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In accordance with applicable provisions of Chapter 15A of the General Laws all educational programs, college sponsored activities, college tuition, fees, and related charges are subject to change upon approval by the Massachusetts Board of Regents or the Greenfield Community College Board of Trustees.
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.

Mission
Greenfield Community College, as a two-year, publicly supported institution, strives to provide relevant educational services in the most professional, economical and efficient manner possible.

History
Founded in 1962, Greenfield Community College is one of 28 institutions which make up the Massachusetts Public Higher Education 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 governed by a board of trustees of regional residents appointed by the Governor and the Massachusetts Board of Regents.
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.

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 the General Examination and selected College Level Subject Examinations of CLEP; 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. There is a $20.00 non-refundable fee for in-house testing.
International Students

A limited number of international 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.

Prospective students whose native language is other than English are required to submit their scores on the Test of English as a Foreign Language (TOEFL), to the Director of Admissions. Applicants who score less than 550 may be requested to do one or more of the following:

1. To repeat the TOEFL examination to raise their score.

2. To take an examination administered by the College prior to receiving further consideration for admission.

3. To submit additional evidence of English proficiency.

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

TOEFL Program Director
Educational Testing Service
Princeton, New Jersey 08540

International 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 international 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 INTERNATIONAL STUDENTS PER YEAR:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees</td>
<td>$1,852</td>
</tr>
<tr>
<td>Room and Board (food)</td>
<td>3,960</td>
</tr>
<tr>
<td>Books and Supplies</td>
<td>225</td>
</tr>
<tr>
<td>Medical Care and Insurance</td>
<td>150</td>
</tr>
<tr>
<td>Personal Expenses</td>
<td>632</td>
</tr>
<tr>
<td>Transportation (after arrival in U.S.)</td>
<td>744</td>
</tr>
<tr>
<td>TOTAL ESTIMATED ANNUAL COST</td>
<td>$7,563</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 the VA Educational 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 day division classes for those veterans whose GI Bill benefits are still in effect. The waiver has been extended to those veterans attending Continuing Education classes, whose GI Bill benefits have expired, and who still meet the eligibility requirements of the Massachusetts Vietnam Veteran Tuition Exemption. 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.
Financial Obligations
The College requires that all financial obligations be satisfied on time. Failure to do so will result in one or more of the following actions: withholding of College transcripts and financial aid transcripts; imposition of collection service charges; denial of other College services.

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.

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.
Tuition Costs

**FALL 1981**

<table>
<thead>
<tr>
<th></th>
<th>Part-Time</th>
<th>Full-Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts Residents</td>
<td>$23/credit</td>
<td>$254/semester</td>
</tr>
<tr>
<td>Non-Residents</td>
<td>$85/credit</td>
<td>$899/semester</td>
</tr>
</tbody>
</table>

**SPRING 1982**

<table>
<thead>
<tr>
<th></th>
<th>Part-Time</th>
<th>Full-Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts Residents</td>
<td>$24/credit</td>
<td>$288/semester</td>
</tr>
<tr>
<td>Non-Residents</td>
<td>$85/credit</td>
<td>$1,008/semester</td>
</tr>
</tbody>
</table>

**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></th>
<th>Amount Refundable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before classes begin</td>
<td>100 per cent</td>
</tr>
<tr>
<td>During 1st week of classes</td>
<td>90 per cent</td>
</tr>
<tr>
<td>During 2nd and 3rd week of classes</td>
<td>70 per cent</td>
</tr>
<tr>
<td>During 4th week of classes</td>
<td>50 per cent</td>
</tr>
<tr>
<td>After four weeks of classes</td>
<td>None</td>
</tr>
</tbody>
</table>

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

**Graduation Fee**

A $30.00 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.

**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**
(non-refundable)

Each semester a non-refundable L/IMF fee will be charged in accordance with the following schedule:

- 0-5 credit hours $10.00
- 6-11 credit hours 20.00
- 12- credit hours 25.00

**Late Registration Fee** (non-refundable)

A $10.00 non-refundable fee will be charged for registering after classes begin.

**Student Activities Fee** (non-refundable)

This non-refundable fee of $25.00 per semester is authorized by the Massachusetts Board of Regents 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.

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**Estimated Student Expenses**

In addition to tuition and fees, students must plan to meet additional expenses related to college attendance. Those expenses include the cost of books and supplies, room and board, transportation, recreation, laundry, clothing, grooming aids, and medical costs.

While these additional costs may vary a great deal from student to student, the estimates below may provide a guide to assist students in planning to meet the costs of attendance at Greenfield Community College. The estimates are provided for a student living at home and a student living off-campus, based on a nine month academic year.

<table>
<thead>
<tr>
<th></th>
<th>Living with Parents</th>
<th>Living Off-Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books and Supplies</td>
<td>$225</td>
<td>$225</td>
</tr>
<tr>
<td>Room</td>
<td>650</td>
<td>1,800</td>
</tr>
<tr>
<td>Board</td>
<td>450</td>
<td>1,080</td>
</tr>
<tr>
<td>Transportation</td>
<td>744</td>
<td>744</td>
</tr>
<tr>
<td>Personal</td>
<td>632</td>
<td>632</td>
</tr>
<tr>
<td>Medical</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$2,851</strong></td>
<td><strong>$4,631</strong></td>
</tr>
</tbody>
</table>

All students should plan sufficiently in advance to be able to meet college costs by the opening of school.

**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

Greenfield Community College offers assistance to students with demonstrated financial need, in an effort to enable all students to attend the College, regardless of financial resources. The financial aid offered typically consists of a combination of gift aid, such as grants and scholarships which do not have to be repaid, and self-help aid, such as on-campus or off-campus jobs and loans which must be repaid. The financial aid funds come from a variety of federal, state, and private sources.

Programs

Greenfield Community College participates in all of the major federal and state financial aid programs, including the following:

- Pell Grant Program
  Formerly called the Basic Educational Opportunity Grant Program, this program is a federal entitlement program which provides grants to students with demonstrated financial need. In order to receive consideration for other types of financial aid at Greenfield Community College, students must apply for a Pell Grant, using either a College Scholarship Service form or a Pell Grant application form, both of which may be obtained from a high school guidance office or from the Financial Aid Office at the College.

- Supplemental Educational Opportunity Grant Program
  Through this program, grants are offered to students with exceptional financial need from federal funds obtained by the College.

- College Work-Study Program
  This program, using federal and state funds obtained by the College, enables the College to offer part-time, on-campus and off-campus employment to students with demonstrated financial need as a way of assisting them in meeting College expenses.

- National Direct Student Loan Program
  Using federal and state funds obtained by the College, this program allows the College to make low-interest, deferred-payment loans to students with demonstrated financial need. Students begin repayment following graduation or completion of studies.

- Nursing Student Scholarship and Nursing Student Loan Programs
  These programs, using federal funds obtained by the College, enable the College to offer scholarships and low-interest, deferred-payment loans to nursing students with demonstrated financial need.

- Guaranteed Student Loan Program
  This program enables students with financial need to obtain low-interest, deferred payment loans through banks or other lending agencies. Students obtain applications from the bank or lending agency itself. In Massachusetts this program is called the Higher Education Loan Program (H.E.L.P.) and is administered by the Massachusetts Higher Educational Assistance Corporation.

- Massachusetts State Scholarship Program
  This state program offers scholarships to students who are Massachusetts residents and who have demonstrated financial need. Students must submit the Massachusetts Financial Aid Form (M.F.A.F.) by March 1 of the year in which the academic year begins in order to receive full consideration. Forms are available in high school guidance offices and the Financial Aid Office at the College.

Application Procedures

In order to receive consideration for financial aid awarded by the College, including the SEOG, CWS, NDSL, NSS, and NSL programs, applicants must submit:

- A Greenfield Community College Financial Aid Application, which may be obtained from high school guidance offices and the Financial Aid Office at the
College. Submit this application only after having applied for admission to the College, and return it directly to the Financial Aid Office at the College.

- A Statement of Independent Status, if applying as a self-supporting student, which may be obtained from the Financial Aid Office at the College and must be returned directly to the College.

- A Financial Aid Form (F.A.F.) or Massachusetts Financial Aid Form (M.F.A.F.), which may be obtained from high school guidance offices and the Financial Aid Office at the College. The Greenfield Community College code number is 3420 and must be included on the form. Applicants are encouraged to use this form to apply for a Pell Grant as well. Send the completed form, with appropriate payment enclosed, to the College Scholarship Service in Princeton, New Jersey.

- Student Eligibility Reports from the Pell Grant Program
  These reports are sent directly to students from the Pell Grant Program and must be submitted to the College Financial Aid Office once received. Students may apply for a Pell Grant using either a College Scholarship Service form (F.A.F. or M.F.A.F.) or a Pell Grant application form, both of which may be obtained from high school guidance offices and the Financial Aid Office at the College.

