# Johnson State College 

Johnson, Vermont

## Undergraduate Catalogue

Johnson State College<br>337 College Hill<br>Johnson, VT 05656-9464<br>Phone (802) 635-2356<br>Fax (802) 635-1230<br>jscadmissions@jsc.vsc.edu<br>www.johnsonstatecollege.edu

This catalogue becomes effective on August 20, 2006 and is in effect until superseded by a new issue.
This catalogue is not a legally binding agreement between the College and its students, but is published for purposes of information only. Johnson State College reserves the right to make changes in course offerings, degree requirements, charges, regulations, and procedures contained herein as educational and financial considerations require.

## A Message from President Barbara Murphy

I'm pleased that you are considering study at Johnson State College.
We are a community committed to the belief that higher education has the power to transform lives. Our faculty members take a personal interest in your success. Whether in the classroom or through one of our many service or extended-campus study opportunities, Johnson will offer you the chance to explore your interests, examine your values, and shape the future direction your life will take. You can count on us to help you along the way.

This catalogue can provide an overview of our college and an introduction to opportunities for study, but it is only an informational guide. We encourage you to contact our admissions and student services staff to learn more about your Johnson State College experience.

Welcome to our college community.


President

## Contents

A Message from President Murphy ..... 2
General Information 5
A Brief History of Johnson State College 5
Mission Statement 6
Degree Requirements 6
Academic Regulations and Requirements 9
External Degree Program ..... 18
Undergraduate Academic Programs ..... 21
Behavioral Sciences ..... 21
Business/Economics ..... 26
Education ..... 30
Environmental and Health Sciences ..... 35
Fine and Performing Arts 43
Humanities 51
Mathematics 55
Writing and Literature 57
Inter-Departmental Programs ..... 60
Undergraduate Course Descriptions ..... 62
Admissions, Costs, Financial Aid, Student Services ..... 106
Admissions ..... 106
Tuition and Expenses ..... 110
Financial Aid ..... 114
Payment Procedures ..... 118
Student Services ..... 120
Campus Facilities ..... 128
Administrative Support Services ..... 129
Faculty ..... 130
Staff ..... 136
Index 140
Accreditation ..... 144
Academic Calendar (back cover)

## Human Rights/Equal Opportunity

Every member of Johnson State College should work to ensure non-discriminatory processes and practices for faculty, staff, and students.

Qualified students are recruited for, admitted to, and participate in all college programs without discrimination on the basis of race, color, sex, sexual orientation, religion, creed, national origin, age, veteran status, or disability. JSC will provide reasonable accommodations to create equal opportunity for students with known disabilities.

Faculty, administrators, and staff are employed without discrimination on the basis of race, color, sex, sexual orientation, religion, creed, national origin, age, veteran status, or disability unrelated to job requirements. JSC will make reasonable accommodations to the known disability of an otherwise qualified applicant or employee.

Johnson State College is committed to creating and maintaining an environment for work and study in which students, staff, and faculty are free from all forms of sexual harassment. Such harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature directed toward a member of the College community.

Johnson State complies with State and Federal laws related to equal opportunity and non-discrimination. Any questions or complaints about potential or perceived discrimination in violation of any State or Federal law should be directed to Sharron Scott, Dean of Administration at JSC, Martinetti Hall, 802-635-1207; or the VSC Office of the Chancellor in Waterbury; the Vermont Office of the Attorney General; or the Equal Opportunity Employment Commission in Washington, D.C. Please contact Sharron Scott, Dean of Administration, if auxiliary aid or service is needed to apply for admission or employment.

Johnson State College is accredited by the New England Association of Schools and Colleges, Inc., through its Commission on Institutions of Higher Education.

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

Commission on Institutions of Higher Education New England Association of Schools and Colleges 209 Burlington Road Bedford, MA 01730-1433
(781) 271-0022 cihe@neasc.org

# General Information 

## The College: A Brief History

The history of Johnson State College dates back to 1828 when John Chesamore, a village cobbler, gave his shoe shop to the village of Johnson for a much-needed elementary and secondary school. Dr. Carpenter, a Chelsea, Vermont preacher became the schoolmaster when the school was chartered in 1832 as Johnson Academy.

In 1836, five communities incorporated as the Lamoille County Grammar School Association to support the school. In 1866, the State designated Johnson Academy as one of three new "Normal Schools," institutions specifically for teacher training. The Johnson Normal School offered one-, two-, and three-year teacher training programs until 1947 when the State approved a fouryear teacher training program, and the school became Johnson Teachers College.

By an act of the 1961 Legislature, the Vermont State Colleges Board of Trustees was created to oversee the state college system. This new board assumed control on July 1, 1962, and Johnson Teachers College became Johnson State College. This new name signaled a change in the College's mission from a single-purpose teacher-training college to a multi-purpose liberal arts college. Since that time, the College's curriculum in the liberal arts and sciences, its enrollment, and its facilities have expanded dramatically to meet this new mission. The most recent addition is the Library and

Learning Center, a 39,000 square foot library, classroom, and faculty office facility which opened in Fall 1996.

The College has come a long way from that first class of 16 students in a converted cobbler's shop. Johnson State's modern, dozen-building campus spreads over 330 hilltop acres and serves nearly 1600 students from Vermont and around the country. The College is accredited as a multi-purpose public institution by the New England Association of Schools and Colleges and is approved as a degree-granting institution by the Vermont State Board of Education.

## Mission Statements

## Mission of the Vermont State Colleges System

For the benefit of Vermont, the Vermont State Colleges provide affordable, high quality, student-centered and accessible education, fully integrating professional, liberal, and career study. This integrated education, in conjunction with applied learning experiences, assures that graduates of VSC programs will:

1. Demonstrate competence in communication, research and critical thinking.
2. Practice creative problem-solving both individually and collaboratively.
3. Be engaged, effective, and responsible citizens.
4. Bring to the workplace appropriate skills and an appreciation of work quality and ethics.
5. Embrace the necessity and joy of lifelong learning.

The Vermont State Colleges also offer numerous opportunities for others to engage in continuous learning to meet their specific goals.

## The Johnson State College Mission

The Johnson State College community believes in the power of higher education to transform lives. We express this commitment through an education that crosses academic and other boundaries, wherever possible; creates opportunities for students to extend their classroom learning to the field, the laboratory, the studio, the community, and the local and wider world; recognizes the diverse starting points and goals of students; and sustains active participation, high standards, vigorous debate, and mutual respect.

## Degree Requirements

## Requirements for a Bachelor's Degree

Completion of a bachelor's degree requires completion of at least 120 credit hours of course work (not including basic skills credits), with a minimum cumulative grade point average of 2.00 (on a scale where A equals 4.00). In addition, students must complete the General Education Core Curriculum and an approved major; at least 30 of the last 39 credits applying toward the degree must be earned from Johnson State College; and at least 39 credits must be at the 3000 and 4000 level.

## General Education Core Curriculum (GECC)

The GECC is designed to introduce students to a broad range of the liberal arts and sciences and to prepare them to become informed citizens of a democratic society. The GECC has three components:

- Part I: Fundamental Skills requires students to complete three lower-division courses in writing and two in mathematics, and to pass the Writing Proficiency Examination.
- Part II: Disciplinary Exploration requires students to complete a minimum of six lower division courses emphasizing the primary concepts, methods of inquiry and major achievements of the arts and humanities, the natural sciences and the social sciences.
- Part III: Interdisciplinary requires students to complete three upper-division, interdisciplinary courses, including one focused on a theme determined annually by the Faculty Assembly Committee on General Education. These courses use a topical approach and combine the tools of analysis from two or more disciplines.


## Part I: Fundamental Skills <br> 15-16 credits

A. Requirements in expository writing ( 9 credits):

1. ENG-1051: College Writing (3 credits)
2. ENG-1052: Exposition and Analysis(3 credits)

- ENG-1052 should be taken after successfully completing ENG-1051.

3. At least one writing intensive course. (The fall and spring semester course bulletins identify courses that are writing intensive.)
4. Writing Proficiency Examination

- All students seeking a baccalaureate degree must pass the Writing Proficiency Exam in order to graduate. Effective academic year 2002-2003, the exam will be administered as part of ENG 1052, Exposition and Analysis. Students who do not attempt the exam at that time will receive a grade of Incomplete for the course. The Incomplete will be converted into a grade when students take the exam in a subsequent semester. Neither passing nor failing the exam will affect the letter grade for the course. Students who fail the Writing Proficiency Exam must take The Self-Sufficient Writer; those who fail the exam once may attempt it a second time before taking this course.
B. Requires two courses in mathematics (6-7 credits):

MAT-1020 Intermediate Algebra
MAT-1221 Finite Mathematics
MAT-1320 Pre-Calculus
MAT-1531 Calculus I*
MAT-2030 Probability and Statistics
MAT-2140 Modeling the Environment
*Will satisfy the full two-course requirement in itself.

## Part II: Disciplinary Exploration 18-19 credits

One course from each of the following sub-categories, other than the sub-category that includes the student's major (one may be writing intensive - see Part I):
A. Arts and Humanities

1. Literature/Philosophy

COM-2050 Introduction to Film Study
ENG-1310 Introduction to Literature
ENG-2171 World Literature I
ENG-2172 World Literature II
ENG-2281 Survey of English Literature I
ENG-2282 Survey of English Literature II
ENG-2321 Survey of American Literature I
ENG-2322 Survey of American Literature II
ENG-2510 Women and Literature
PHI-1010 Introduction to Philosophy
PHI-1040 Introduction to Ethics
2. History/Foreign Languages

HIS-1111 World History I
HIS-1112 World History II
HIS-1211 American History I
HIS-1212 American History II
FRE-1111 French I
FRE-1112 French II
SPA-1011 Spanish I
SPA-1012 Spanish II
3. Fine and Performing Arts

ART-1011 Drawing I
ART-1140 Design
ART-2251 Sculpture I
ART-2301 Photography I
ARH-2011 Survey of Western Art I

ARH-2012 Survey of Western Art II
DAN-1010 Fundamentals of Dance
MUS-1015 Meet the Masters
MUS-1030 Music Fundamentals
THA-1041 Introduction to Theater Arts
B. Natural Sciences (minimum of 7 credits; at least one course must include a laboratory)

1. Life Science

BIO-1210 Introduction to Biology
BIO-1211 Introduction to Biology: Ecology \& Evolution
BIO-1212 Introduction to Biology: Cells \& Genetic Basis of Life
2. Physical Science

CHE-1020 Introduction to Chemistry
CHE-1031 General Chemistry I
ENV-1040 Introduction to Oceanography
ENV-1050 Introduction to Earth Science
PHY-1041 Physics I
PHY-1042 Physics II
SCI-1031 \& 1032 Evolution of the Universe I \& II*
*sequence will satisfy entire Natural Science requirement
C. Anthropology/Sociology/Psychology

ANT-1010 Introduction to Cultural Anthropology
SOC-1010 Introduction to Sociology
PSY-1010 Introduction to Psychology
D. Political Science/Economics

ECO-1020 Introduction to Economics
ECO-2020 Macroeconomics
ECO-2030 Microeconomics
POS-1010 Introduction to Political Science
POS-1020 American Politics and Government

## Part III: Interdisciplinary

9 credits
Open Interdisciplinary: Two courses from the following list of approved courses.

ARH-3210
BUS-3250
DAN-3010
EDU-3020
EDU-3110
ENG-3270
HIS-3040
HUM-3045
HUM-3110
HUM-3115
HUM-3120
HUM-3125
HUM-3150
HUM-3160
HUM-3170
HUM-3310
INT-3010
INT-3130
INT-3150
INT-3210
MUS-3040
MUS-3220 History of Blues
MUS-3330 Worlds of Music
Women in Art
The Renaissance Spirit
Educational Psychology
Literature for Children
Myth and Myth Making

Religions of the World North Africa
African Culture
Culture through Cuisine Mahayana Buddhism Jazz in America

Organizational Behavior and Management

Ancient Civilizations of the New World
The Bible: History, Literature, Spirituality
Native American History and Culture
Native American Worldview and Spirituality
The Abenaki and Their Neighbors
Peoples and Cultures of the Middle East and

Popular Culture in America
Natural Landscapes and Literature
Compassion and You: An Introduction to
Gödel, Escher, Bach: An Eternal Golden Braid The Holocaust: An Interdisciplinary Approach

PHI-3150 Philosophy Through Literature
POS-3050 Environmental Ethics and Politics
POS-3220 Genocide: Inhumanity Across the Ages
PSY-4080 Psychology and the Civil War
SOC-3040 Youth Culture and Cultural Studies
SOC-3080 Wellness and Alternative Medicine
THA-3010 Shakespeare: "On The Stage and on The Page"
Thematic Interdisciplinary:
INT-4730 Topical Seminar: Peace and War (required for all seniors)
Note:

- Business, elementary education, hospitality and tourism management, health science, outdoor education, and liberal arts majors must take the disciplinary exploration course in each of the seven sub-categories above.
- For students majoring in liberal arts, no course taken to satisfy GECC requirements can be counted as part of the major.
- For students with a documented learning disability in mathematics, MAT-1070, Mathematics in our Culture, will count as one of the required mathematics courses to fulfill the GECC.
- Students in the External Degree Program are required to complete a different set of general education requirements. Please see pages 18-20.


