Birthday - No Classes</td>
</tr>
<tr>
<td>Wednesday</td>
<td>February 25</td>
<td>Last Day to Withdraw - No Record</td>
</tr>
<tr>
<td>Tuesday</td>
<td>March 17</td>
<td>Evacuation Day - No Classes</td>
</tr>
<tr>
<td>Wednesday</td>
<td>March 18</td>
<td>Deficiency Notices Due</td>
</tr>
<tr>
<td>Friday</td>
<td>March 20</td>
<td>Spring Recess Begins</td>
</tr>
<tr>
<td>Monday</td>
<td>March 30</td>
<td>After Last Class</td>
</tr>
<tr>
<td>Thursday</td>
<td>April 2</td>
<td>Classes Resume</td>
</tr>
<tr>
<td>Monday-Friday</td>
<td>April 13-17</td>
<td>Last Day to Withdraw - W</td>
</tr>
<tr>
<td>Monday</td>
<td>April 20</td>
<td>Returning Student Registration for Fall 1981</td>
</tr>
<tr>
<td>Monday</td>
<td>May 18</td>
<td>Patriot's Day - No Classes</td>
</tr>
<tr>
<td>Monday</td>
<td>May 19-22</td>
<td>Classes End</td>
</tr>
<tr>
<td>Tuesday-Friday</td>
<td>May 26</td>
<td>Exams</td>
</tr>
<tr>
<td>Tuesday</td>
<td>May 26</td>
<td>Grades Due in Registrar's Office</td>
</tr>
<tr>
<td>Sunday</td>
<td>June 7</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

---

Greenfield Community College is an Affirmative Action/Equal Opportunity Employer and does not discriminate on the basis of handicap status in its educational programs, activities, or employment policies, as required by Section 504, Rehabilitation Act of 1973, as amended. Further, it is the policy of Greenfield Community College not to discriminate on the basis of sex in its educational programs, activities, or employment policies as required by Title IX of the 1972 Education Amendments. Greenfield Community College is in compliance with the Civil Rights Act of 1964, admitting students without regard to race, color or national origin. Inquiries regarding compliance with Section 504, Rehabilitation Act of 1973, as amended, Title IX of 1972 Education Amendments, and the Civil Rights Act of 1964, may be directed to Robert Merriam, Affirmative Action Office, Greenfield Community College. This school is authorized under Federal law to enroll non-immigrant alien students.