- A copy of the IRS income tax return for the calendar year preceding the year in which the academic year begins. Submit the parents' IRS form, if the applicant is a dependent, or the applicant's IRS form, if the applicant is self-supporting, to the Financial Aid Office at the College.

To receive full consideration for all available financial aid, applicants should submit their materials by March 1 to ensure receipt by the College by April 15 of the year in which the academic year begins. Processing by the College Scholarship Service and the Pell Grant Program may take approximately six weeks. The Financial Aid Office at the College will make every effort to notify applicants whether or not they will receive financial aid by early June.

Financial aid recipients usually receive their awards, except in the case of the College Work-Study Program, by the middle of each semester. Students must plan accordingly to ensure that they have adequate financial resources until their awards are disbursed.

In order to receive financial assistance from any of the federal financial aid programs, students must be enrolled at the College for at least six credits in a degree or certificate program and maintain satisfactory academic progress: i.e., students who are on probation or suspension are not eligible for federal financial aid. Pell Grant amounts vary depending upon whether one is enrolled full-time (12 credits or more), three-quarter time (9-11 credits) or half-time (6-8 credits).

Inquiries regarding financial aid may be made to the Financial Aid Office at Greenfield Community College.

**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.). 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 advisers who assist in orientation to the College and in registration. Advisers are also available throughout the academic year.

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

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 adviser, 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:

- **A** = 4.00  **B-** = 2.65  **C-** = 1.65
- **A-** = 3.65  **C+** = 2.35  **D** = 1.00
- **B+** = 3.35  **C** = 2.00  **F** = 0.00
- **B** = 3.00

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.

Students wishing to earn additional associate degrees must:

a. Meet all specific requirements of each degree program.

b. Complete a minimum of fifteen credit hours beyond the previous degree awarded.

c. Twelve of these fifteen additional credits for each degree must be completed in residency.

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.

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."

Students who are making unsatisfactory academic progress are not eligible for federal financial aid, including the Pell Grant Program, the Supplemental Educational Opportunity Grant Program, the College Work-Study Program, the National Direct Student Loan Program, the Nursing Student Scholarship and Nursing Student Loan Programs, and the Guaranteed Student Loan Program.

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
A period to add courses is made available after classes begin. Adding courses requires the signature of the adviser only, unless a course requires permission of the instructor.

Adding courses after this period requires the signature of the adviser, 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. Counselors and advisers 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; how-
ever, 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 adviser and the approval of the adviser’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 in accordance with the schedule listed below. The signature of the adviser 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 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 should consult with his/her academic adviser. 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. A $10.00 non-refundable readmission fee will be charged.

**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 $2.00 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 the 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 Regents 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 core Behavioral-Social Sciences
- 9 hours of core Humanities-Fine Arts
- 9 hours of core 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 lunches 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.

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, baseball, soccer, tennis and golf for men and volleyball, basketball, softball and cross-country for women. Toboggan racing is a coed sport.
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 adviser 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.
Continuing Education and Community Services

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 Continuing Education 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 Continuing Education also offers a wide range of non-credit community service workshops, lectures, conferences, community forums and other special events.

Continuing Education is maintained at no expense to the Commonwealth.

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. Continuing Education 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 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 00 for more information.

The College currently offers nine Liberal Arts Programs including a General Liberal Arts Program and eight concentrations.

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

Students planning to transfer to baccalaureate degree programs have the responsibility of familiarizing themselves with the requirements of potential transfer institutions.

<table>
<thead>
<tr>
<th>Program</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Program</td>
<td>23</td>
</tr>
<tr>
<td>American Studies Concentration</td>
<td>24</td>
</tr>
<tr>
<td>Art Concentration</td>
<td>25</td>
</tr>
<tr>
<td>Business Administration Concentration</td>
<td>26</td>
</tr>
<tr>
<td>Data Processing Concentration</td>
<td>27</td>
</tr>
<tr>
<td>Food Science Concentration</td>
<td>27</td>
</tr>
<tr>
<td>Math/Science Studies Concentration</td>
<td>28</td>
</tr>
<tr>
<td>Natural Resources Concentration</td>
<td>29</td>
</tr>
<tr>
<td>Pioneer Valley Studies Concentration</td>
<td>30</td>
</tr>
</tbody>
</table>
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>Core Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <em>English Composition I</em>—may be satisfied by completing any English Composition I course coded (E) (ENG 101, 103 or 105)</td>
<td>3</td>
</tr>
<tr>
<td>2. <em>English Composition II</em>—may be satisfied by completing any English Composition II course coded (E) (ENG 112, 114 or 116)</td>
<td>3</td>
</tr>
<tr>
<td>3. <em>SPE 101—Oral Communication</em>—may be satisfied by completing any course coded (S)</td>
<td>3</td>
</tr>
<tr>
<td>4. <em>Behavioral Science Core</em>—may be satisfied by completing any combination of courses coded (BC)</td>
<td>9</td>
</tr>
</tbody>
</table>
| 5. *Humanities Core*—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 or 107, 106 or 108, 113)  
b) Literature (ENG 201, 202, 203, 204, 205, 206)  
c) Any additional course coded (HC) | 9 |
| 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) | 9 |

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

<table>
<thead>
<tr>
<th>Elective Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>24</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), (NL), 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, but subject to the limitations of 1 and 2 above.
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>*Behavioral Science Core</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>*Science/Math Core</td>
<td></td>
<td>9-12</td>
</tr>
</tbody>
</table>

**Elective Choice**

American Studies (Any 3 courses from the list below) 9

General Electives (Any 4 courses) 12

TOTAL 60-63

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**Electives—American Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 201</td>
<td>North American Indians</td>
<td>3</td>
</tr>
<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 217</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 117</td>
<td>Valley Ethnic History</td>
<td>3</td>
</tr>
<tr>
<td>HIS 119</td>
<td>American Economic History</td>
<td>3</td>
</tr>
<tr>
<td>POL 203</td>
<td>American Civil Liberties</td>
<td></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

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

**Required Courses**

<table>
<thead>
<tr>
<th>Course</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) 12

General Elective 3

Liberal Arts Elective 9

TOTAL 60-63

*See page 23 for specific requirements.

**Group I—Select 2**

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

**Group II—Select 2**

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

ENG 101, 103 or 105 English Composition I, any option 3
ENG 112, 114 or 116 English Composition II, any option 3
SPE 101 Oral Communication 3
ACC 121 Intro. to Accounting I 4
ACC 122 Intro. to Accounting II 4
BUS 111 Intro. to Business 3
DAT 101 Data Processing for Business and Management 3
ECO 101 and .102 Principles of Economics I and II 6
*Behavioral Science Core 3
*Humanities Core 9
*Science/Math Core (See 1 below) 9-12

Elective Choice (See 2 below) 12

TOTAL 62-65

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 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>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</td>
<td></td>
<td>3-4</td>
</tr>
</tbody>
</table>

Elective Choice

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</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

Liberal Arts/Food Science Concentration*

This concentration is designed for the student who plans to transfer to a four-year degree program with a major in Food Science or Food Science Engineering. 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.

Some students may wish to modify this program slightly to allow transfer into a major in Nutrition.

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>BIO 101</td>
<td>Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 205</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<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 202</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>MAT 201</td>
<td>Calculus with Analytic Geometry I</td>
<td>4</td>
</tr>
<tr>
<td>MAT 202</td>
<td>Calculus with Analytic Geometry II</td>
<td>4</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>*Behavioral Science Core (3 courses)</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>**Humanities Core (3 courses)</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

TOTAL 67

Coordinator: Gertrude P. Sheaffer, M.T. (ASCP)

**See page 23 for specific requirements.

*Subject to approval of the Massachusetts Board of Regents.
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. The student should consult with his adviser about choosing appropriate courses.

Required Courses

<table>
<thead>
<tr>
<th>Course</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>MAT 107, 108, 201, 202 (at least two)</td>
<td>6-8</td>
</tr>
<tr>
<td>*Behavioral Science Core (3 courses)</td>
<td>9</td>
</tr>
<tr>
<td>*Humanities Core (3 courses)</td>
<td>9</td>
</tr>
</tbody>
</table>

Other Required Courses—at least 8 credits from 2 or more subject areas (16 credits total)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101, 102</td>
<td></td>
</tr>
<tr>
<td>CHE 101, 102</td>
<td></td>
</tr>
<tr>
<td>EAS 101, 102</td>
<td></td>
</tr>
<tr>
<td>PHY 101, 102 or 111, 112</td>
<td></td>
</tr>
<tr>
<td>MAT 201, 202 or 203, 204</td>
<td>16</td>
</tr>
</tbody>
</table>

Electives—any “Other Required Courses” plus:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 103, 104, 105, 106, 107, 108, 111, 205</td>
<td></td>
</tr>
<tr>
<td>CHE 201, 202</td>
<td></td>
</tr>
<tr>
<td>EAS 103, 104, 106, 107, 201</td>
<td></td>
</tr>
<tr>
<td>MAT 112, 114</td>
<td></td>
</tr>
<tr>
<td>DAT 105 or 123</td>
<td>11</td>
</tr>
</tbody>
</table>

TOTAL 60-62

Coordinator: Office, Division of Natural Sciences

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

This concentration is designed for the student who plans to transfer to a four-year degree program with a major in natural resources, agriculture, land use planning, landscaping, horticulture, forestry, wood technology or wildlife management.