## Graduation Standards

Johnson State College and the rest of the Vermont State College system has established a graduation standard in writing, and is in the process of establishing graduation standards in quantitative reasoning, information literacy, and oral communication. The colleges will design and implement assessments for each of these areas according to a schedule determined by the Council of Presidents. Successfully fulfilling graduation standards at one VSC institution will be accepted as fulfillment of the standards at any other VSC institution for an equivalent associate's or bachelor's degree. The VSC and the colleges will report regularly on student performance on the assessments.

## Requirements for an Associate's Degree

Completion of an associate's degree requires completion of at least 60 credit hours of course work (not including basic skills credits), with a minimum cumulative grade point average of 2.00 (on a scale where A equals 4.00); at least 30 of the credits applying toward the degree must be earned from Johnson State College. Students in the Associate of Arts (A.A.) in general studies program must complete the Fundamental Skills and Disciplinary Exploration (taking one course from each of the seven sub-categories) components of the GECC. Students in all other associate's programs must complete ENG-1051 and 1052, one semester of mathematics, and four Disciplinary Exploration courses, one each from categories A (Arts and Humanities), B (Natural Sciences),

C (Anthropology/Sociology/Psychology) and D (Political Science/Economics) of the GECC.

## Requirements for Earning a Second Bachelor's Degree

Students who already hold a bachelor's degree from another institution or from Johnson State College may earn a second degree by completing the following requirements:

- Completion of at least an additional 30 semester credits at Johnson State.
- Full completion of the requirements of a major unique from the first bachelor's degree major. The interpretations applying to requirements for double majors also apply.
- Achievement of a minimum cumulative grade point average of 2.00 for credits earned at Johnson State College.


## Requirements for Earning a Second Associate's Degree

Students who already hold an associate's degree from another institution or from Johnson State College may earn a second degree by completing the following requirements:

- Completion of at least an additional 15 semester credits at Johnson State.
- Full completion of the requirements of a major unique from the first associate's degree. The interpretations applying to requirements for double majors also apply.
- Achievement of a minimum cumulative grade point average of 2.00 for credits earned at Johnson State College.


## Requirements for a Double Major

Students wishing to earn a degree with a double major must meet the following requirements:

- Completion of degree requirements as listed under Requirements for a Bachelor's Degree (page 6).
- Completion of the requirements of two unique majors as outlined in the program descriptions section of the catalogue in effect at the time the student matriculated at the College or any time thereafter.
- For baccalaureate degrees, at least 30 , and for associate's degrees, at least 15 , of the credits used to complete each major must be in courses not used in meeting the requirements in the other major.
- Students must obtain approval of their double major by means of two separate plans of study, one for each major. Each plan of study must be signed by an advisor from the department and by the department chair. Note: Students who entered the College while previous degree or major requirements were in effect may choose to meet either the old requirements or the present ones. Former students who are not on an approved leave of absence must meet the current requirements.


## Academic Minors

An academic minor shall consist of a minimum of 18 credits in a discipline or field, at least six of which shall be at the 3000/4000 level. Students should check with their academic advisor or the department chair as to whether credits toward a minor may also be used to satisfy required or elective credits within the student's major.

## Basic Skills

Recognizing that basic reading, writing and mathematics skills are essential to successful completion of college-level work, and in accordance with the Vermont State Colleges Basic Academic Skills policy, Johnson State College assesses the skill level of all new students in these three areas. On the basis of the assessment, students who do not possess college-level skills in one
or more areas are directed into courses designed to address their skill deficiencies. These courses should be taken during the student's first year at Johnson State College.

Please note that those basic skills courses whose course number begins with a "0" (i.e., MAT-0410) do not count toward total credits required for graduation, but they do count in the student's grade point average.

Individual exceptions to any of the requirements for either degree program above may be appealed to the Academic Status Committee. See Appeal of Academic Policies, page 17.

## Academic Regulations and Requirements

By enrolling for courses, students obligate themselves to abide by the policies set forth in this catalogue and in other College publications.

## Registration

Students pursuing a bachelor's or associate's degree from Johnson State College must be formally accepted through the admissions office before they may register for courses. Continuing undergraduates are expected to pre-register for their courses in November for the spring semester and in April for the summer and fall semesters. Students are notified of exact dates and instructions via email one to two weeks prior to the registration period. EDP students receive registration information by mail. All students must meet state immunization requirements and must be cleared by the Business office (see payment procedure section for details) in order to register for classes.

Class attendance does not in itself signify registration. Students must properly register for each of their courses in order to receive academic credit for work completed.

New Student Registration: New student registration is required of all new first-year and transfer students. Sessions are held during the late spring and summer and before the start of classes in both fall and spring semesters.

Class Membership: Students are classified for academic class membership and administrative purposes on the basis of semester credits earned according to the following schedule:

| Number of Credits Earned | Academic Class |
| :---: | :---: |
| $0-29.9$ | First-year |
| $30-59.9$ | Sophomore |
| $60-89.9$ | Junior |
| 90 or more | Senior |

Auditing Courses: No credit or grades are assigned for audited courses. A per-credit tuition fee of one-half of in-state rates is charged. Courses that are audited do not count toward a student's credit load and are not eligible for financial aid. Students wishing to audit a course should follow normal registration procedures, indicating AU as their grade option on the course registration form. The choice to audit a course must be made prior to the end of the add/drop period.

Class Attendance: Students who register for a course prior to the first week of the semester or during the first day of the semester are expected to attend at least one of the first two class sessions. A faculty member may fill absent places with students wishing to enter the course and to refuse entry to absent students when they appear. Faculty members may also refuse to admit a student to the class after the beginning of the semester, if they believe the student cannot complete missed work. In this case, the registered student is responsible for dropping the course from their schedule.

## Adding and Dropping Courses

Students who want to add or drop a course from their schedule of courses may do so only by filing a properly completed add/drop form with the registrar's office according to these guidelines:

- The signatures of the student's advisor and the instructor are required for all course adds. Only the signature of the student's advisor is required for all course drops.
- Full-semester courses may be added or dropped only until the end of the second week of the semester.
- Half-semester courses may be added or dropped:
- during the beginning of the semester periods as specified above for first-half semester courses, or
- during the period one week prior to the end of the first half of the semester until the end of the second week of the second half of the semester for second-
half semester courses.
If, because of failure to attend at least one of the first two class sessions, students are refused entry to a class in which they are registered, they must still officially drop that course from their schedule by completing an add/drop form and submitting it to the registrar's office. Tuition refunds that might be due will be made only on the basis of a properly filed add/drop form, regardless of the student's actual attendance of the class.


## Withdrawing from a Course

Students may withdraw from a course after the drop deadline only by filing a "Request for Withdrawal" form with the registrar's office. Students may withdraw from courses only between the end of the add/drop period (see above) and the end of the ninth week of the semester. If the request is granted, the course will appear on the transcript with a "W" grade. A "W" grade will not affect a student's grade point average.

The registrar will publish the exact dates on which all of the above deadlines fall. Exceptions to the procedures above will be allowed only upon approval of the Academic Status Committee. See Appeal of Academic Policies, page 17.

## Declaring a Major

After earning 45 credit hours in a bachelor's degree program, or 12 credit hours in an associate's degree program, all students must formally declare a major by filing an approved plan of study with the registrar. Students transferring into the College with sophomore or higher standing must submit a plan of study by the end of their first semester at Johnson. A student may declare any major officially in existence at the time the student matriculated. The plan outlines the requirements in the student's major and describes how the student intends to meet those requirements.

Students who have accumulated sufficient credits to be required to file a plan of study will not be allowed to register or take a leave of absence until they have met this requirement.

Discontinued Majors: The following provisions apply with regard to discontinued majors:

- Students who have previously formally
declared a major may not at a later time switch into a major designated as discontinued.
- Students failing to make a formal declaration of a major by the end of their sophomore year, as is required, may not at a later time declare a discontinued major.
- Former students who are not on an approved leave of absence and have returned may not pursue a discontinued major.


## Grading

Johnson State College employs letter grades as indicated below:

| Grade |  | Explanation |
| :--- | :--- | ---: |
| A+ | High competence | 4.00 |
| A | High competence | 4.00 |
| A- | High competence | 3.70 |
| B+ | Good competence | 3.30 |
| B | Good competence | 3.00 |
| B- | Good competence | 2.70 |
| C+ | Moderate competence | 2.30 |
| C | Moderate competence | 2.00 |
| C- | Moderate competence | 1.70 |
| D+ | Minimum acceptable competence | 1.30 |
| D | Minimum acceptable competence | 1.00 |
| D- | Minimum acceptable competence | 0.70 |
| F | Failing | 0.00 |
| I | Incomplete (See Incompletes.) |  |
| P or NP | Pass/No Pass grades |  |
| NG | No grade indicates that no grade has yet been |  |
|  | submitted. The grade will be recorded upon course |  |
|  | completion. |  |
| TR | Transfer credit |  |
| CR | Credit granted (non-course work) |  |
| W | Withdrawn |  |
| AU | Audit |  |

Faculty grades are due at the registrar's office 48 hours after each course's final examination.

Pass/No Pass Option: Students may enroll in any course other than basic skills courses, courses in their declared major or minor, or courses taken to satisfy the GECC, and opt to be graded on a Pass/No Pass basis. The Pass/No Pass option is designed to encourage students to take courses they otherwise would not take for fear of receiving low grades. For performance of $D$ - work or better, a grade of $P$ (Pass) is recorded on the student's record. Credit is received for $P$ grades, but the grades do not affect the student's grade point average. Failing work is recorded as NP (No Pass). NP grades do not earn credit nor does the grade affect the student's grade point average.

Students select this option by indicating P/NP as their grade option. This option may be selected only once a semester and no more than a total of eight times.

Incompletes: A grade of Incomplete (I) will be given to work of satisfactory quality in a course when the full amount of required work has not been completed because of illness or other reasons beyond the control of the student. It cannot be used instead of the grade of F in situations involving a student's lack of ability or negligence. The student has until the seventh week of the next regular semester (excluding the summer semester) to complete the work, although the instructor may impose a shorter deadline. This deadline applies regardless of whether the student is enrolled during the semester. An instructor may extend an Incomplete beyond the mid-semester deadline, but must obtain approval of the registrar prior to that deadline.

The registrar will publish the mid-semester deadline in each semester's course bulletin. When the student completes the work, the Incomplete is replaced with the final grade. In assigning an Incomplete, the instructor is required to designate what grade should be recorded if the student fails to complete the work by the deadline. If the instructor fails to designate this default grade, the registrar will assume the grade to be an F . The resulting grade will be calculated into the student's cumulative average. The cumulative average will be reviewed at the end of each regular semester in conformance with the academic dismissal policy. Courses carried through as "I" to the following semester do not count toward the student's credit load for tuition billing purposes or for additional credit toward graduation.

Not Graded Work: An NG grade will be given when grades have not yet been assigned to the course. This may happen if the course extends beyond the end of the semester. NG grades are removed upon completion with only the final grade showing on the transcript. Course work carried into a second semester with a grade of NG does not count toward a student's credit load for tuition billing purposes or for additional credit toward graduation in the second semester.

Repeat Course Option: Students may repeat any course they have previously taken to attempt to earn a higher grade. When a course has been repeated within the Vermont State College system (VSC), the initial
grade remains on the transcript but is taken out of the student's cumulative GPA. The most recent grade will be the only one computed in the student's cumulative average. Credit in the course may be earned only once. If the credit value of the course has changed, the repeated course is worth only the new credit value.

When repeating a course at another institution outside of the VSC, the initial grade remains on the transcript but is taken out of the student's cumulative GPA. The grade from the repeated course being transferred to JSC will show as a transfer but will not be counted in the student's cumulative GPA.

Students may choose to use the Pass/№ Pass option when registering for a repeat course, except for basic skills courses, courses in their major or minor, or in the GECC. If they do not receive a $P$, however, the repeat will not count. If a course was originally taken under a prior grading system, the effect on the student's average will be determined by using the new system. If a course is offered at both the lower level and upper level, it can generally be taken only once for credit, not once at the lower level and again at the upper level.