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. The student should consult with the adviser about choosing most appropriate courses.

Required Courses (Core)                      Credits
BIO 103-104 Natural Science                  8
ENV 107 Land Use                             3
ENG English Composition I & II               6
MAT Mathematics                              3-6
SPE 101 Oral Communication                    3
**Humanities Core (3 courses)                 9
**Behavioral Science Core (3 courses)         9

Concentration electives to be selected from the list below 18-21 credit hours.

Electives                      Credits
AGR 101 Agriculture               3
AGR 103 Equine Management          3
BIO 101 Zoology                    4
BIO 102 Botany                     4
BIO 111 Horticulture               3
BIO 121 Woodlot Management         3
CHE 101-102 General Chemistry      4-8
CHE 106 Chemistry of Air & Water   3
EAS 101 Physical Geology           4
EAS 102 Historical Geology          4
EAS 10 Valley Geology               3
EAS 104 Oceanography                4
ENV 106 Landscaping                 3
MAT Mathematics                     3-4
PHY 101-102 General Physics         4-8
SCI 104 Energy Management           3

Coordinator: Office, Division of Natural Sciences

*Subject to approval of the Massachusetts Board of Regents.

**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 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>ANT 107 Valley Archeology</td>
<td>3</td>
</tr>
<tr>
<td>ART 105 or ART 106 Valley/American Art and Architecture I or Valley/American Art and Architecture II</td>
<td>3</td>
</tr>
<tr>
<td>EAS 103 Valley Geology</td>
<td>3</td>
</tr>
<tr>
<td>ENG 203 or ENG 204 or ENG 253 American Literature I or American Literature II or Valley Writers (See 1 below)</td>
<td>3</td>
</tr>
<tr>
<td>HIS 107 Valley/American History I (See 2 below)</td>
<td>3</td>
</tr>
<tr>
<td>HIS 108 Valley/American History II (See 2 below)</td>
<td>3</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>
</tbody>
</table>

**Elective Choice**

<table>
<thead>
<tr>
<th>Elective Choice</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Electives</td>
<td></td>
</tr>
<tr>
<td>Valley Studies Electives (chosen from below or from alternatives above)</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></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 Valley Folklore</td>
<td>3</td>
</tr>
<tr>
<td>ENG 257 MacLeish Seminar</td>
<td>3</td>
</tr>
<tr>
<td>HIS 117 Valley Ethnic History</td>
<td>3</td>
</tr>
<tr>
<td>HUM 117 History of Pioneer Valley Education</td>
<td>3</td>
</tr>
<tr>
<td>HUM 231 Valley Research Project</td>
<td>3</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.

*See page 23 for specific requirements.*

Program Coordinator: Bernard A. Drabek

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
Career Programs

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 adviser.

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), (L), or (SL).

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

   Subject Area                  Acceptable Code
   Behavioral Science elective    BC or BL
   Humanities elective            HC or HL
   Math/Science elective          NC or NL

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 para-professional 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>4</td>
</tr>
<tr>
<td>ACC 122</td>
<td>4</td>
</tr>
<tr>
<td>ACC 201, 202 or ACC 205, 206 Intermediate Accounting I and II or Cost Accounting I and II</td>
<td>6</td>
</tr>
<tr>
<td>BUS 111</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105</td>
<td>3</td>
</tr>
<tr>
<td>BUS 155</td>
<td>3</td>
</tr>
<tr>
<td>BUS 156</td>
<td>3</td>
</tr>
<tr>
<td>BUS 205</td>
<td>3</td>
</tr>
<tr>
<td>DAT 101</td>
<td>3</td>
</tr>
<tr>
<td>ECO 101</td>
<td>3</td>
</tr>
<tr>
<td>ECO 102</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 123</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Program electives—Any three courses from the list below: 9
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 pre-professional 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 Regents under the title of “Fine Arts.”

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 103 and 104</td>
<td>Art History I and II</td>
</tr>
<tr>
<td>ART 115 and 116</td>
<td>Sensory Phenomena I and II</td>
</tr>
<tr>
<td>ART 121 and 122</td>
<td>Design I and II</td>
</tr>
<tr>
<td>ART 131 and 132</td>
<td>Drawing I and II</td>
</tr>
<tr>
<td>ART 231 and 232</td>
<td>Life Drawing I and II</td>
</tr>
<tr>
<td>ENG 101, 103 or 105</td>
<td>English Composition I, any option</td>
</tr>
<tr>
<td>ENG 112, 114, 116 or 123</td>
<td>English Composition II, any option or Report Writing</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 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</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 151 Intro. to Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 215 Options in Career Development</td>
<td>1</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 271 Graphic Design 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 234 Printmaking II</td>
<td>1-3</td>
</tr>
<tr>
<td>ART 242 Painting II</td>
<td>3</td>
</tr>
<tr>
<td>ART 251 Photography I</td>
<td>3</td>
</tr>
<tr>
<td>ART 252 Photography II</td>
<td>3</td>
</tr>
<tr>
<td>ART 272 Graphic Design II</td>
<td>3</td>
</tr>
<tr>
<td>ART 296 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJ 101</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 103</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 105</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 107</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 109</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 121</td>
<td>3</td>
</tr>
<tr>
<td>CRJ 215</td>
<td>3</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>
<tr>
<td>POL 101</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>3</td>
</tr>
<tr>
<td>SOC 201</td>
<td>3</td>
</tr>
<tr>
<td>SPE 101 or 121</td>
<td>3</td>
</tr>
</tbody>
</table>

CRJ electives (see below) 9
General elective 3
Natural Science and/or Humanities electives 6

**Total** 60

* CR 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

*To be selected with the assistance of the program advisers.

**Students who wish to take advantage of the Commonwealth Transfer Compact (see page 17) will have to select their electives with those requirements in mind.**
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 17) 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</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 101</td>
<td>3</td>
</tr>
<tr>
<td>ECE 103</td>
<td>3</td>
</tr>
<tr>
<td>ECE 115, 116, 215, 216</td>
<td>15</td>
</tr>
<tr>
<td>ECE 201</td>
<td>3</td>
</tr>
<tr>
<td>ECE 203</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101, 103, 105</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112, 114, 116</td>
<td>3</td>
</tr>
</tbody>
</table>

\[
\text{ENG 241 or 242 Survey of Children's Literature or Storytelling} \quad 3
\]

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 101</td>
<td>3</td>
</tr>
<tr>
<td>PSY 217</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101 or ANT 104</td>
<td>3</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3</td>
</tr>
<tr>
<td>SPE 121</td>
<td>3</td>
</tr>
</tbody>
</table>

**ECE/LED electives (see offerings below)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General elective</td>
<td>6</td>
</tr>
<tr>
<td>Natural Science/Math elective</td>
<td>3-4</td>
</tr>
</tbody>
</table>

**TOTAL** 63-64

### ECE/LED electives—Any 2 of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 221 Science for Children</td>
<td>1</td>
</tr>
<tr>
<td>ECE 223 Mathematics for Children</td>
<td>1</td>
</tr>
<tr>
<td>ECE 225 Social Studies for Children</td>
<td>1</td>
</tr>
<tr>
<td>ECE 229 Nature Activities for Children</td>
<td>1</td>
</tr>
<tr>
<td>ECE 237 Exploring Children's Behavior</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED 153 New Games</td>
<td>1</td>
</tr>
<tr>
<td>LED 191 Recreational Dance</td>
<td>2</td>
</tr>
<tr>
<td>LED 193 Contemporary Food Experience</td>
<td>1</td>
</tr>
<tr>
<td>LED 199 Creative Dramatics</td>
<td>2</td>
</tr>
<tr>
<td>MUS 109 Music in Early Childhood Education</td>
<td>1</td>
</tr>
</tbody>
</table>

\[1\] 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</td>
<td>4</td>
</tr>
<tr>
<td>DAT 105</td>
<td>3</td>
</tr>
<tr>
<td>EGR 101</td>
<td>3</td>
</tr>
<tr>
<td>EGR 103</td>
<td>1</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>MAT 201</td>
<td>4</td>
</tr>
<tr>
<td>MAT 202</td>
<td>4</td>
</tr>
<tr>
<td>MAT 203</td>
<td>4</td>
</tr>
<tr>
<td>PHY 111</td>
<td>4</td>
</tr>
<tr>
<td>PHY 112</td>
<td>4</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Electives</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities Electives</td>
<td>6</td>
</tr>
<tr>
<td>Behavioral Science Electives</td>
<td>9</td>
</tr>
<tr>
<td>Engineering and/or Science electives</td>
<td>9-12</td>
</tr>
</tbody>
</table>