## Graduation

Application for a Degree : A student who anticipates completion of his/her degree requirements should file an application for a degree with the registrar's office during the semester prior to his/her last semester. This may allow time for the student to pick up additional courses or complete outstanding paperwork during his/her last semester if necessary. A commencement fee will be charged to the student's account. The registrar's office will carry out a detailed degree audit, identifying where the student stands in relation to degree requirements. The results of the degree audit will be given to the student and to his or her advisor.

Conferring of Degrees: Degrees are conferred once each year in a ceremony at the end of the spring semester. Students who complete their degree requirements at other times during the year will be certified as having completed their programs but will not actually receive their diplomas until the spring semester. Diplomas are dated August, December, or May for students completing studies in summer, fall, or spring semesters respectively. Diplomas are awarded to August and December graduating students at the commencement ceremony. May graduating students will be mailed their diplomas
once completion of all degree requirements is verified by the registrar's office.

Participation in Commencement: Only students who have completed all degree requirements will be allowed to participate in the Commencement ceremony. The College recognizes that there may be occasions when special circumstances arise. Under such unusual circumstances, students may petition the academic dean or his/her designee to participate in Commencement. Students must, however, be within 8 credits or a single experience (such as an internship) of completing graduation requirements. No other exceptions will be considered. The decision of the academic dean or his/her designee is final and may not be appealed to the president.

## Academic Honesty

Students are expected to be honest in all their academic work at Johnson State College. Academic dishonesty in any form is prohibited and unacceptable. Acts of dishonesty for which a student may be disciplined include, but are not limited to, receiving or providing unauthorized assistance on an examination and plagiarizing the work of others in writing assignments. The American Heritage Dictionary defines plagiarism in the following way: "To steal or use (the ideas or writings of another) as one's own." Students are responsible for knowing what specific acts constitute plagiarism; if students are uncertain whether a particular act constitutes plagiarism, they should consult with their instructors before turning in assigned work.

Any faculty member who suspects that a student has committed an act of academic dishonesty will bring this suspicion to the attention of the student and provide the student with an opportunity to respond. Following this, should the faculty member determine that the student has committed an act of academic dishonesty, the faculty member will assign a penalty for the offense, which penalty may be a failing grade for the specific work submitted or a failing grade for the course. The student will be notified, in writing, of the faculty member's action. A student may appeal the action of any faculty member relative to the determination of academic dishonesty. Any such appeal must be submitted, in writing, to the Academic Status Committee. Upon receiving any such appeal, the Academic Status Committee shall meet with the student, the faculty member, and any other person with evidence to submit relative to the charge and determination, and will thereafter affirm, reverse, or
modify the finding and/or penalty of the faculty member. Decisions of the Academic Status Committee may be appealed, in writing, to the academic dean. Records of all incidents of academic dishonesty will be maintained in the academic dean's office. Repeated incidents of academic dishonesty will subject a student to dismissal from the College.

## Academic Standing

Good Academic Standing: A student, regardless of the number of credits earned, whose cumulative average is 2.0 or above, except 1.75 for students with fewer than 30 earned or GPA credits, whichever is higher, is considered to be in good academic standing. The cumulative and semester averages are calculated by including only the graded credits (A, B, C, D, F) earned during the current and past semesters. These averages do not include courses bearing other grade designators.

Academic Warning: A student whose cumulative average is in good standing or above but whose semester average is below good standing (see Academic Standing above) will receive a letter of warning from the College. There are no punitive aspects to this warning status.

Academic Probation: Academic probation serves as an official warning from the College that a student's performance has been substandard. A student who has attempted 30 or more credits and whose cumulative average falls below 2.0, or a student who has attempted fewer than 30 credits and whose cumulative average falls below 1.75 , will be placed on academic probation. Students remain on academic probation until they achieve a cumulative average of 2.0 or above, or until they fall below the dismissal standard outlined below. Students on academic probation who have less than 30 credits must work with the academic probation counselor to create a plan for academic success. When a student voluntarily withdraws from the College while on probation status, or is academically dismissed and later readmitted, he or she will return on probation.

Academic Dismissal: Students on academic probation will be academically dismissed if:

- they fail to achieve a semester grade point average of 2.0 having attempted 30 or more credits, or 1.75 having attempted fewer than 30 credits, during the semester on probation.

Any new, first-year student, with no previously earned credits, who fails to achieve a grade point average of
at least 0.7 in the first semester will be academically dismissed.
Students who successfully appeal academic dismissal will return on stipulated probation and must sign a contract to abide by conditions set forth by the Academic Status Committee. Failure to comply with any portion of this contract may result in immediate dismissal from Johnson State College.

Students academically dismissed may reapply for admission generally after two regular semesters of absence. Such students must follow the regular procedure for application to the College for re-admission and will remain on probation upon their return.

Early Warning Notification: The purpose of early warning notification is to send a clear message to students who are performing poorly in 1000- and 2000level courses, and to do so early enough in the semester for corrective action to be taken. All faculty are required to participate in this process. During the fifth week of each semester, an early warning notification should be sent to each student who is performing at a grade level of $D$ or below in a 1000- or 2000-level course. Written warnings for 3000- and 4000-level courses are optional, but recommended.

Incomplete Courses: Calculation of a semester or cumulative grade point average does not include any Incomplete a student has earned during the semester. Students who receive an Incomplete in one or more courses during a semester are held academically liable for the completion of the course. For students who have been academically dismissed from the College, re-admission for the semester immediately following the student's dismissal requires that the Incomplete course be completed and the grade officially submitted to the registrar's office by the instructor by the first day of the semester. (No extensions of this deadline will be granted.)

## Appeals Process for Probation/Dismissal:

A student placed on academic probation or who has been dismissed may appeal his or her academic status by writing a letter to the Academic Status Committee, in care of the registrar. The letter should include any mitigating or extenuating circumstances that may have contributed to the poor academic performance.

Academic Forgiveness: Johnson State College
recognizes that some students who otherwise perform well academically have, for a variety of reasons, poor previous academic records. To encourage students with academic potential who have poor previous academic records, the College is in the process of establishing a policy of academic forgiveness. Such a policy will provide students with an opportunity to remove the damaging effect of a poor semester from their transcripts, consistent with VSC procedures on amelioration.

Pending a formal policy, a temporary policy on academic forgiveness will be in effect. A student who has been out of college for at least two (2) academic years may appeal to the Academic Dean at the end of the first semester of subsequent attendance in good standing at JSC to have a previous semester set aside.

Setting aside the previous record is done by notation on the permanent Johnson State College transcript, not by removing any previous course or grade. Grades of C and above and the credits derived from those grades will remain. Grade history will be removed from cumulative totals only, and grades cannot be ameliorated if they have already been included in calculations for awarding a degree.

## Academic Honors

President's and Dean's List: Matriculated (degreeseeking) students who complete 12 or more Vermont State College graded credits in a single semester and who have no Incomplete, NP, F, or blank grades in Johnson State College courses are eligible for the Dean's List and President's List.

The following standards apply:

- Students who achieve a 4.0 semester average will be placed on the President's List.
- Students who achieve a 3.5 semester average or above will be placed on the Dean's List.

Graduation with Distinction: Effective for the graduating class of spring 2006, of the total credits required for graduation, at least 30 credits for a twoyear degree and 60 credits for a four-year degree must be earned within the Vermont State Colleges by the end of the previous fall semester. Graduating students who have earned a cumulative grade point average of 3.9 or better through the fall semester of their graduation year will be awarded their degree "summa cum laude."

Those who earn a 3.7 average will be awarded degrees "magna cum laude." Those who earn a 3.5 average will be awarded degrees "cum laude."

Graduation honors for certificate programs require final, cumulative GPA as follows: honors, 3.0-3.49; high honors, 3.5 or above.

Honors Convocation: Every spring, the College awards prizes and scholarships to students who have distinguished themselves in the classroom, in the community, and on the playing field. Among these awards are the Lula F. Potter Cup, named in honor of a JSC alumna who lived in North Hyde Park and taught locally for many years and given to the senior who has the highest cumulative scholastic average in his or her graduating class, and the Richard Andersen Award, established as a memorial by his parents and given annually to a graduate who has exhibited academic achievement, athletic ability, and good sportsmanship.

## Transfer of Credit

## Transfer within the Vermont State Colleges

System: College-level credits earned at any VSC de-gree-granting institution prior to summer 2002 are fully transferable to JSC. Each credit taken in fulfillment of a GECC requirement at another VSC institution counts as one credit toward fulfillment of GECC requirements at JSC in appropriate categories. JSC will determine the extent to which transferred credits will satisfy specific major or program requirements. Effective summer 2002, credits taken within the VSC are not considered transfer credits.

Transfer of Credit from Other Institutions: In order to be eligible for the transfer of credits from other institutions, a student must be a matriculated (degreeseeking) student at Johnson State College. Matriculated students at Johnson State who wish to take courses at other institutions and have credits transferred to Johnson State must obtain prior written approval from the registrar. Transfer credits will not be accepted from non-matriculated students.

Transfer credit may be granted by Johnson State College for college-level courses completed with the equivalent of a grade C - or better at regionally accredited or officially approved institutions of higher education. Credit for a $D$ in a course may be granted if the second semester of a two-semester, sequential course is completed
with a C- or better. In addition, for transfer students holding a two-year associate's degree from an accredited institution, credits applied to that degree will be accepted as transfer credit. Credits earned in a quarter system count as two-thirds of a semester credit.

Johnson State requires that a student accumulate at least 39 credits of upper-level work in order to graduate. Transfer credits are normally accepted as lower-level credits. Students who believe that transferred credits were upper-level work should present documentation (usually in the form of a catalogue from the transferring institution) to the registrar's office.

Credits accepted for transfer are not necessarily accepted as meeting requirements in a student's major. Decisions of this nature are made by the student's major department at the time the student formally declares a major by filing a plan of study. The grades attached to credits accepted in transfer are not calculated in a student's cumulative grade point average.

The registrar will evaluate credits for experiential learning and credits from unaccredited institutions to determine their applicability toward graduation requirements. An associate's degree and an R.N. diploma will be accepted as 60 credits.

## Credit Granted (CR) for Non-Course Work:

Students who are granted credit on the basis of CLEP examinations, military credit, lifetime experience portfolios, AP courses, or other similar circumstances (as determined by Johnson State College) will receive a CR in the grade field. CR distinguishes the credit from TR, which is used for credits that are transferred in from another college or university.

Assessment of Prior Learning: Learning acquired through work or other non-college experiences may be assessed for college credit. The Assessment of Prior Learning (APL) course, taught through the Community College of Vermont, is designed for this purpose. Students are guided through the process of describing and documenting their experiential learning in a portfolio. This document is then reviewed for credit by an Advance Standing Committee composed of appropriate faculty and professionals. The credit awarded through the Office of External Programs may be transferred to JSC, the other Vermont State Colleges, and many other institutions.

## Community College of Vermont

EDU-1240 Assessment of Prior Learning 3 credits
An opportunity for students to earn college credit for prior learning acquired either on the job or in other settings. Students explore past learning experiences and identify future educational goals. Students develop an individual portfolio describing and documenting prior learning. Upon successful completion of the course, students may submit their portfolio to the Office of External Programs for review of credit requests. Recommended prior learning: ENG-1051 College Writing or equivalent. (Before enrolling, students should consult the Academic Support Services Office at Johnson State College at 635-1259.)

## Special Academic Courses and Programs

All independent work will be referred to as independent study, whether labeled independent research, independent field work, or internship. For all students, except those enrolled in the External Degree Program, a maximum of 21 credits of independent study can be taken during pursuit of a bachelor's degree.

Internships: Internship placements exist for matriculated students who wish to gain practical experience in a particular field. The internships are individually designed to meet the needs of the students. Each student is assigned a faculty member from JSC and a site supervisor to ensure successful completion of the work experience. The eligibility requirements for participation in an internship are established by the faculty in each academic department. Internships in every major, at both the lower-division and upper-division levels, are available for one through twelve credits; each credit hour represents a minimum of 40 work hours. Internships are graded on a Pass/No Pass basis only.

Independent Study: Independent studies are more academic and research-based in nature and often replace a regular class. Each student pursuing independent study works under the direct and regular supervision of a faculty member. The goals, objectives, and performance measures for independent study are defined in a formal contract between the faculty supervisor and the student and approved by the academic dean. Instructions and deadline dates for enrolling in independent study are included in the current issue of the course bulletin.

In addition to regular per credit tuition charges, a fee of $\$ 30$ per credit will be assessed for all independent study credits.

Students receiving veterans educational benefits must
comply with specific V.A. regulations with regard to independent study. (See Veterans Benefits, page 117.)

Special Topics Courses: Departments and programs occasionally offer special topics courses designed to supplement the subject matter covered in their regular programs. These courses are listed in the fall and spring semester course bulletins.

Summer College: Summer consists of a ten- to twelveweek session in which courses are taught in compressed formats. Students may choose from courses that meet specific requirements in either the GECC or their major, or choose courses that are purely elective. Additionally, summer college offers a variety of special programs, conferences, and events of broad educational interest.

Tuition for summer college is charged at the regular in-state rate for Vermont residents and at 150 percent of the in-state rate for out-of-state students, regardless of NEBHE eligibility.

National Student Exchange: The National Student Exchange (NSE), coordinated out of the Career Center, is a network of over 175 institutions of higher education in the United States and Canada. Through NSE, JSC students who meet eligibility requirements can spend a semester or a year at one or more of these institutions, earning credits toward their JSC degree. In addition, international exchange opportunities are available through participating institutions that open their study abroad programs to NSE exchange students. Following a semester or year exchange, students return to JSC to complete their degrees. Credit is earned by transfer.

Quebec/New England Exchange Program: This exchange program involves 25 colleges and universities in New England and 18 institutions in Quebec. Students accepted into the exchange program spend a year or half-year studying at the Quebec institution of their choice while remaining enrolled at Johnson State College. Credit is earned by transfer.

Continuing Education: Continuing education students are students who wish to take one or more undergraduate courses at JSC for college credit but who are not formally admitted as matriculated (degree-seeking) students. To be eligible to enroll in the continuing education program, students must have a high school diploma or a GED. Students who wish to enroll in continuing education should request information from the
registrar. Continuing education students may enroll in all courses listed in the catalogue, if space is available, except graduate courses in education, counseling, and fine arts. In most cases, continuing education students are ineligible for state, federal, or college-sponsored financial aid; however, they may be eligible for the VSAC non-degree grant.

Extension Courses: The College occasionally offers special courses to selected audiences at various locations. These courses are not listed in this catalogue but are separately advertised or sponsored through agencies or other institutions. Extension students generally register via materials given them at their first class session.

Army ROTC: Johnson State College offers an Army ROTC program in collaboration with the University of Vermont. The program leads to an officer commission as a second lieutenant in the United States Army, Army Reserve, or Army National Guard. Scholarships are available to qualified applicants. For further information, contact the Department of Military Studies at the University of Vermont, 128 University Heights, Burlington, Vermont, 05401.
Email: uvmrotc@zoo.uvm.edu.
Homepage: www.uvm.edul~uvmrotc.
The Jump Start Program: This program is available to juniors and seniors in high school who demonstrate the abilities and commitment to undertake college work, and who desire to challenge themselves on the post-secondary level. Each semester, JSC will select ten students who will be permitted to take one course for that semester. To be accepted to the program, students must meet each of the following requirements:

- Two letters of recommendation: one from the student's guidance counselor, the second from the principal describing the student's interest in this program and likelihood of success.
- The student must be attending high school full time or be enrolled in a certified home school program.
- The student will schedule and complete an interview with the JSC Admissions staff.

Typically, students in this program will be permitted to register for one first- or second-year college course, on a seat-available basis and with faculty permission.

The deadlines are: December 16, 2006, for spring 2007; May 12, 2007, for summer 2007; July 14, 2007, for fall 2007.

All courses may be taken on a Pass/№ Pass basis. Students accepted to the program will pay $\$ 320$ per course or $\$ 90$ per credit, a $\$ 50$ registration fee, plus applicable laboratory and materials fees. A student may take only one course per semester at these rates. Please contact the Admissions Office at 635-1219 for complete details.

Dual-Enrollment Consortium Agreement: Students matriculated at Johnson State (their home institution where they have been officially accepted) and enrolled in JSC courses may simultaneously enroll in courses at two or more VSC institutions, provided that an active degree plan is on file at JSC and by following appropriate registration procedures. Students follow the home institution's procedures for course selection, course add/drop/withdrawals, advising, financial aid, and billing. This agreement does not supersede existing External Degree Program arrangements; these arrangements remain unchanged by this agreement.

Non-degree students establish non-degree status at an institution by registering for a class at the institution. If that is the only institution where they are taking classes, that institution becomes their home institution. If they are taking classes at more than one VSC institution, the institution where they take the majority of credits is the home institution. If they are taking equal numbers of credits at two or more institutions, they may choose their home institution.

## Exits and Leaves of Absence

Leave of Absence: Students in good academic standing (see page 13), who have an approved plan of study on file, if required, and wish to interrupt their studies for a period not to exceed two consecutive regular semesters, may request a leave of absence. Students on a leave of absence do not need to reapply for admission and will be allowed to pre-register during the regular advance registration period.

Students may apply for a leave of absence by completing a Leave of Absence Request Form available at the registrar's office and a Student Exit Notification Form available at the dean of students' office. The leave is not official until the request is approved by the registrar. A leave may be requested prior to the add/drop deadline for one or two consecutive regular semesters. In special circumstances, the leave of absence may be extended
beyond the approved period with the approval of the registrar.

Exiting from the College: A student voluntarily exiting from the College during the semester must do so formally and in writing by completing a Student Exit Notification Form available at the dean of students' office.

The transcripts of students exiting the College after the beginning of classes and prior to the withdrawal deadline (week nine) will show W grades for all courses enrolled in that semester. The transcripts of students exiting the College after the ninth week will show A-F grades submitted by their instructors.

Students who exit from the College may reapply by making formal application with the admissions office. The W grades received will be used in making an admission decision. For refunds on room, meal plan, and tuition charges, see the refund policy on page 114.

Involuntary Exit: In cases where the psychological or the emotional state of a student creates a clear and present danger to the well-being of the student or to other members of the College community, the dean of students or the college counselor may carry out an involuntary exit of the student. An involuntary exit requires withdrawal from all courses. Students exiting involuntarily who wish to re-enroll in the College must reapply for admission and may be admitted only with written permission of the dean of students. An interview with the dean may be required.

## Requesting a Transcript

Official transcripts are available at no charge to students upon a written, signed request to the registrar's office. Transcripts for students who have bills past due or other obligations to any of the Vermont State Colleges will not be released until all bills are paid. Students requesting a transcript toward the end of any semester should indicate whether they want it sent immediately or whether it should be held until final grades are recorded. In the latter case, transcripts will not be sent out until at least the third week following the end of the semester.

## Appeal of Academic Policies

Students may appeal any academic regulation or decision to the Academic Status Committee of the Faculty Assembly and then to the academic dean and president of the College. Information on procedures for appeal may be obtained from the registrar's office.

## External Degree Program

Johnson State's External Degree Program (EDP) serves adult students throughout Vermont who have already completed 60 or more credits of acceptable college-level work. Each student works closely with an advisor who has an office at the student's local CCV site. The advisor helps the student develop and carry out a plan to earn the remainder of the credits needed for a B.A. or B.S. degree. A minimum of 30 credits must be earned while in the program.

Studies are completed where most convenient for students: through EDP-sponsored JSC courses held on weekends, Sundays, or weeknights throughout Vermont; at Johnson State; over the Internet or interactive television; or at other colleges.

## Requirements for a Bachelor's Degree through EDP

- Accumulation of at least 60 credits before entrance. A total of at least 120 credits, not including basic skills credits, is required for graduation.
- At least 39 semester credits in upper (junior and senior) level courses, identified by 3000and 4000 -level course numbers at Johnson State College.
- Acceptance into a degree program by submitting a degree plan to the EDP office and receiving formal approval.
- Completion of the course work in the major declared in the candidate's approved degree plan.
- Achievement of a minimum 2.0 cumulative grade point average on a scale where A equals 4.0.
- Enrollment in graded credits for at least half of the courses taken in EDP.
- Completion of at least two semesters and at least 30 credits in EDP.
- Completion of the EDP's General Education Program requirements.
- Achievement of writing proficiency obtained
through success in the required course, ENG-1220, Rhetorical Expression, or by passing the Writing Assessment Essay administered through EDP.


## EDP General Education Requirements

Students must earn at least 60 credits in liberal arts.
These credits must include the following components of general education:

## Key Skills (6 credits)

- Mathematics (3 credits).
- Rhetorical Expression (ENG-1220, 3 credits), or earn a waiver by successfully completing the Writing Assessment Essay. This requirement must be met by the end of a student's second semester or after completion of 15 credits in EDP.
Integrated Knowledge ( 24 credits)
- Individual and Human Relationships ( 6 credits). English literature or writing, languages, communications, psychology or other courses with a focus on understanding self and others.
- Social and Historical Relationships (6 credits). Sociology, history, political science, economics, law and other courses focusing on social institutions, movements, and problems past and present. At least three credits must emphasize an historical perspective.
- Environmental and World Relationships ( 6 credits). Sciences (physical, biological, environmental, health). At least three credits must use or study scientific method, preferably including a lab or field study.
- Universal and Philosophical Relationships ( 6 credits). Studies with a focus on transcendent issues, symbolic systems, and aesthetic understanding. At least three credits must be in a consciously speculative field such as philosophy, religious studies, mythology, aesthetic or symbolic theory. Other credits can be in areas such as art, music, or drama.


## Declaring a Major: Degree Plan

In the first semester of their program, all EDP students must prepare a degree plan with the help of their advisors. The degree plan outlines the requirements in the student's major and describes how the student intends to meet them. Students may write degree plans in the following majors: business management, education, general studies, liberal arts, and psychology. Other JSC programs, including secondary teaching licensure and post-baccalaureate licensure, are available with degree plans submitted and approved before the student begins his or her studies. For details on degree requirements, see the sections in this catalogue on particular academic departments.

EDP students may not graduate until their degree plans have received approval by the appropriate group (EDP co-directors for general studies and liberal arts majors, departmental faculty approval for all other majors). If a student has not submitted a degree plan by the last review meeting of the second semester in the program, the program's co-directors may recommend administrative dismissal for one semester.

## General Studies

Students in the External Degree Program may choose to earn a B.S. in general studies.The general studies degree gives adult learners with considerable academic and life experience the option of choosing courses to suit their special interests and needs. Students must declare and explore an area of special emphasis while meeting the general education requirements and other guidelines for a bachelor's degree. For more information, refer to page 61.

## Registration

Registration materials are mailed to EDP students well before the start of each semester. Students confer with their advisors, who must approve course selections and who register the students for classes. A late fee will be assessed for registrations after the published deadline. When registering for courses at institutions outside the Vermont State Colleges, EDP students submit a tuition transfer form available from advisors.

## Dropping a Course

In general, the same policies apply for EDP students who wish to drop a course as for students on campus. However, an EDP student registered for a course at another institution must drop the course at both colleges. The student will be charged for any prorated tuition and fees that Johnson State College may charge.

## Leave of Absence (Stop-Out)

To maintain active status in the EDP, students must register for a minimum of three credits a semester, excluding summers. EDP students may take a semester or more off and re-enter the program when it is convenient. Any credits they take while out of the program that fit into their degree plan may count toward graduation but will not count as part of the required 30 credits in the program. To re-enter, a student must file a re-entry application available from the EDP Office. There is no fee for re-entry.

If a student has been out of the program longer than five years, he or she must reapply to the External Degree Program and submit a new degree plan for approval. Approval will be contingent, in part, on availability of courses and the student's access to them.

## Class Attendance

Attendance is mandatory at all meetings of EDP weekend, Saturday, and Sunday courses. If, for an extraordinary reason, an EDP student misses class time, the instructor will decide whether the work may be made up. If the instructor determines it cannot, the student will fail or, with permission from the Academic Review Board, can change to another course, providing it is before the first meeting of the new course. Permission to drop the first course requires a valid reason. If the student fails, he or she must pay for the course.

## Graduation

See page 12, including details on Application for a Degree.

## Academic Honesty

See policy on page 12.

## Academic Honors and Graduating with Distinction

 See information on page 14.
## EDP Probation and Dismissal

EDP students must maintain the same academic standards as any Johnson State student, i.e., a grade point average of 2.0 . If the cumulative average is 2.0 but a semester average falls below that, a letter of warning will be issued. If the cumulative average falls below 2.0, the student will be placed on academic probation. If any semester average is less than 2.0 while the student is on academic probation, the student will be academically dismissed.

## Transfer of Credit

Transfer grades earned before a student enters EDP will not count in the cumulative average. However, credits earned from Johnson State within 10 years of entering EDP will count in the grade point average. Transfer grades earned at other institutions while in the program or while stopping-out will count in the average. Any grades earned after summer 2002 within the VSC will count in a student's GPA. Please reference page 14 and 15 for information on transfer credits within the VSC.