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</td>
<td>4</td>
</tr>
<tr>
<td>CHE 201</td>
<td>4</td>
</tr>
<tr>
<td>CHE 202</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</td>
<td>3</td>
</tr>
<tr>
<td>EGR 205</td>
<td>3</td>
</tr>
<tr>
<td>CIV 102</td>
<td>3</td>
</tr>
<tr>
<td>EGR 206</td>
<td>4</td>
</tr>
</tbody>
</table>

Electrical Engineering

<table>
<thead>
<tr>
<th>Electives</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science elective</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Two EGR electives</td>
<td>6-8</td>
</tr>
</tbody>
</table>

Environmental Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 102</td>
<td>4</td>
</tr>
<tr>
<td>BIO elective</td>
<td>3 or 4</td>
</tr>
<tr>
<td>BIO 205</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</td>
<td>3</td>
</tr>
<tr>
<td>EGR 206</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</td>
<td>3</td>
</tr>
<tr>
<td>EGR 206</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 Regents under the title of "Fire Protection and Safety Technology."

Electives

<table>
<thead>
<tr>
<th>Course</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

1FST 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>Art History I and II</td>
</tr>
<tr>
<td>ART 115 and 116</td>
<td>Sensory Phenomena I and II</td>
</tr>
<tr>
<td>ART 121 and 122</td>
<td>Design I and II</td>
</tr>
<tr>
<td>ART 131 and 132</td>
<td>Drawing I and II</td>
</tr>
<tr>
<td>ART 271 and 272</td>
<td>Graphic Design I and II</td>
</tr>
<tr>
<td>ENG 101, 103 or 105</td>
<td>English Composition I, any option</td>
</tr>
<tr>
<td>ENG 112, 114, 116 or 123</td>
<td>English Composition II, any option or Report Writing</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/Media Communications electives (maximum 3 credits)</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</td>
<td>Options in Career Development</td>
</tr>
<tr>
<td>ART 231</td>
<td>Life Drawing</td>
</tr>
<tr>
<td>ART 233</td>
<td>Printmaking I</td>
</tr>
<tr>
<td>ART 241</td>
<td>Painting I</td>
</tr>
<tr>
<td>ART 251</td>
<td>Photography I</td>
</tr>
<tr>
<td>ART 295</td>
<td>Directed Study in Art</td>
</tr>
</tbody>
</table>

Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 232</td>
<td>Life Drawing II</td>
</tr>
<tr>
<td>ART 234</td>
<td>Printmaking II</td>
</tr>
<tr>
<td>ART 242</td>
<td>Painting II</td>
</tr>
<tr>
<td>ART 252</td>
<td>Photography II</td>
</tr>
<tr>
<td>ART 296</td>
<td>Directed Study in Art</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</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAT 105</td>
<td>3</td>
</tr>
<tr>
<td>EGR 101</td>
<td>3</td>
</tr>
<tr>
<td>EGR 103</td>
<td>1</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>MAT 103</td>
<td>3</td>
</tr>
<tr>
<td>MAT 104</td>
<td>3</td>
</tr>
<tr>
<td>MAT 207</td>
<td>3</td>
</tr>
<tr>
<td>PHY 101</td>
<td>4</td>
</tr>
<tr>
<td>PHY 102</td>
<td>4</td>
</tr>
<tr>
<td>SPE 101</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Elective Description</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</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 101</td>
<td>4</td>
</tr>
<tr>
<td>CHE 102</td>
<td>4</td>
</tr>
<tr>
<td>CHE 201</td>
<td>4</td>
</tr>
<tr>
<td>CHE 211</td>
<td>4</td>
</tr>
<tr>
<td>CHE 221</td>
<td>3</td>
</tr>
<tr>
<td>CHE electives (0-2)/BUS electives (0-2)</td>
<td></td>
</tr>
</tbody>
</table>

Civil Engineering Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIV 101</td>
<td>3</td>
</tr>
<tr>
<td>CIV 102</td>
<td>3</td>
</tr>
<tr>
<td>EGR 205</td>
<td>3</td>
</tr>
<tr>
<td>EGR 206</td>
<td>4</td>
</tr>
<tr>
<td>CIV electives (1-3)/BUS electives (0-2)</td>
<td></td>
</tr>
</tbody>
</table>

Electronics Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT 101</td>
<td>4</td>
</tr>
<tr>
<td>ELT 102</td>
<td>4</td>
</tr>
<tr>
<td>ELT 103</td>
<td>4</td>
</tr>
<tr>
<td>ELT 104</td>
<td>4</td>
</tr>
<tr>
<td>ELT 105</td>
<td>3</td>
</tr>
<tr>
<td>ELT electives (0-2)/BUS electives (0-2)</td>
<td></td>
</tr>
</tbody>
</table>

Industrial Engineering Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>IND or EGR electives (0-2)/BUS electives (0-2)</td>
<td></td>
</tr>
</tbody>
</table>
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 Regents 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 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>PSY 101 Principles of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>REC 101 Introduction to Recreation and Human Services</td>
<td>3</td>
</tr>
<tr>
<td>REC 103 Creative Experience in Art, Music, Drama and Dance</td>
<td>3</td>
</tr>
<tr>
<td>REC 107 Recreational Sports Administration</td>
<td>3</td>
</tr>
<tr>
<td>REC 109 Program Planning</td>
<td>3</td>
</tr>
<tr>
<td>REC 111 Environmental Recreation</td>
<td>3</td>
</tr>
<tr>
<td>REC 115, 215, 216 Field Work I, II, III</td>
<td>9</td>
</tr>
<tr>
<td>REC 119 Advanced First Aid and C.P.R.</td>
<td>3</td>
</tr>
<tr>
<td>REC 205 Recreation Seminar</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101 Principles of Sociology</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</td>
<td>8</td>
</tr>
<tr>
<td>Science/Math elective</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL 65
**Recommended Courses**

ENG 217  American Folklore  3
ENG 242  Storytelling  3
LED 109  Basic White Water Canoeing I  1
LED 139  Hiking and Backpacking  1
LED 153  New Games  2
LED 163  Physical Education and Fitness  1
LED 191  Recreational Dance  2
LED 199  Creative Dramatics  2
PSY 213  Psychology of Interpersonal Behavior  3
PSY 217  Human Growth and Development  3
REC 131  Introduction to Therapeutic Recreation  3
SPE 121  Group Discussion: Problem Solving  3

1The 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

**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>BUS 103</td>
<td>Intro. to Marketing</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Mathematics for Business</td>
</tr>
<tr>
<td>BUS 111</td>
<td>Intro. to 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 201</td>
<td>Financial Management or Small Business Management and Finance</td>
</tr>
<tr>
<td>BUS 205</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>ECO 101</td>
<td>Principles of Economics I (Macro)</td>
</tr>
<tr>
<td>ECO 102</td>
<td>Principles of Economics II (Micro)</td>
</tr>
<tr>
<td>ENG 101, 103 or 105</td>
<td>English Composition I, any option</td>
</tr>
<tr>
<td>ENG 112, 114, 116 or 123</td>
<td>English Composition II, any option or Report Writing</td>
</tr>
<tr>
<td>DAT 101</td>
<td>Data Processing for Business and Management</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Principles of Psychology</td>
</tr>
</tbody>
</table>

**Electives**

Program electives: Any 2 courses with a BUS, ACC or DAT prefix 6
Liberal Arts electives: 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**

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 to appropriate four-year degree programs. The program includes a State-mandated minimum of liberal arts courses, a core of management courses 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.
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.

**Required Courses**

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

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 125</td>
<td>Principles of Advertising</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>ECO 101</td>
<td>Principles of Economics I (Macro)</td>
<td>3</td>
</tr>
<tr>
<td>ECO 102</td>
<td>Principles 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**

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

**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.

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

| 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                           | 9       |
| Suggested courses:                                     |         |
| PSY 101 Principles of Psychology                       | 3       |
| SOC 101 Principles of Sociology                        | 3       |

| General Electives                                      | 9       |
| 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 adviser.