Transcripted credits for experiential learning will be accepted for admission purposes. The registrar, in consultation with the co-directors of EDP and the appropriate department chair at the College, will evaluate these credits to determine their applicability toward graduation requirements. An associate's degree and an R.N. diploma will be accepted as 60 credits.

## Good Neighbor Policy

The External Degree Program is more easily accessible to some residents of New Hampshire, New York, and Massachusetts than is their own nearest state college site. In order to support the needs of these non-residents, the College will charge 150 percent of Vermont tuition rate to matriculated EDP students for whom the local EDP site office is closer to their legal residence than their nearest resident state college.

# Course Descriptions 

Courses listed as "(Shared)" are also offered at one or more of the Vermont State Colleges.

## ACCOUNTING (ACC)

## ACC-2121 Financial Accounting <br> 4 credits <br> Prerequisite: Basic Math Comp. <br> Introduces students to the problems of external reporting as they relate to sole proprietorships, partnerships, and corporations. Students examine the various accounts found in financial statements and learn how to put these accounts together to render meaningful statements that communicate pertinent information to those who read them. (Shared course in VSC)

## ACC-2122 Managerial Accounting <br> 4 credits

Prerequisite: ACC-2121.
The course explores internal accounting systems and the uses of internally generated data in management. Topics include: the use of financial accounting data, cost-volume-profit analysis, budgets and responsibility accounting, and cost allocations. (Shared course in VSC)

## ACC-2230 Federal Taxes

3 credits
Prerequisite: ACC-2121 or ACC-2122, with C- or better.
A study of federal tax laws and regulations as contained in the Internal Revenue Code, with the emphasis on individuals and sole proprietorships. Topics include income inclusions and exclusions, deductions, capital gains and losses, sales and exchanges, basis calculations, depreciable property, tax research, tax planning, and the preparation of the various tax forms and schedules applicable to an individual or a small business. (Shared course in VSC)

ACC-2710 Special Topics in Accounting
3 credits (Shared course in VSC)

ACC-2910/4910 Independent Study in Accounting 1-12 credits

ACC-3011 Intermediate Accounting I 3 credits
Prerequisite: ACC-2102, or ACC-2103, or ACC-2121 or ACC-2122.
This course provides an extensive study of generally accepted accounting principles as applied to the recording and reporting of asset, liability, and equity accounts, the financial statements, and the required disclosures. Computer applications, case studies, and problem solving are integral parts of this course. (Shared course in VSC)

## ACC-3030 Business Accounting Systems <br> 3 credits Prerequisite: None. <br> A study of the major accounting subsystems prevalent in small and medium-sized businesses. Emphasis will be placed on the architecture and integration of these subsystems within the business environment. Management and control of the various subsystems will be a major emphasis in this course.

## ALLIED HEALTH SCIENCES (AHS)

## AHS-1010 Contemporary Health Issues <br> 3 credits Prerequisite: None. <br> Examines the concept of health and the role and responsibility of individuals for their health. Emphasizes wellness and health promotion and their relationship to the quality of life. (Shared course in VSC)

## AHS-1080 Lifetime Fitness

1 credit
Prerequisite: None.
A study of the theory of wellness concepts. Topics include: wellness, physical fitness, nutrition, diet and weight control, stress management and lifestyle diseases. The impact of a wellness-promoting lifestyle is examined. Students enhance theory knowledge of wellness concepts through laboratory sessions. (Shared course in VSC)

## AHS-2010 Mindfulness Meditation

3 credits
Prerequisite: PSY-1010. Not open to first year students.
Students are taught fundamentals of mindfulness meditation skills designed to mobilize mind/body energies for balancing and complementing personal health and spiritual wellness. Journal writing, outside readings, home practice, and 24 -hour off campus retreat highlight the course experience.

## AHS-2040 Advanced First Aid and Emergency Care 4 credits (with lab)

Prerequisite: BIO-1210. Not open to first-year students.
This course provides the student with the knowledge and skills to function effectively in a medical emergency situation. This course consists of both lecture and laboratory experiences, and Red Cross Advanced First Aid Certification is possible.

## AHS-2130 Programs for Lifetime Health and Fitness

 Prerequisite: BIO-2012.3 credits
In this course, the student will learn how to develop and administer programs designed to raise fitness/wellness level of individuals at home, in fitness clubs, and in the workplace. Contra-indications for exercise for specific populations are discussed.

## AHS-2810/4810 Internship in Allied Health Science

## (Shared Course in VSC) 1-12 credits

## AHS-2910/4910 Independent Study in Allied Health Science

## AHS-3010 Therapeutic Massage <br> 3 credits

Prerequisite: Not open to first-year students.
This course is an opportunity for students to train intensively in therapeutic massage. Primarily for students concentrating in health science and the behavioral sciences, this course is meant to assist students in learning about therapeutic massage as an acceptable form of treatment for stress and decreasing muscle tension and increasing mind-body comfort.

## AHS-3043 Care and Prevention of Athletic Injuries

 Prerequisite: BIO-2011 and BIO-2012. 3 credits This course is an introduction to the prevention, evaluation, and treatment of athletic-related injuries. It is an overview of the field of athletic training to include the evaluation of injuries, emergency medical procedures, prevention and treatment methods for musculoskeletal injuries, and heat illness. The laboratory practicum involves the application of preventative, assessment, supportive, and rehabilitative techniques to injury management.
## AHS-3050 Introduction to Pharmacology <br> 4 credits

Prerequisite: BIO-2011, BIO-2012, and CHE-1031 or CHE-1020. The course presents an introduction to the fundamental principles of basic and clinical pharmacology at the molecular, cellular, organ, and whole body levels. It will cover the biochemical and physiological bases for drug actions and effects, theraputic uses, and adverse reactions. Drug classifications, methods of administration, and alternative therapies will be discussed.

## AHS-3110 Health and Healing: The Mind/Body

Connection (available through EDP)
3 credits
Prerequisite:PSY-1010, BIO-2011, and 2012, or permission of instructor. Scientists and researchers of holistic medicine have gained convincing evidence to support the view that illness is not caused only by external factors such as viruses, but also by internal factors such as emotions and the individual's state of mind. This course will focus on the psychology of wellness and illness, in addition to healing connections among the body, mind, and spirit.

## AHS-3120 Kinesiology

3 credits
Prerequisite: BIO-2011.
This course is designed to give students a practical approach to the study of human body movement from anatomical, physiological, mechanical, analytical, and functional viewpoints. (Shared course in VSC)

## HS-3230 Physiology of Exercise

4 credits
Prerequisite: BIO-2011 and 2012.
This course examines the acute and chronic physiological adaptations of the human body to physical activity.

AHS-4030 Psychology of Sports and Exercise 3 credits Prerequisite: PSY-1010
This course explores the theories and principles of psychology and their relationship to performance in physical education and athletics and recovery from athletic injury.

## AHS-4060 Cardiopulmonary Assessment, Rehabilitation and Training 3 credits

 Prerequisite: BIO-2012. This course introduces the student to the magnitude of the problems caused by cardiopulmonary disease. Basic evaluation procedures, such as EKG interpretation, stress testing, and pulmonary function tests, will be introduced. In addition, exercise prescription and supervision of cardiopulmonary rehabilitation programs will be discussed.
## AHS-4110 Psychophysiology of Stress <br> 3 credits

Prerequisite: PSY-1010.
This course is designed for senior students in health and behavioral sciences as well as graduate students. It will provide the learner with the theoretical information about the clinical application of biofeedback across the disciplines of psychology, physiology, education, and medical science.

## ANTHROPOLOGY (ANT)

## ANT-1010 Introduction to Cultural Anthropology

Prerequisite: None.
3 credits
A survey of basic issues, concepts, theories, and methods of cultural anthropology. Students think critically about the evolution of culture and society from the perspective of the past and the present. Topics include social and political organization, gender, myth and religion, language, cultural ecology, and cultural change. (Shared course in VSC)

## ANT-2810/4810 Internship in Anthropology

$1-12$ credits

## ANT-2910/4910 Independent Study in Anthropology

 1-12 credits
## ANT-3020 Global Healing, Consciousness and Religion

 Prerequisite: None. 3 credits While consciousness is a universal characteristic of human beings, it is influenced in a profound manner by the culture of each group. This causes people to experience life as a complex interaction of "alternate realities." Students explore the relationship between culture and alternate realities through topics such as altered states of consciousness, dreams, faith, magic, shamanism, witchcraft, possession, and mysticism.
## ANT-3040 Culture Change in the Modern World

Prerequisite: None.
3 credits
This course explores processes of social and cultural change, ranging from gradual modifications during prolonged peaceful periods to sudden revolutionary upheavals. Factors inhibiting and facilitating change are discussed along with such topics as invention, development, social power movements, changing interpersonal relations, the impact of technology, cultural clashes, and innovative religions. Included is Visual Anthropology: ethnographic photography, camera culture, and
photographic states of consciousness.

## ANT-3110 Development of Anthropological Thinking

 Prerequisite: ANT-1010 or permission of instructor. 3 credits Each society has characteristic ways of regarding itself and other groups. In this course, anthropological points of view help students understand and analyze other cultures and their own. Innovative schools of thought in anthropology and their practical applications through research are emphasized. Also studied are questions universally asked by different cultures about the nature of humanity and the world.
## ANT-3120 Science, Research Methods, and Ethics <br> Prerequisite: None. <br> 3 credits

Introduces quantitative and qualitative methods useful to sociologists and anthropologists to investigate how people create and sustain culture and society. Some methods included are the survey, field observation, ethnography, and content analysis.

## ANT-3130 Culture and Personality Prerequisite: None.

3 credits
An investigation of interaction between the culture of a group and the thoughts, emotions, and behavior of its members. Topics include group personality, patterns and types of normal and abnormal behavior, and cultural features of helping relationships. Students learn to observe and analyze human behavior from different perspectives.

## ANT-4010 Anthropology of Death

3 credits
Prerequisite: None.
This course studies death from a wide variety of approaches and is designed to help students integrate objective descriptions and analysis with subjective thoughts and feelings. Our orientations toward death are compared with those of other cultures through such issues as terminal illness, experiencing death, prolonging life, and hastening death. Mourning, funerals, life after death, and processes of symbolic death and rebirth are also explored.

## ANT-4020 Multicultural Studies of Healing 3 credits

 Prerequisite: None.This course provides an understanding of the complex interrelationships between cultural, biological, psychological, and environmental components of health, disease, illness, and medical treatment. Some topics include medical explanatory beliefs, adaptation, stress, illness experiences, healing techniques, patient/practitioner relations, and religion. Western biomedicine and many other medical systems of the world are compared searching for cultural diversity and universals. The variety of cases studied and the perspectives used ranges from the single individual, to diverse groups, to the entire global population. Students apply anthropology and other disciplines to the experience of being sick and to the delivery of health care in many different cultures.

## ANT-4720 Senior Seminar in Anthropology/Sociology

 Prerequisite: Senior Standing.3 credits
This capstone course reviews the major concepts, theories, and methodologies of anthropology and sociology and offers students leadership, teaching, and volunteer service opportunities to demonstrate their unique knowledge and skills in social situations, in social services, and in high schools.

## ANT-4730 Topical Seminar in Anthropology $\quad 1-3$ credits

Prerequisite: None.
This course explores new topics and current developments in the discipline. The seminar emphasizes student research, presentation and discussion and may be repeated for credit.

## ART (ART)

## ART-1011 Drawing I

3 credits
Prerequisite: None.
An introduction to drawing media, techniques, and concepts with emphasis on drawing from observation. (Shared course in VSC)

ART-1140 Design
3 credits
Prerequisite: None.
Students are introduced to a series of conceptual, structural, spatial, and relationship "problems" designed to stimulate creative thought and innovative approaches to working in both two and three dimensions.

## ART-1231 Ceramics I

3 credits
Prerequisite: None.
An introduction to the ceramic arts which develops the student's working knowledge of ceramic materials, tools, and techniques. Students work with issues of concept and design, and develop an understanding and appreciation of traditional, historical, and contemporary ceramic objects and issues. Hand building is emphasized.