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.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST YEAR</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
</tr>
<tr>
<td>NUR 101</td>
<td>Fundamentals of Nursing</td>
</tr>
<tr>
<td>BIO 105</td>
<td>Anatomy and Physiology I</td>
</tr>
<tr>
<td>ENG 101, 103, or 105</td>
<td>English Composition I, any option</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Principles of Psychology</td>
</tr>
<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
</tr>
<tr>
<td>NUR 102</td>
<td>Family-Centered Nursing</td>
</tr>
<tr>
<td>BIO 106</td>
<td>Anatomy and Physiology II</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Principles of Sociology</td>
</tr>
<tr>
<td>PSY 217</td>
<td>Human Growth and Development</td>
</tr>
<tr>
<td><strong>SECOND YEAR</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
</tr>
<tr>
<td>NUR 201</td>
<td>Adaptation to Illness I</td>
</tr>
<tr>
<td>NUR 203</td>
<td>Mental-Health Nursing</td>
</tr>
<tr>
<td>BIO 205</td>
<td>Microbiology</td>
</tr>
<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
</tr>
<tr>
<td>NUR 202 Adaptation to Illness II</td>
<td>9</td>
</tr>
<tr>
<td>NUR 204 Historical and Professional Trends in Nursing</td>
<td>2</td>
</tr>
<tr>
<td>ENG 112, 114 or 116 English Composition II, any option</td>
<td>3</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>67</td>
</tr>
</tbody>
</table>

Program Director: Margaret M. Craig, R.N., M.S.N.
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.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM 105 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>
</tr>
<tr>
<td>ADM 205 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>
</tr>
<tr>
<td>ENG 112, 114, 116 or 123 English Composition II, any option or Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>SPE 101 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, BL, HC, HL, NC or NL 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 Regents under the title of "Industrial Technology."

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 111</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 131</td>
<td>Applied Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BUS 132</td>
<td>Procedures of Cost Control and Budgeting</td>
<td>3</td>
</tr>
<tr>
<td>DAT 101 or 105</td>
<td>Data Processing for Business and Management or FORTRAN Programming</td>
<td>3</td>
</tr>
<tr>
<td>EGR 101</td>
<td>Engineering Drawing</td>
<td>3</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>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>MAT 103 and 104</td>
<td>Applied Math I and II</td>
<td>6</td>
</tr>
<tr>
<td>MAT 121</td>
<td>Applied Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SPE 101</td>
<td>Oral Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Behavioral Science/Humanities Electives | 6
IND or BUS Electives | 6

TOTAL | 60

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 Regents, 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 Board of Trustees, 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(s)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR 101 and 106 Engineering Drawing I and II</td>
<td>6</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 103 and 104 Applied Mathematics I and II</td>
<td>6</td>
</tr>
</tbody>
</table>

   TOTAL 18

   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 in a minimum of time maximum technical training in fire protection, fire prevention and hazardous materials handling.

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

Required Courses  

<table>
<thead>
<tr>
<th>Course</th>
<th>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>3</td>
</tr>
</tbody>
</table>

Electives

FST electives  

| TOTAL  | 27  |

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

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>Title</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>Title</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  |

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

**TOTAL** 27

**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 Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 111 and 112</td>
<td>Basic Accounting I and II</td>
<td>6</td>
</tr>
<tr>
<td>BUS 123</td>
<td>Business Communications I</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>PSY 101</td>
<td>Principles of Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ADM 111 and 113</td>
<td>Typewriting I and II</td>
<td>6</td>
</tr>
<tr>
<td>SPE 101 or 121</td>
<td>Oral Communication or Group Discussion: Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>ADM 210, 211, 212, 213</td>
<td>Office Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**

Program Elective²

TOTAL 30

**NOTES:**

1 Typing course entry level to be determined.

2 Students 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 Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OLP 107</td>
<td>Canoeing</td>
<td>2</td>
</tr>
<tr>
<td>OLP 110</td>
<td>White Water Canoeing for Outdoor Leaders</td>
<td>1</td>
</tr>
<tr>
<td>OLP 111</td>
<td>Introduction to Outdoor Programs and Services</td>
<td>3</td>
</tr>
<tr>
<td>OLP 112</td>
<td>Counseling and Human Services for Outdoor Leaders</td>
<td>3</td>
</tr>
<tr>
<td>OLP 116 and 216</td>
<td>Field Experience in Outdoor Leadership I and II</td>
<td>8</td>
</tr>
<tr>
<td>OLP 120</td>
<td>Advanced First Aid and Emergency Care</td>
<td>3</td>
</tr>
<tr>
<td>OLP 124</td>
<td>Environmental Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>OLP 127</td>
<td>Outdoor Adventure Methods and Materials</td>
<td>3</td>
</tr>
<tr>
<td>OLP 131 and 133</td>
<td>Outing Sports I and II</td>
<td>6</td>
</tr>
<tr>
<td>OLP 205</td>
<td>Outdoor Leadership Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

*Program Coordinator: Lawrence Buell*
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 towards 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**

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

**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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART Three art electives</td>
<td>9</td>
</tr>
</tbody>
</table>

(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

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

**Program Coordinator:** Bernard A. Drabeck
Developmental Studies and Human Development

The Developmental Studies courses are 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</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>HUD 113</td>
<td>Job Search Training</td>
<td></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>

Developmental Studies Coordinator: Phyllis Nahman

Human Development Coordinator: Garrett McAuliffe
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 103 Analysis of Financial Statements (X) 3 credits
Interpretation and analysis of financial statements; cost allocation procedures, break even analysis, the budgeting process, preparation of flexible and rolling budgets.
Prereq: None

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.
Prereq: 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.
Prereq: 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.
Prereq: 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.
Prereq: 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.
Prereq: 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.
Prereq: 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.
Prereq: 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.
Prereq: ACC 205

ACC 251 Cooperative Work Experience in Accounting (X) 3 credits
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, pre-transcription 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** (X) 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 106 Keyboarding for Information Processing** (X) 1 credit
Designed to develop basic touch keyboarding skill; input alphabetic, numeric and symbol information quickly and accurately; emphasizes the basic vocabulary and concepts used in keyboarding operations for inputting and retrieving information. Laboratory suggested. 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 111 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 or permission of the instructor.

**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: ADM 117 or permission of the instructor.

**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 administrative 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)** 2 credits
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)** 1 credit
Provides basic instruction for operating a transcribing machine. Students will learn techniques and procedures to use transcription 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 (X)** 3 credits
Word roots, prefixes, suffixes, combining forms and abbreviations used in medicine. Spelling, pronunciation, definitions and the analysis of components of medical terms common to the medical and allied health disciplines.
Prereq: Permission of the instructor.

ADM 232 **Medical Machine Transcription (X)** 3 credits
Prereq: ADM 113 and ADM 231, or permission of the instructor.

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

**Agriculture**

AGR 101 **Principles of Agriculture (NL)** 3 credits
An introduction toward a better understanding of traditional and contemporary practices as they apply to farm animals and crops. Emphasis will be on animal husbandry skills, breed characteristics and concerns of small-scale, part-time operations.
Prereq: None

AGR 103 **Equine Management (NL)** 3 credits
A comprehensive and detailed examination of the biology, health, selection and proper care necessary for the successful maintenance and enjoyment of horses. Western and English riding or lessons available at nearby facilities at a reasonable fee.
Prereq: None

**Anthropology**

ANT 101 **Introduction to Anthropology (B C)** 3 credits
Theory and method in relation to prehistory, evolution and the nature of culture. 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 perspective; the interaction between biology, culture 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, economic systems, religion, myth and ritual; the dynamics of culture change and the role of the anthropologist.
Prereq: None

ANT 107 **Valley Archaeology (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 understanding the prehistoric cultural ecology of North America in general; several field trips to local archaeological sites.
Prereq: None

ANT 201 **North American Indians (B C)** 3 credits
Historical, cultural and ecological perspective on Indian tribes north of Mexico with emphasis on variations in procurement strategies, settlement patterns, social organization and belief systems; contemporary problems of assimilation and adjustment among Indian Americans as a result of contact with non-Indian society.
Prereq: ANT 101 or ANT 104 or permission of the instructor.
ART

ART 101 Intro. to the Visual Arts (H C) 3 credits
A study of the elements and principles of art, the materials and techniques. Development of style and the role of the artist in society are studied as a means of understanding art. Field trips are 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 studied 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. Field trips required.
Prereq: ART 103 or permission of the instructor.

ART 105 Valley/American Art and Architecture I (H C) 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 C) 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 107 History of Modern Art (H C) 3 credits
A survey of modern visual art from Post-Impressionism to the present. Although the emphasis is on the art of painting, major expressions in sculpture and architecture are also studied. Field trips are required.
Prereq: None

ART 111 Introduction to Studio I (H L) 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 L) 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 151 Introduction to Photography (HL) 3 credits
Introduction to basic camera operation, processing and printing. Students must provide their own cameras, film and paper. Processing and darkroom equipment furnished.
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. Graded on a Credit/No Credit basis.
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 photolitho print 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 the 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 acrylics. 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 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 (N C) 4 credits
Environmental studies with emphasis on weather, plants and the ecology of forest, field and stream. Laboratory required.
Prereq: None

BIO 104 Natural Science (N C) 4 credits
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 (NC)  4 credits
Mammalian anatomy and physiology with emphasis on anatomy. Laboratory required.
Prereq: High School chemistry required.

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

BIO 107 Basic Biology I (NC)  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 instructions: Lecture and/or audio-tutorial. Laboratory required.
Prereq: None

BIO 108 Basic Biology II (NC)  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 (NC)  3 credits
Theory and practice of plant propagation and cultivation, including care of house plants and preparation of gardens.
Prereq: None

BIO 112 Woodlot Management (NC)  3 credits
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 (NC)  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 (NC)  4 credits
Introduction to the biology of microorganisms with emphasis on the properties of micro-organisms and their relation to disease. Laboratory required.

BIO 207 Histology (NC)  4 credits
The study of normal human cells, organs and tissues. Includes the detailed structure of 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 (X)  3 credits
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 (X) 3 credits
Principles of effective writing as applied to various business letters. Oral communication with stress on telephone techniques.
Prereq: None

BUS 125 Principles of Advertising (X) 3 credits
An introduction to the field of advertising. Intended for those interested in the role of advertising in our business and economic structure. Emphasis on how a mass communication program should be developed.

BUS 141 Introduction to Small Business Management (A) 3 credits
This course will provide someone planning to own or operating 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 (X) 3 credits
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 (A) 3 credits
Personnel management, with practical emphasis on the major tasks of recruiting, training, maintaining and using an effective work force.
Prereq: BUS 111

BUS 205 Principles of Management (A) 3 credits
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
Recom: PSY 101

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. Graded on a Credit/No-Credit basis.
Prereq: BUS 211, BUS 213

BUS 225 Small Business Management and Finance (X) 3 credits
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 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)

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 credits

Applications of elementary mathematics to chemical calculations.
Prereq: CHE 101 concurrently.

CHE 101 General Chemistry I (N C)

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)

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)

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)

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 (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 (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)

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)

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)

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)

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)

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) 3 credits
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) 3 credits
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 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) 4 credits
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: None
Recom: Basic Algebra, ACC 121 and BUS 111

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: None
Recom: DAT 101 or 123

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 pro-
grams in BASIC using interactive computer terminals.
Prereq: DAT 101 or DAT 123 recommended.

DAT 123 Introduction to Computers (L)
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

DAT 201 Systems Analysis and Design (X)
The view of business activity as an information processing system. The methods and techniques used by the systems analyst in investigating the needs and uses of information. A discussion/presentation format is used in conjunction with case-studies to illustrate the procedures and considerations involved in a systems analysis and design project.
Prereq: Successful completion of an introductory computer course (DAT 101 or 123), and a programming course (DAT 103, 105, or 107) or permission of instructor.

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)
Purposes of early childhood education and the role of the teacher. Considers the developmental needs of young children. Attention to physical environment, recording and reporting progress and administration.
Prereq: None

ECE/REC 103 Creative Experiences 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 ECE 103, but not for both.
Prereq: ECE or REC major, or permission of instructor.

ECE 115 Field Experience in Early Childhood Education I (X)
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)
Work experience with limited responsibility for planning classroom activities in various developmental areas.
Prereq: ECE 115

ECE 201 Early Childhood Curriculum (X)
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)
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)
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)
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

ECE 233 Early Education in the Home (X) 1 credit
An exploration of child rearing practices and early education in the home. Focus on communication skills between adults and children and on understanding children's development and behavior. Regulations for establishing home child care will be analyzed.
Prereq: None

ECE 235 A.V. in the Early Childhood Classroom (X) 1 credit
Familiarity with and use of various audio-visual and other aids appropriate to the early childhood classroom. Hands-on training and direct applications emphasized.
Prereq: None

ECE 237 Exploring Children's Behavior (X) 1 credit
Exploration of children and their behaviors in the context of the preschool experience. The manner in which children acquire behavior, theories and techniques of behavior management and the adult's impact on children's behavior will be discussed.
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, volcanos, 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

EAS 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. Credit will be granted for EAS 103 or EAS 106 but not for both.
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 106 Survey of Geology (N C) 3 credits
An introduction to the science of geology to provide an understanding of such topics as: minerals and rocks, landscapes, environmental hazards, resources and earth history. Local field trips and lab work included in course. Areas to be visited during optional June field trip to either Sierra-Cascades or Rocky Mts. will be emphasized. Credit will be granted for EAS 103 or EAS 106 but not for both.
Prereq: None
EAS 107 Geology of our National Parks (N C)
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)
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 (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 (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)
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

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

EDU 111 Introduction to Special Education (L)
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)
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)
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

EDU 117 Program Options for Children with Special Needs (X)
Discussion of the definition and rationale for early intervention, as well as the implications of current legislation. Early program options for children with a wide range of handicapping conditions will be explored. Program options evaluation tools will be utilized in critiquing programs.
Prereq: None

Electronics

ELT 101 Basic Electricity 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; capacitance; magnetism, inductance. Laboratory required.
Prereq: MAT 103 or equivalent concurrently.

ELT 102 Basic Electricity II—AC (X)
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) 3 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: ELT 102 or equivalent.

ELT 104 Basic Electronics II (X) 3 credits
Typical circuit configurations and their functions and characteristics. Topics include, but are not limited to: amplifiers; detectors; power supplies; wave form generators; modulation; demodulation; receivers; transmitters; transmission lines and antennas; miscellaneous circuits. Laboratory required.
Prereq: ELT 103 or equivalent.

ELT 201 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. Laboratory required.
Prereq: ELT 104

Engineering

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 (X) 3 credits
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. Deflection, 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 Skills (X) 3 credits
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) 3 credits
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) 3 credits
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 I: The Impact of Language (E) 3 credits
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; students may receive credit for only one:

ENG 112  English Composition II: Exploring Literature (E)  3 credits
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: Literature and Creative Writing (E)  3 credits
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 II: Literature and Film (E)  3 credits
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 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 adapta-
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 folktale 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 folktale 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 English as a Second Language (X)  3 credits
Focuses on the reading, writing and aural skills needed for the student to participate in a full GCC academic program. Individualized programs allow students to progress from present level of proficiency to more advanced levels in reading, writing and oral communication. Intensive drills in writing mechanics, reading comprehension, vocabulary and sentence study. An accumulation of 3 credits required of all international students: Credits may be earned through successful completion of ESL courses and/or TOEFL or in-house examinations.

ESL 100 Beginning Level  1 credit
ESL 101 Intermediate Level  1 credit
ESL 102 Advanced Level  1 credit

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 Landscaping (N L) 3 credits
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 (N L) 3 credits
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 to 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/IND 175 Industrial Fire Protection and Safety (X) 3 credits
Introduction to fire risk management, fire suppression and detection systems and devices; industrial storage and housekeeping practices; fire hazard control; OSHA Regulations (Subpart L).
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, standard 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 (H C) 3 credits
Refinement of written and conversational skills through selected readings in literature.
Prereq: FRE 102 or permission of the instructor.

FRE 202 Intermediate French II (H C) 3 credits
Study of chosen representative literary works from French literature. Outside readings and reports required.
Prereq: FRE 201 or permission of the instructor.

FRE 251 French Composition and Conversation (H C) 3 credits
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. (H C) 3 credits
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; the role of religion; the individual in history, the transition to modern modes of life and thought.
Prereq: None

HIS 102 Western Civilization since 1500 A.D. (H C) 3 credits
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) 3 credits
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. Credit will be granted for HIS 105 or HIS 107 but not for both.
Prereq: None

HIS 106 History of the American People since 1865 (H C) 3 credits
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. Credit will be granted for HIS 106 or HIS 108 but not for both.
Prereq: None

HIS 107 Valley/American History I (H C) 3 credits
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. Credit will be granted for HIS 105 or HIS 107 but not for both.
Prereq: None

HIS 108 Valley/American History II (H C) 3 credits
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. Credit will be granted for HIS 106 or HIS 108 but not for both. 

Prereq: None

HIS 109 American Foreign Policy (H C) 3 credits
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 (H C) 3 credits
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 Asian Society (H C) 3 credits
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 117 Valley Ethnic History (H L) 3 credits
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

HIS 119 American Economic History (H C) 3 credits
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

Human Ecology

HEC 115-118 Laboratory Experience in Human Ecology (B L) 1,2 credits
A flexible experiential laboratory in which simulation and experiential learning are used in the study of human ecology. Students select, plan and participate in projects and activities on an individual and group basis by special arrangement with the instructor and approval of Division Chairperson. Learning contracts define the nature of the project, methods of inquiry and criteria for evaluation. 1 or 2 credits per semester.
Prereq: Permission of the instructor.