## ART-2007 Comix Go Legit: Contemporary Graphic Novels Prerequisite: First-year students only. 3 credits

 One could argue that cave paintings were the first comics, but this course focuses on the most recent graphic novels, including award winning works by Art Spiegelman, Marjane Satrapi, Chris Ware, Daniel Clowes, Joe Sacco, and many more. In addition to reading masterworks, we will study the history of comics and the many uses of comics, including advertising and animation. Students will also design their own comics, and produce a limited edition graphic of their own work. Drawing is only one way to approach this, but not the only way photographers, writers, collage artists, and stick-figure maestros are all welcome.
## ART-2110 Introduction to Digital Media

3 credits
Prerequisite: ART-2301, 3032, or 4050.
An overview of the digital image tools used in professional image editing, layout, and design work, as well as an introduction to the general issues relevant to the handling of images and related art material in the digital context. A series of discussion topics will frame the relationship of digital media to fine art discourse and to specific media within that discourse.

ART-2150 Jewelry and Metalsmithing
3 credits Prerequisite: None.
Students will develop a working knowledge and sensitivity toward metal as a material, gain a vocabulary of metalsmithing and jewelry techniques, and confront the degrees of excellence, precision, and impeccability of craftsmanship in their own work as artists-craftsmen.

ART-2210 Painting: Color \& Content
3 credits
Prerequisite: ART-1011.
A presentation of technical and aesthetic aspects of painting that introduce students to the use of various painting media: oil, acrylic, watercolor, oil pastel, soft pastel, etc. A strong foundation in color theory is included, as well as an overview of painting masters, both historic and contemporary. (ART-2210 replaces ART-2211)

## ART-2251 Sculpture I

3 credits
Prerequisite: None.
Students are introduced to historic and contemporary sculpture through different theoretical, practical, and conceptual approaches utilizing a variety of media. (Shared course in VSC)

## ART-2301 Photography I

3 credits
Prerequisite: None.
An introduction to the fundamentals of 35 mm black and white photography, including darkroom techniques, and the history and aesthetics of photography. A 35 mm camera with adjustable f-stops and shutter speeds is required. (Shared course in VSC)

## ART-2410 Introduction to Printmaking

3 credits
Prerequisite: ART-1011
This course offers an exploration of the major forms of printmaking through a variety of techniques and media, as well as the history and technology of printmaking. Experimentation and exploration of the print as a vehicle of artistic expression will be emphasized in conjunction with development of technical proficiency.

## ART-2810/4810 Internship in Art

1-12 credits
ART-2910/4910 Independent Study in Art

## 1-12 credits

## ART-3031 Life Drawing

3 credits
Prerequisite: ART-1011 or permission of instructor. The classic figure drawing course, exploring human form and addressing such issues as anatomy, gesture, technique and content. May be repeated for credit.

## ART-3032 Advanced Drawing

3 credits
Prerequisite: ART-1011 or permission of the instructor.
Designed for students already familiar with the techniques of traditional drawing materials, this course explores more advanced concepts of image making and a personalized use of materials. Among the topics explored in various sentences are figure drawing, large-scale work, mixed-media, hand-made paper and bookmaking. May be repeated for credit.

## ART-3040 Landscape Painting

3 credits
Prerequisite: ART-2211.
This class will explore traditional landscape painting issues of linear and atmospheric perspective, color and its relationship to light and space, and the passage of time and season. Class will work on site in the landscape. Students may work in a variety of media. May be repeated for credit. (Summers only)

ART-3120 Elementary Art Education Methods 3 credits Prerequisite: Junior standing.
This course focuses on four issues: 1) how teachers determine what to teach, 2) how they structure content to meet their objectives, 3) how they decide when to teach material, and 4) how they evaluate what they have taught. Students should, by the end of the course, be able to describe their rationale for "teaching" art in any classroom. Required for elementary education students.

## ART-3140 Secondary Art Education Methods <br> 3 credits <br> Prerequisite: Junior standing.

This course is similar to ART-3120, and the emphasis is on grade $7-12$ art materials and age levels. Required for secondary education students.

## ART-3222 Ceramics II

3 credits
Prerequisite: ART-1231 or permission of the instructor.
This advanced-level course in ceramics encourages the continued exploration of and experimentation with clay as an artistic medium, with emphasis on independent creative research. Students learn basic clay and glaze formulation and kiln operation. May be repeated for credit.

## ART-3314 Advanced Printmaking

3 credits
Prerequisite: ART-2311 or permission of the instructor.
Intaglio printmaking is emphasized beginning, with the collagraph and advancing through the intaglio processes. The focus is to gain control of these techniques so that the student feels free to experiment. The ability to make art and develop an individual imagery as printing skills develop is stressed. While the student is expected to be able to edition prints, experimentation and pushing the medium and imagery are emphasized over traditional multiples editioning. May be repeated for credit.

## ART-3320 Monoprints

3 credits
Prerequisite: ART 1011 or permission of instructor.
Explore this hybrid printmaking technique that combines painting, drawing, and printing to create unique printed images. This technique encourages spontaneity and freedom in many directions. Some possibilities include chine colle, collage, drypoint, and collagraph. We begin with basic monotype techniques and increase complexity including multiple plates. May be repeated for credit.

## ART-4020 Advanced Digital Media

3 credits
Prerequisite: ART-2110.
This course offers a survey of contemporary digital image processes and tools, including digital photography, illustration, design, 3-D graphics, and video/multimedia. Intended for students who have background in photography and related issues of media arts, this course will focus on the relationship of digital media to established art forms and study possibilities for their integration. The course will also cover contemporary work in technology-influenced art practice and theory. May be repeated for credit.

## ART-4040 Advanced Photography

3 credits
Prerequisite: ART-2301 or equivalent expertise, or permission of the instructor.
This course further explores technical, historical, and creative issues.

## 66 / COURSE DESCRIPTIONS

Students will generate a strong portfolio through intensive studio work. Other course components may include research projects, field trips to local exhibitions, non-traditional processes, readings in history and criticism, and a public exhibition of completed projects. May be repeated for credit.

## ART-4050 Advanced Painting

3 credits
Prerequisite: ART-2211, ART-2210 or permission of the instructor. This course emphasizes a student's individual vision. Each semester explores different techniques. Several topics are addressed including large-scale works, mixed media, handmade paints and an examination of painting masters, both historic and contemporary. May be repeated for credit.

## ART-4110 Visual Art and Performance

3 credits
Prerequisite: ART-2251.
This course is an exploration into the world of performance art. Students will generate, perform, and create props and visuals for their performances. Two to four visiting artists will conduct workshops throughout the semester. A trip to Boston or New York will be arranged to see professional work.

## ART-4120 B.F.A. Exhibit

3 credits
Students work closely with a mentor chosen from the studio art faculty to prepare and mount their senior thesis exhibition. Students may work in a single medium or combination of media to produce their culminating exhibition in the Julian Scott Memorial Gallery.

## ART-4130 Advanced Sculpture

3 credits
Prerequisite: ART-2251 or permission of the instructor. Students investigate at least three media, which may include plaster, wood, metal, stone, or others. Emphasis of study shifts from semester to semester, and concept and material are of equal importance. Students are encouraged to work creatively within the context of the learned technique. Assignments may encompass public art, installations and performance art, among others. May be repeated for credit.

## ART-4730 B.F.A. Seminar

3 credits
This professionally oriented "capstone" course looks into all aspects of a career in the visual arts. By the end of the semester, students will have produced a professional portfolio documenting their own work, complete with resume, artist's statement, and slides. Students also explore career options, exhibit venues, grant writing, websites, graduate schools, legal considerations for the artist, and how to set up a safe, affordable studio.

## ART HISTORY (ARH)

## ARH-2011 Survey of Western Art I

3 credits
Prerequisite: None.
History of Western art as expressed in painting, sculpture, and architecture, from the prehistoric through the Gothic period. (Shared course in VSC)

ARH-2012 Survey of Western Art II
Prerequisite: None. Recommended: ART-2011.

History of Western art as expressed in painting, sculpture, and architecture, from the Renaissance to the modern era. It is recommended that students take ARH-2011 before ARH-2012. (Shared course in VSC)

## ARH-2910/4910 Independent Study in Art History

 1-12 creditsARH-3015 Greek and Roman Art
Prerequisite: ARH-2011 and ART-2012.
The art and architecture of ancient Greece and Rome, from the Aegean
through the Late Empire periods.

## ARH-3020 Art of the Renaissance

3 credits
Prerequisite: ART-2011 and ART-2012.
This course stresses Italian painting and sculpture, beginning with the fourteenth-century Tuscan masters and ending with Michelangelo and the early Mannerists. Northern art is considered in terms of its influence on developments in the south.

ARH-3060 Twentieth Century Art
Prerequisite: ARH-2011 and ARH-2012.
The history of twentieth-century art covering Impressionism, Fauvism, German Expressionism, Cubism, Futurism, Dada, Suprematicism, Constructivism, De Stijl, Surrealism, Abstract Expressionism, Pop Art, Happenings, Minimal Art, New Genre Art, and Post-Modern Art.

## ARH-3110 The Spiritual in Non-Western Art 3 credits Prerequisite: None. <br> This course will examine the rich cultural history of African, Native American, Oceanic, and pre-Roman Celtic art. The course will underscore how traditional societies fully integrated art into everyday life and how they imbued it with powerful magical and mystical meanings. How western artists, collectors, and museum officials have used and misused art from "Third World" countries will be carefully illustrated and considered throughout the semester.

## ARH-3120 Art Criticism

3 credits

## Prerequisite: ARH-2012

This is a writing-intensive course. This course will expose students to the major critical stances that have shaped art historical thought in the West. Students will analyze the critical stance of Kant, Wincklemann, Marx and Freud, to name a few. This exposure will help students to become more critical readers and writers. Students will be expected to write weekly assignments and critique each other's work.

ARH-3130 The History of Photography
3 credits
Prerequisite: ARH-2011 and ARH-2012.
Surveys the history and aesthetics of nineteenth- and twentieth-century photography. Photographs by masters form the basis for a critical assessment of the medium.

## ARH-3210: Women in Art

3 credits
Prerequisite: None.
A survey of representative women artists from the Renaissance to the present, this course introduces students to the unique role of women in the visual arts, their contributions and struggle for recognition.

## ARH-4710 Special Topics in Art History 3 credits

## ARH-4720 Seminar in Contemporary Art Issues Prerequisite: ARH-3060. <br> 3 credits

The issues treated vary from semester to semester. The class takes an active role in deciding the relevant issues. Past topics have included public funding for "controversial" art, women's issues in art, art vs. craft, and "Is it art?" Students develop critical skills and see their own work in the light of the contemporary scene. At least one field trip to a metropolitan center is scheduled to view contemporary art.

## BIOLOGY (BIO)

BIO-1210 Introduction to Biology 4 credits (with lab) Prerequisite: PLM-0003, PLM-0004, or MAT-0410.
An introduction to the study of life, including cells, organisms, ecosystems, and evolution, and the techniques of the biologist. (Shared course in VSC)

## BIO-1211 Introduction to Biology: Ecology \& Evolution

Prerequisites: None.
4 credits (with lab)
In this course students will explore the "process of science" with hands-on field and laboratory experiments. Concepts in the evolutionary history of biological diversity, ecology and the biosphere, and conservation biology will be covered.

## BIO-1212 Introduction to Biology: Cells \& Genetic Basis of Life <br> 4 credits (with lab) <br> Prerequisites: None. <br> This course will introduce biology to students through the unifying theme of the "process of science"- what we know, how we know it, and what we don't know yet. The course will cover topics in chemistry of life, cell structure and function, cell reproduction, classical and molecular basis of inheritance, and DNA Technology.

## BIO-1230 Field Ecology

3 credits
(available through EDP)
Prerequisite: None.
This course offers students the opportunity to study the major environments found in the Vermont landscape and to understand the plants and wildlife that make up the fabric of Vermont's ecology. After the weekend of lectures, slides and hands-on work with mammals, birds and vegetation, classes will be held in various field locations throughout central Vermont. This course fulfills an EWR requirement.

BIO-1781 Ecology of Subtropical Ecosystems 3 credits Prerequisites: Acceptance into Upward Bound Program. This course introduces ecological structure and function of the major aquatic and terrestrial ecosystems of subtropical Florida. The class begins with an intensive weekend of lectures on the ecological principles that pertain to the ecosystems of south Florida. Another weekend day will be spent evaluating written work and will culminate with an environmental debate. Students, based on their preferences, will be assigned ecosystems for which they will be responsible for leading the class on interpretive tours of the biological, chemical, and physical factors that influence their ecosystems. The class will travel to the Florida Everglades and Keys to explore the variety of subtropical forests,
glades, marshes, swamps, and marine communities.

## BIO-2010 Cell and Molecular Biology

Prerequisites: BIO-1212 and CHE-1031. 4 credits (with lab)
Students are introduced to the relationships between structure and function in the study of the cell and its subcellular organelles and macromolecules. Analyses of major cellular processes will include energy utilization, cellular reproduction and mechanisms of gene action.