HEC 251 Small Group Ecology: Project TEME Planning and Development (B L) 3 credits
Training in the use of ecological concepts and principles in the planning and development of the annual Project TEME event schedule; instruction in group theory and participation in experiential learning activities to develop an understanding of group dynamics and effective group skills, i.e., goal setting, leadership, decision-making, problem-solving, resource utilization.
Prereq: PSY 101 and ANT 101 or permission of the instructor.

HEC 252 Small Group Ecology: Project TEME Implementation (B L) 3 credits
Application of ecological concepts and principles in the implementation of the annual Project TEME event schedule; instruction in group theory and participation in experiential learning activities to develop an understanding of group dynamics and effective group skills, i.e., goal setting, leadership, decision-making, problem-solving, resource utilization.
Prereq: HEC 251 or permission of the instructor.

Human Development

HUD 101 Study Skills Workshop 1 credit (X)
A survey course to provide knowledge of basic study techniques and practice in applying these 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) 1 credit
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 and Personal Growth (X) 1 credit
The four course sessions and central weekend experience 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) 1 credit
The four course sessions and central weekend experience, all facilitated by both outdoor leaders and counselors, focus group problem-solving, rock-climbing instruction practice, orienteering and interpretation of the natural and manmade 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 Decision-Making (X) 1 credit
An individualized introduction to the career/life 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 satisfaction of outcomes depending on accuracy of information about self and world of work.
Prereq: None

HUD 111 Interpersonal Communication and Assertiveness (X) 1 credit
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

HUD 113 Job Search Training (X) 1 credit
An introduction to the techniques used in effective job search. Specific attention is paid to helping each student to match his/her skills, needs and values to specific types of jobs. The course content emphasizes informational interviewing, resumé development, formal job interviewing, and job contact negotiations.
Prereq: None. HUD 109 recommended.

HUD 121 Applied Leadership Training (X) 1 credit
Fundamental leadership skills, problem solving, decision-making techniques and group process; College governance structure, principles of the planning process and budget preparation.
Prereq: Offered only to G.C.C. Student Senators elected by the G.C.C. student body.

Humanities

HUM 101 Humanities in the Western World (H C) 3 credits
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) 3 credits
Continuation of HUM 101. This course concentrates on the Baroque, Romantic and Modern periods.
Prereq: None

HUM 111 Historical Research Orientation (H L) 2 credits
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) 3 credits
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) 3 credits
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 117 History of Pioneer Valley Education (H L) 3 credits
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

HUM 119 Women in the Pioneer Valley I (H L) 3 credits
In this course students through historical and literary readings and original research explore the experience of women of the Pioneer Valley. Letters, diaries, journals, oral histories, fictional works and other similar sources will be examined.
Prereq: None
HUM 201 Mass Media in America (H L) 3 credits

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) 3 credits

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

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 3 credits (X)

Prereq: IND 111 or permission of instructor.

IND/FST 175 Industrial Fire Protection and Safety (X) 3 credits

Introduction to fire risk management, fire suppression and detection systems and devices; industrial storage and housekeeping practices; fire hazard control; OSHA Regulations (Subpart L).
Prereq: None

IND 204 Facilities Engineering (X) 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 Carnot cycles.
Prereq: MAT 207 or equivalent.

IND 207 Strength of Materials 3 credits (X)

Axial and shear stress and strain. Torsion, bending, shear and moment diagrams, deflections, columns, connections, indeterminate beams. Credit will be granted for IND 207 or EGR 206 but not for both.
Prereq: EGR 205

Journalism

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: 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** 1 credit (X)

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** 1 credit (X)

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** 1 credit (X)

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** 1 credit (X)

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** 1 credit (X)

Designed to train and certify American National Red Cross Canoeing Instructors; provides people with the knowledge, judgment 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** 3 credits (X)

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, judgment 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** 1 credit (X)

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** 1 credit (X)

Designed to train and certify American National Red Cross Sailing Instructors; provides the knowledge, judgment 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** 1 credit (X)

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** 1 credit (X)

Skills of rowing and outboard motor use; emphasis on safety, skills development and enjoyment in the use of rowboats and small motor boats. Course is taught in conjunction with the LED sailing courses. (LED 113, 115)

Prereq: None

LED 121 **Solo White Water Canoeing** 1 credit (X)

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** 2 credits (X)

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** 1 credit (X)

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 Racquetball (X) 1 credit
The basic skills and techniques essential to recreational racquetball. Covers the rules, terminology and strategy used during singles and doubles play. The value of racquetball and other racquet 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 top spin.

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 blocking and kicking techniques, self-defense and the philosophy of the The Kwon Do.

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 178 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 181 Basic Officiating. (X) 1 credit
Provides the basic rules and procedures needed for officiating within informal settings. Includes basketball, volleyball, softball, baseball, soccer, tennis and racquetball. Suitable for use on playgrounds, in YMCA's, etc.

Prereq: None

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 195 Nature Crafts (X) 1 credit
Familiarity with and development of skills within a variety of nature craft activities. Incorporates the use of natural, inexpensive materials into arts and crafts. Teaching approaches, leadership and organizational skills appropriate to nature craft programs.

Prereq: None

LED 199 Creative Drama (X) 2 credits
Prepares recreation leaders to direct informal creative dramatics 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)
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

LIB 107 Library Research Techniques (H L)
A practical, hands-on course emphasizing the use of library resources for the purpose of preparing research papers. Designed for students wishing to transfer.
Prereq: None

Mathematics

MAT 100 Basic Mathematics 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 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 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 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)
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)
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)
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)
The organization, presentation and interpretations 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 Managerial and Social Sciences I (N C)
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 Managerial and Social Sciences II 4 credits (N C)
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 Geometry I 4 credits (N C)
Prereq: MAT 108 or the equivalent.

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

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

MAT 204 Elementary Differential Equations 3 credits (N C)
Topics in ordinary differential equations to be considered include separation of variables, homogeneous equations, exact equations, differential operators, series solutions and solution by Laplace transform. The methods will be applied to problems from engineering, physics and chemistry.
Prereq: MAT 203

MAT 205 Elementary Linear Algebra 3 credits (N C)
Prereq: MAT 202, or permission of the instructor.

MAT 207 Applied Mathematics III 3 credits (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 204 or equivalent.

Media Communications

MCM 101 Introduction to Media Communications (A)
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 Audiovisual Materials (X)
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 make-up 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 3 credits (X)
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 program for tapes, records and radio.
Prereq: MCM 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: MCM 109 or equivalent.
MCM 215 Media Communication 3 credits
Technology (X)

Theory and practice in the electronics related to media, maintenance and care of equipment.
Prereq: MCM 101 or permission of the instructor.

MCM 217 Media Systems Design (X)

6 credits
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 Communications 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: MCM 101, MCM 103 and MCM 109.

MCM 298 Cooperative Work Experience in Media II (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: MCM 297 may be taken concurrently.

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

Music
NOTE: A maximum of 8 credits may be earned toward graduation requirements in music courses coded H L.

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 (H C)

3 credits
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 (H C)

3 credits
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
Dominant seventh and extended chords in root, position and inversions. Modulation to closely related keys. Harmonic analysis of great composers' works. Keyboard harmony and ear training.
Prereq: MUS 107

MUS 109 Music in Early Childhood Education (H L)

1 credit
Designed to meet the needs of early childhood education majors. Rewarding ways of using music for pre-school age children will be explored. Note reading will be acquired by playing simple tunes on recorder, autoharp and/or piano.
Prereq: ECE major.

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 114 Applied Music: Beginning level

1 credit
Individual instruction on an instrument or voice. Emphasis on technique, repertoire, memory, and interpretation. A fee for lessons is charged by the instructor in addition to regular College fees and tuition.

1 credit courses are weekly half-hour lessons: See also 2 credit courses.
Prereq: None
MUS 115 Applied Music: 1 credit
Intermediate level
Prereq: MUS 114 or 124 in same instrument or permission of Music Coordinator.

MUS 116 Applied Music: 1 credit
Advanced level
Prereq: MUS 115 or 125 in same instrument or permission of Music Coordinator.

MUS 117 Class Piano (H L) 1 credit
Group instruction open to all GCC students. Especially designed for students with no background in music. Sight reading, melodies with chords and familiar tunes will be included. Individual and partner practicing is a feature of class piano.
Prereq: None

MUS 118 Class Piano (H L) 1 credit
Fundamental piano skills. Group instruction is especially designed for the beginning piano student who already has some background in music. Emphasis will be on sight reading, harmonizing melodies, transposition, solo, duet and group literature. Individual and partner practicing is a feature of class piano.
Prereq: MUS 117 or permission of the instructor.

MUS 119 Class Piano (H L) 1 credit
For intermediate/advanced students. Development of technique, sight reading, melody harmonization, solo and ensemble literature. Special emphasis will be given to technique and interpretation.
Prereq: MUS 118 or permission of the instructor.