## BIO-2011 Human Anatomy \& Physiology I 4 credits <br> Prerequisites: None

An introduction to the structure and function of the human body. Topics include general body organization, cells, tissues, and the anatomy and physiology of the skeletal, muscular, and nervous systems. Laboratory work involves microscopy, dissections, and the study of human organ models. First semester of a two-semester sequence. (Shared course in the VSC.)

BIO-2012 Human Anatomy \& Physiology II 4 credits A continuation of BIO-2011. Topics include cellular physiology, and the structures and function of the cardiovascular, endocrine, immune, respiratory, digestive, excretory, and reproductive systems. Laboratory systems practicum involves microscopy, dissections, and the study of human organ models. (Shared course in the VSC.)

## BIO-2130 Natural History of the Yellowstone Plateau Prerequisite: Permission of instructor. <br> 3 credits

This course involves seven days in the back country of Yellowstone National Park, traveling to three remote areas that demonstrate the unique geological and ecological characteristics of the park. Students make their own arrangements to and from Salt Lake City, Utah, where the instructor will meet them. (Summer only)

## BIO-2145 Plant Biology

4 credits
Prerequisite: One introductory biology course.
An introduction to the study of plant biology including the structure and function of cells and tissues, photosynthesis, and a survey of the plant kingdom with special emphasis on the higher plants.

## BIO-2310 Invertebrate and Vertebrate Zoology <br> 4 credits (with lab)

Prerequisite: None. Recommended BIO-1210 or equivalent.
The study of animal biology including diversity and classification within the two major groups, vertebrates and invertebrates, comparative anatomy and physiology, genetics and development, evolution, behavior, and ecology. (Shared course in VSC)

## BIO-2340 Fundamentals of Ecology

Prerequisite: BIO-1211.
4 credits (with lab)
Recommended: One course in chemistry.
The relationships between the organism and its natural environment will be examined. Students will perform outdoor experiments and field studies that complement discussions on population and community ecology.

## BI0-2710 Special Topics in Biology 3 credits <br> BIO-2810/4810 Internship in Biology <br> $1-12$ credits <br> (Shared course in VSC)

BIO-2910/4910 Independent Study in Biology
1-12 credits

## BIO-3043 Care \& Prevention of Athletic Injuries

Prerequisite: BIO-2011 and BIO-2012.
4 credits
An introduction to the prevention, evaluation, and treatment of athletic related injuries. It is and overview of the field of athletic training to include the evaluation of injuries, emergency medical procedures, prevention and treatment methods for musculoskeletal injuries, and heat illness. The laboratory Practicum involves the application of preventative, assesment, supportive, and rehabilitative techniques to injury management.

## BIO-3110 Field Ornithology

3 credits
Prerequisite: None.
An intensive course in the field identification, behavior, and life histories of local bird species. Students are expected to provide their own binoculars (contact instructor for specifications if you will be purchasing binoculars). (Shared course in VSC; Summer only.)

## BIO-3125 Biological Chemistry

3 credits
Prerequisite: BIO-1212, CHE-1032.
This course introduces the student to an integration of biology and chemistry through an overview of the biochemical structure and reactions that occur in living systems. Presentation of the chemical structures of the important classes of biological macromolecules (proteins, carbohydrates, lipids, and nucleic acids) is integrated with their roles in cellular metabolism.

## BIO-3130 Cellular Biology: A Molecular Approach

 Prerequisite: BIO-1212, CHE-1032. 4 credits (with lab) This course is an in-depth study of biological processes at the molecular level with emphasis on the relationship between structure and function of biological macromolecules. Topics include bioenergetics, enzymes, the genetic system, protein synthesis, biological membranes, cellular organization and chemical signaling. In the laboratory, students will be introduced to modern experimental techniques to analyze cellular functions.
## BIO-3140 Microbiology <br> 4 credits(with lab)

Prerequisite: One 3-credit, 2000/3000 level BIO course. Recommended: BIO-1212 and CHE-1032.
An introductory exploration of microscopic life and an introduction to the principles and concepts of microbiology. Topics include microbial morphology, physiology, ecology, and evolution, and the connections between microorganisms and the sciences of pathology and immunology. (Shared course in VSC)

## BIO-3160 Animal Behavior <br> 4 credits (with lab)

Prerequisite: None. Recommended: BIO-2310.
An exploration of sensory perception, innate behavior, learning, com-
munication, and social behavior in invertebrates and vertebrates, using taxonomy, ecology, and natural selection as frames of reference. (Shared course in VSC)

## BIO-3170 Mammalogy

Prerequisite: BIO-2310. 4 credits (with lab)
A detailed treatment of the identification, classification, adaptations, physiology, ecology, distribution, and evolution of the world's mammals. In laboratory sessions, students engage in the work of professional mammalogists using museum specimens of mammals from all parts of the world.

## BIO-3180 Nutrition

3 credits
Prerequisite: BIO-1210, CHE-1020, and junior or senior standing, or permission of the instructor.
This course is a study of the structure, function, digestion, and absorption of nutrients in the human body, with an emphasis on chemistry, current research, and controversies. The topics of food safety, diet analysis and planning, and the relation between nutrition and diseases are included.

## BIO-3220 Genetics

4 credits(with lab)
Prerequisite: BIO-1212 and CHE-1032.
A review and investigation of the principles of inheritance, including the topics of molecular, Mendelian, population, and human genetics.
Current research and controversies will be emphasized. (Shared course in VSC)

BIO-3260 Limnology 4 credits (with lab)
Prerequisite: BIO-1211 and CHE-1031 or equivalent.
Students gain first-hand experience in the techniques used to sample and analyze aquatic ecosystems. We will discuss the occurrence of aquatic organisms in different systems and the chemical, physical, and biological factors which affect their distribution.

## BI0-3270 Forest Ecology <br> 4 credits (with lab)

Prerequisite: BIO-2145. Recommended: BIO-2340.
Students learn how ecologists study the structural and functional aspects of forest communities of northeastern North America. Considerable time is spent outside exploring the watersheds of the Babcock Nature Preserve in order to study succession, nutrient and energy flow, and the role of disturbance in the maintenance of forest communities.

## BIO-3280 Environmental Toxicology

4 credits (with lab)
Prerequisite: BIO-1211 and CHE-1031 or equivalent.
Recommended: a course in statistics.
Students perform standard toxicity tests to understand experimental design and the biological fate and effects of pollutants. Skills developed in this course can be applied to a wide variety of environmental management and research occupations.

BIO-3290 Conservation Biology
Prerequisite: BIO-2340, an upper-level ENV course, or permission of instructor.
This course will integrate many disciplines in biology, environmental
science, and public policy that are traditionally covered as separate courses. Biological concepts include ecology, limnology, forest ecology, evolution, and toxicology. Chemical concepts will be applied to discussions of toxic substances and environmental contaminants. This course will take an interdisciplinary approach to solving conservation problems.

## BIO-3310 Wildlife Field Methods

Prerequisite: Competence in natural science.
4 credits will learn basic and advanced procedures for the study of populations, and will practice a variety of observational, live-capture, and radiotelemetric methods for fish, amphibians, reptiles, birds, and mammals in the field. Selected species identification and sign reading techniques and general data analysis will be included. Participants must provide their own binoculars and hip-wader boots (purchased or borrowed). Not open to students who have already taken Field Mammalogy. (Summer only)

## BIO-3320 Ornithology

## 4 credits (with lab)

Prerequisite: BIO-2310.
Engagement in the in-depth study of bird classification, anatomy, physiology, ecology, and behavior. Several sessions focus on Vermont birds and field techniques.

## BIO-3720 Current Topics in Biology <br> 1 credit Prerequisite: None. <br> A weekly seminar series presents invited research scientists known for their contributions in biology. Speakers represent a broad spectrum of biological disciplines. Discussion sessions follow. May be repeated for credit. (Shared course in VSC)

## BIO-4030 Evolution

3 credits
Prerequisite: $\mathrm{BIO}-1211$ and $\mathrm{BIO}-1212$.
The study of evolution as the unifying principle for modern biology. Topics include the development of evolutionary theory along with its current debates, molecular and cellular evolution, natural selection, adaptation, and speciation. (Shared course in VSC)

## BIO-4220 Wildlife Ecology and Management 4 credits (with lab)

Prerequisite: BIO-2340 and a course in mathematics. Classroom and field studies of game and non-game species with emphasis on population biology, physiological ecology, and wildlife management in theory and practice.

## BIO-4920 Senior Thesis

3 credits

## Prerequisite: Senior Standing.

The Senior Thesis requires students to conduct an individual research project, write a thesis, conduct an oral presentation and prepare a paper for publication. This capstone course allows the student to combine the skills and knowledge gleaned from previous courses with a self-designed research project that requires the student to ask a good question, develop appropriate techniques, and conduct appropriate research. The research topic is to be chosen by the student in consultation with a faculty. A thesis outline must be submitted to the supervising faculty member (or members) prior to commencement of
research. This type of practical, hands-on experience may be conducted at locations off campus, in conjunction with a work-study project, internships, or on-campus research. The project must be completed within two semesters.

## BUSINESS (BUS)

## BUS-2020 Principles of Management <br> 3 credits

## Prerequisite: None.

This course is an introduction to the philosophy, principles, and techniques of management. Students will examine classical, modern, and emerging concepts as they relate to today's manager and the functional processes of planning, organizing, directing, and controlling resources. Learning experiences may include case studies, team experiences, and simulations. (Shared course in VSC)

## BUS-2140 Personal Finance

3 credits

## Prerequisite: None.

A study of the tools used in personal financial planning. The student is introduced to the process used by professional planners and shown how this can be helpful in planning their own financial futures. (Shared course in VSC)

## BUS-2210 Small Business Management <br> 3 credits

 Prerequisite: None.This course explores the practical aspects of organizing and managing a small business. It is designed to equip students with the skills and knowledge to make informed business decisions. Topics include the basic concepts of accounting, finance, cash management, taxes, business law, government regulations, staffing, and marketing. (Shared course in VSC)

## BUS-2230 Principles of Marketing

3 credits
Prerequisite: None.
This course introduces the role of marketing as it relates to manufacturing, wholesale, retail, not-for-profit, and service businesses. Topics include product development, pricing decisions, promotional considerations, and distribution options of both goods and services. Students will also examine the emerging role of electronic marketing and its impact on today's businesses. (Shared course in VSC)

## BUS-2410 Human Resource Management 3 credits

Prerequisite: None. Recommended: BUS-2020.
This course examines the critical issues and the strategic questions that must be considered when managing diverse groups of people in today's workplace. Topics include selecting, training, and evaluating personnel; compensation, health and safety, and bargaining units; motivation, morale, and human relations. (Shared course in VSC)

## BUS-2810/4810 Internship in Business Management $1-12$ credits

BUS-2910/4910 Independent Study in Business $1-12$ credits

## /70 COURSE DESCRIPTIONS

## BUS-3050 Principles of Sales

Prerequisite: BUS-2230.
Explores buyer behavior and the communication process of mutually satisfactory selling. Techniques of personal selling for individuals who must influence or persuade, actuate or lead other individuals now or in the future.

## BUS-3060 Consumer Behavior 3 credits

Prerequisite: BUS-2230.
The study of consumers in the marketplace. It examines who, what, when, where, and how consumers make purchasing decisions. (Shared course in VSC)

## BUS-3110 Ski Area Management and Design 3 credits

 Prerequisite: BUS-2020.The unique planning and management requirements associated with commercial ski resorts are presented: organizational structure, land and water management, environmental impact, and the various roles of federal, state, and local governments.

## BUS-3131 Business Law I <br> 3 credits

## Prerequisite: None.

An introductory course to provide a knowledge and awareness of the scope and terminology of the American legal system as it pertains to business organizations. Topics emphasized may include criminal law, tort law, forms of doing business, law of contracts, sales, real and personal property law, negotiable instruments, Uniform Commercial Code, and agency relationships. (Shared course in VSC)

## BUS-3150 Production/Operations Management

Prerequisite: ACC-2122 and MAT-2021 or MAT-2030. 3 credits
This survey course develops administrative skills needed to manage efficiently the several elements of production materials, facilities and manpower. Quantitative models (Management Science) are used to optimize the efficient use of resources. (Shared course in VSC)

## BUS-3210 Advertising

3 credits
Prerequisite: BUS-2230.
A comprehensive look at the promotional process, including media analysis and selection, dealing with the creative functions and production processes, measuring promotional effectiveness, and developing a comprehensive advertising strategy. Central to the course is the development of an advertising plan and campaign. (Shared course in VSC)

## BUS-3230 Financial Management <br> 3 credits

Prerequisite: ACC-2101, ACC-2121, ACC-2122, or ACC-2125.
A study of the use of accounting data to make financial decisions.
Decision making techniques are learned and used to address financial situations faced by a firm. (Shared course in VSC)

## BUS-3250 Organizational Behavior and Management Prerequisite: BUS-2020. 3 credits

The study of how individuals and groups interact in organizations to reach various goals and objectives. Particular emphasis is given to business organizations and the problems they face. (Shared course in VSC)

BUS-3265 Off-Shore Investment
3 credits
Prerequisite: BUS-3230 or permission of instructor.
The general purpose of this course is to expose students to the workings of international finance. Specific learning objectives will cover three basic areas of study. First there will be major concentration on business ethics as related to international and off-shore investment. Second, the methods and laws that allow for off-shore investment and tax sheltering will be examined. Third, international competition in tax law as balanced against a nation's right to legal sovereignty will be examined. Finally, and of no less import, the students will be exposed to a culture where race is almost nonexistent. As North Americans, we often see things through a racial filter. It is interesting to experience a culture where this is not done. This part of the course will be done by observation and class discussion.