MUS 123 Instrumental Ensemble (H L) 1 credit
per semester (maximum 4 credits)
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.

Applied Music (H L)
Individual instruction on an instrument or voice. Emphasis on technique, repertoire, memory and interpretation. A fee for lessons is charged by the instructor in addition to regular College fees and tuition.
2 credit courses are weekly one-hour lessons. See also 1 credit courses.

MUS 124 Applied Music: 2 credits
Beginning level
Prereq: None

MUS 125 Applied Music: 2 credits
Intermediate level
Prereq: MUS 114 or 124 in same instrument or permission of Music Coordinator.

MUS 126 Applied Music: 2 credits
Advanced level
Prereq: MUS 115 or 125 in same instrument or permission of Music Coordinator.

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.

Nursing

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 children and pregnant women. 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: 8 credits
Medical—Surgical Nursing I (X)
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: 9 credits
Medical—Surgical Nursing II (X)
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 (X)
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 2 credits (X)
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 socioeconomic and political forces in our health care delivery system.

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

Outdoor Leadership

OLP 107 Canoeing Workshops 2 credits (X)
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 for Outdoor Leaders 1 credit (X) 3 credits
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 skill areas.

Prereq: OLP participants only.

OLP 111 Introduction to Outdoor Adventure Programs and Services 3 credits (X)
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 3 credits (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 in Outdoor Leadership I 4 credits (X)
Field experience in the basic stages of planning, organizing and evaluation 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 Emergency Care 3 credits (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 3 credits (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 3 credits (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 3 credits (X)
Provides fundamental information and backgrounds, 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 205 Outdoor Leadership Seminar (X) 3 credits
A survey of the major philosophical outlooks and practical applications that relate to outdoor and adventure educational programs. The course format will focus on fieldwork and job settings the students have experienced. Particular attention will be paid to changing trends and the needs of particular populations.
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 (H L) 3 credits
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 (B C) 3 credits
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 (B C) 3 credits
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)
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 (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)
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)
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 3 credits (B C)
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)
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)
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)
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 (B C) 3 credits
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/ECE 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 ECE 103, but not for both.
Prereq: REC or ECE major or permission of instructor.

REC 107 Recreational Sports Administration (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 or recreational programs applied to a variety of settings. Analysis of program objectives. Development of leadership skills.
Prereq: None

REC 111 Environmental Recreation (X) 3 credits
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 (X) 3 credits
Experience in planning, organizing, conducting and evaluating recreation programs in a local agency. Settings change each semester.
Prereq: None

REC 116 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 car-

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 131 Introduction to Therapeutic Recreation (X) 3 credits
Philosophy and principles of therapeutic recreation programming. Development of skills in applying principles to practical situations.
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, audiovisual 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 100 Math for the Physical Sciences (N L)  3 credits
A one semester course in scientific math for the student who needs immediate command of certain mathematical concepts and skills which are typically encountered in physical science courses such as chemistry, physics, electronics and generally other math-based courses. Such topics would normally be dealt with more fully in courses such as Math 105, 106; 103, 104; 107, 108. Not intended to replace the normal math sequences, but merely to expedite and facilitate mathematical progress in the sciences until such time that the normal math deficiencies or prerequisites can be satisfied.
Prereq: Math through high school Alg. I or permission of the instructor.

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, Black Holes and 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 C)  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 (B C)  3 credits
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 (B C)  4 credits
The historical and cultural development of work with emphasis on economic and social cycles developed through the process of socialization and stratification. The importance 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 courtship, 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)  3 credits
This course explores the various means from childhood fairytale to myth and religion whereby man transforms his daily 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 sociological perspective. The impact of the legal system on the rest of society.
Prereq: SOC 101

Spanish

SPA 101 Elementary Spanish I (H C)  3 credits
Introduction of the language through conversation followed by a systematic study
of practical grammar and phonetics. Readings correlated with what is learned through conversation. For beginners and students who have not successfully completed one year of high school Spanish. Laboratory required.

Prereq: None

SPA 102 Elementary Spanish 3 credits
II (H C)

Development of basic language skills through conversation, study of grammar and phonetics and correlated readings. For students who have successfully completed one year of high school Spanish. Laboratory required.

Prereq: SPA 101 or equivalent.

SPA 201 Intermediate Spanish 3 credits
I (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 3 credits
II (H C)

Further development of conversational and technical fluency. Continued consideration of Spanish literature to provide increased awareness of Spanish culture.

Prereq: SPA 201 or permission of the instructor.

SPA 251 Spanish Composition 3 credits
and Conversation (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 3 credits

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

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

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

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 3 credits
(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 3 credits
(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 107 History of the Dance 3 credits
(H L)

Introduction to the history of theatrical dance, beginning with the Renaissance courts of Europe and ending with current dance experiments in New York lofts. Includes dance literature/film and a live performance.

Prereq: None

THE 111 Fundamentals of Acting and Directing 3 credits

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)  
3 credits

Intensive training in theatrical production, rehearsal and performance. Registration in advance required.

Prereq: Permission of the instructor.

THE 133 **College Theatre Workshop** (H L)  
1 credit 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
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M.Ed., Utah State University
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Media Technician
Susan J. Downey
A.A., Greenfield Community College
Media Assistant

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M.A., Columbia University
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Student Development and Career Counseling
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M.S., Ed.S., State University of New York at Albany

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Institutional Maintenance Foreman
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B.S., University of Massachusetts

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Painter
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Plant
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Frank Hill

Controls Specialist
AV/TV Technician
Instrument Technician
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Security & Communications
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Jean Call
Patricia Dunican

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Duplicating Services Technician
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M.Ed., University of Vermont

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B.S., M.Ed., Springfield College

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M.Ed., Westfield State College

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M.Ed., C.A.G.S., University of Massachusetts

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Secretary, Office of Student Services
Beryl R. Holloway  
Secretary, Office of Student Services
Joanne Shaw  
Secretary, Office of Student Services
Patricia Jurek  
Secretary, Office of Student Services
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Laima Brunner  
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Anne LaVangie  
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Secretary, Student Activities

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Certified Adult Nurse Practitioner

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Massachusetts General Hospital

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M.A.T., University of Massachusetts

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History  

French  

English  

Music  

English  

English  

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M.S., University of California

Jean B. Waite, R.N.
Nursing
B.S., University of Vermont
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# Academic Calendar 1981-1982*

**1981 Fall Semester**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 3-4</td>
<td>Registration</td>
</tr>
<tr>
<td>September 7</td>
<td>Labor Day</td>
</tr>
<tr>
<td>September 8</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>September 9-11</td>
<td>Period to Add Classes</td>
</tr>
<tr>
<td>October 12</td>
<td>Columbus Day - No Classes</td>
</tr>
<tr>
<td>October 13</td>
<td>Last Day to Withdraw - No Record</td>
</tr>
<tr>
<td>October 30</td>
<td>Deficiency Notices Due</td>
</tr>
<tr>
<td>November 11</td>
<td>Veteran's Day - No Classes</td>
</tr>
<tr>
<td>November 18</td>
<td>Last Day to Withdraw - W</td>
</tr>
<tr>
<td>November 16-23</td>
<td>Returning Student Registration for Spring 1982</td>
</tr>
<tr>
<td>November 26-27</td>
<td>Thanksgiving Recess</td>
</tr>
<tr>
<td>November 30</td>
<td>Classes Resume</td>
</tr>
<tr>
<td>December 17</td>
<td>Classes End</td>
</tr>
<tr>
<td>December 18-23</td>
<td>Exams</td>
</tr>
</tbody>
</table>

**1982 Spring Semester**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 21-22</td>
<td>Registration</td>
</tr>
<tr>
<td>January 25</td>
<td>Classes Begin</td>
</tr>
<tr>
<td>To be announced</td>
<td>Period to Add Classes</td>
</tr>
<tr>
<td>February 15</td>
<td>Washington's Birthday - No Classes</td>
</tr>
<tr>
<td>March 1</td>
<td>Last Day to Withdraw - No Record</td>
</tr>
<tr>
<td>March 16</td>
<td>Deficiency Notices Due</td>
</tr>
<tr>
<td>March 17</td>
<td>Evacuation Day - No Classes</td>
</tr>
<tr>
<td>March 22-26</td>
<td>Spring Recess - No Classes</td>
</tr>
<tr>
<td>April 6</td>
<td>Last Day to Withdraw - W</td>
</tr>
<tr>
<td>April 12-16</td>
<td>Returning Student Registration for Fall 1982</td>
</tr>
<tr>
<td>April 19</td>
<td>Patriot's Day - No Classes</td>
</tr>
<tr>
<td>May 18</td>
<td>Classes End</td>
</tr>
<tr>
<td>May 19-21</td>
<td>Exams</td>
</tr>
<tr>
<td>June 6</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

*The 1982-83 calendar will be available later.*

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