BUS-4030 Marketing Research 3 credits
Prerequisite: BUS-2230 and MAT-2022, MAT-2030 or MAT-3130. A study of the assembly, analysis, and interpretation of information used to make marketing decisions. Includes research design, sampling techniques, and data collection and analysis. (Shared course in VSC)

## BUS-4070 Strategic Decision Making <br> 3 credits

 Prerequisite: BUS-2020 and BUS-2230.This course is designed to be a capstone to the critical thinking process. Students will be placed in a position to use previously aquired knowledge and apply that knowledge to case studies of actual companies and through participation in the Capstone Business Simulation. This course will be conducted through a combination of student presentations and execution of an 8 -year srategy with the Captone Simulation.

## BUS-4140 Quantitative Analysis

3 credits
Prerequisite: MAT-1221, MAT-2030.
This course provides quantitative reasoning and quantitative tools to assist in the management decision-making process. Topics include inventory control models, linear programming, statistical hypothesis testing, regression and analysis of variance, scheduling methods, elements of calculus and differential equations, and queuing theory.

## BUS-4180 Leadership and Managment of Nonprofit Organizations <br> 3 credits

(Available through EDP)
Prerequisite: BUS-2020 or permission of instructor
This course is designed to provide current and future nonprofit managers and leaders with an overview of a range of management and leadership theory, concerns, and best practices. The course will expand students' management skills, analytical tools, and leadership knowledge. Students take the perspective of nonprofit managers, volunteers, board members, policy makers, donors, and clients.

BUS-4710 Special Topics in Business $\quad 1-12$ credits
(Available through EDP)
BUS-4720 Senior Seminar
3 credits
Prerequisite: ECO-2030, 2020, ACC-2122. Recommended: BUS-3230, MAT-2030.
Provides students with an opportunity to integrate many of the tech-
niques previously learned in business courses. Through case analysis, business simulation, and peer review, students develop the ability to question and analyze corporate decision making and policy setting.

## CHEMISTRY (CHE)

CHE-1020 Introduction to Chemistry
Prerequisite: None.
4 credits (with lab)
This survey course examines atomic structure, the periodic table, chemical reactions, gases, liquids, solids, chemical equilibrium, acids and bases, bonding, molecular structure, and an introduction to organic chemistry. (Shared course in VSC)

## CHE-1031 General Chemistry I

Prerequisite: None. 4 credits (with lab) Recommended: MAT-1020 or MAT-1221 or MAT-1320.
This is the first course of a two-semester sequence on the fundamental principles of chemistry. Topics include atomic structure, stoichiometry, gas laws, thermochemistry, modern atomic theory, liquids and solids, and molecular structure. (Shared course in VSC)

## CHE-1032 General Chemistry II

Prerequisite: CHE-1031.
4 credits (with lab)
(The math course may be taken concurrently with CHE-1032.)
A continuation of CHE 1031. Topics include solution properties, kinetics, equilibrium, reaction mechanisms, thermodynamics, acid-base reactions, electrochemistry, and element properties. (Shared course in VSC)

## CHE-2910/4910 Independent Study in Chemistry

 1-12 creditsCHE-3111 Organic Chemistry I
4 credits (with lab)
Prerequisite: CHE-1032.
An introduction to the chemistry of organic compounds. Topics include nomenclature, bonding, molecular structure, functional groups, synthesis, reaction mechanisms, stereochemistry, and spectroscopic methods of analysis. Lab will introduce students to safety, sample handling, and an introduction to reactions. (Shared course in VSC)

## CHE-3112 Organic Chemistry II

Prerequisite: CHE-3111.
4 credits (with lab) A continuation of CHE-3111. The two courses must be taken in sequence. Continued study of organic functional groups and their chemical properties and molecular structures. Advanced topics may include applications of molecular orbital theory, computational chemistry of organic molecules, and the chemistry of biomolecules. Lab will include compound identification techniques and organic synthesis reactions. (Shared course in VSC)

## COMMUNITY SERVICES (CSV)

[^0]to integrate volunteer learning with their educational and career goals.
CSV-1012 Community Service Learning 1 credit Prerequisite: None. Recommended: CSV-1011.
Students are linked through volunteer services with an agency, school, or project. A journal is kept by the student as a tool to analyze the experience and document skills developed and/or enhanced. Students are awarded one credit for 30 hours of service and the completion of a reflective paper.

## CSV-2810/4810 Internship in Community <br> 3 credits

 Service
## CSV-2910/4910 Independent Study in Community

Service $\quad 1-12$ credits
CSV-3010 Leadership through Volunteer Service
Learning
1 credit
Prerequisite: None. Recommended: CSV-1011, CSV-1012.
In this course, students learn how to plan, develop, and implement a student community service project. They have the option of being a "Student Coordinator" in: a) a particular program area, e.g., children, environment, community development, elderly, or b) a one-shot project, e.g., Red Cross Blood Drive, Hunger Clean-Up, or Freshman Orientation Community Service Project.

## COMPUTER INFORMATION SYSTEMS (CIS)

CIS-1041 Microcomputer Applications 3 credits
Prerequisite: None
This course is designed to introduce the student to the world of microcomputers. The course focuses on software. In particular, the student will learn to use Windows, and Microsoft Office (including Word $®$, Excel $®$, Power Point $®$ and Access), the Internet (e-mail and World Wide Web software) and elementary web page design. By the end of the course, the student will be able to write documents, create and use spread sheets, develop graphic presentations, have a basic understanding of relational data bases, access the Internet, send e-mail, and create their own web page. (Shared course in VSC)

## CIS-2220 Web Site Design

3 credits
Prerequisite: None.
This course explores the fundamental principles of "good" web site design. Students will learn the basic structure of a web page using HTML coding. Students will also explore the advanced topics of designing forms, using cascading style sheets and embedding javascript commands. Students will also be exposed to the whys and hows of web site design. Students will create their own web pages and publish them on the world wide web using FTP software.

CIS-2271 JAVA Programming
3 credits Prerequisite: None.
This course will introduce the student to basic concepts of JAVA and Object Oriented Programming (00P). The course begins with basic concepts of 00P. These include classes, objects, inheritance,
polymorphism, and object-oriented design. The course will then cover the language features of JAVA. The topics in this section are: program structure, statement and field types, operators, expressions, and control structures. The course then returns to 00P features of JAVA, focusing on object data types, strings, methods, classes, and constructors. The final section addresses graphical user interface (GUI). The topics are: applets, GUI components (e.g. buttons), event processing and frames. (Shared course in VSC)

## CIS-2910/4910 Independent Study in Computer Information Systems 1-12 credits

CIS-3040 Database 3 credits
Prerequisite: None.
This course is designed to take the student through the world of relational databases using Microsoft Access. By the end of the course, each student will be able to design and build a relational database. (Shared course in VSC)

## CIS-3272 Advanced JAVA Programming

3 credits Prerequisite: CIS-2271.
Topics include memory management, advanced object-oriented concepts, data structures, advanced swing user interface features, error handling, networking, advanced input and output. (Shared course in VSC.)

## COMMUNICATIONS (COM)

## COM-2050 Introduction to Film Study <br> 3 credits

## Prerequisite: None

The study of film as an item of commerce, as an art form, and as a method of communication. An examination of film's style and technology will inform critical interpretation (oral and written) as an integral part of the course. (Shared course in VSC)

## DANCE (DAN)

## DAN-1010 Fundamentals of Dance <br> 3 credits

Prerequisite: None.
Introduction to dance and movement with a studio component. (Shared course in VSC)

DAN-1020 Fundamentals of Jazz Dance<br>3 credits<br>Prerequisite: None<br>Introduction to the principles and techniques of jazz dance.

## DAN-1030 Body Awareness

3 credits
Prerequisite: None.
Designed to awaken an awareness of one's body through yoga, dance, massage techniques, and reading assignments. Emphasis is on the importance of proper alignment, energy flow, flexibility and strength, body/breath coordinations, tension relief exercises, and philosophies. There are also exercises in postural re-education and simple body-care techniques. A strong emphasis is placed on the correct and natural use of the body. May be repeated for credit.

DAN-1111 Modern Dance
3 credits
Prerequisite: None.
Introduction to the principles and techniques of modern dance. May be repeated for credit. (Shared course in VSC)

## DAN-2010 Folk Dance

3 credits
Prerequisite: None.
An introduction to folk dance and the joyous art of communal dancing of selected international origins. Includes instruction in appropriate styling as well as cultural and historical information pertinent to the countries involved. Outside readings and oral presentation are expected of the student. May be repeated for credit

DAN-2030 Improvisation/Composition 4 credits Prerequisite: None.
(with choreography lab)
This course explores the nature of movement qualities and textures and the elements of dance: space, time, and force. The lab requires the development of improvisation and composition experiments into fully realized compositions intended to be presented before an audience. May be repeated for credit. (Shared course in VSC)

## DAN-2040 Beginning Tap Dance <br> 2 credits

Prerequisite: None
This course offers students the opportunity to study the fundamental structure of tap technique and learn basic tap dance vocabulary. Students will learn to put this vocabulary together into phrases and combine these phrases into a choreographed dance. Students will explore the unique role tap dance plays in the history of American dance, from its beginnings to current trends. They will also research performers who have affected its change and place in the dance world. Additional work will include a focus on speed, flexibility, strength, and emphasis on styles and genres of dance which have affected tap.

## DAN-2131 Ballet

3 credits
Prerequisite: None.
Study of the structure and form of classical ballet. May be repeated for credit. (Shared course in VSC)

DAN-2730 Topical Seminar in Dance $\quad .5-4$ credits Prerequisite: Prerequisites may change depending on topic. This course supplements the regular dance program, offering students the opportunity to study a broad range of topics, which vary from semester to semester. May be repeated for credit.

DAN-2910/4910 Independent Study in Dance
1-12 credits
DAN-3010 The Renaissance Spirit
3 credits Prerequisite: None.
A survey of the Renaissance as experienced through dance and other arts of the period. Manners, morals, music, movement, culinary delights, and eccentric clothing are some of the aspects of Renaissance life explored in this course. Come and leap through the Galliards, strut through Pavans, listen to sackbuts, and crumhorns and feast on authentic food and drink of the period.

DAN-3020 Intermediate Ballet: Technique and History Prerequisite: DAN-2131 or permission of the instructor. 3 credits A continuation and progression of the work begun in DAN-2131 with a further exploration of classical ballet vocabulary and technique through the execution of more accelerated barre and center floor exercises. Emphasis is on proper body alignment, development of rhythmic attack, musicality, clarity and precision, increased strength, flexibility and flow of movement. This course includes a survey of the history of ballet from its beginnings in the courts of Renaissance Europe to the present. May be repeated for credit.

DAN-3030 Improvisation/Composition: Intermediate/Advanced Level 4 credits (with choreography lab) Prerequisite: DAN-2030 or permission of instructor. This course is a continuation of DAN-2030. May be repeated for credit.

## DAN-3032 Body Awareness

3 credits
(Available through EDP)
Prerequisite: None.
Designed to awaken an awareness of one's body through yoga, dance, massage, techniques, and reading assignments. Emphasis is on the importance of proper alignment, energy flow, flexibility and strength, body/breath coordination, tension relief exercises, and philosophies. There are also exercises in postural re-education and simple body-care techniques. A strong emphasis is placed on the correct and natural use of the body.

## DAN-3112 Intermediate Modern Dance: Technique and History <br> Prerequisite: DAN-1111 or permission of the instructor. A continuation of the work begun in DAN-1111. Movement combinations are longer, more rhythmically complex, and more varied in dynamics and quality. Emphasis is on developing a sense of theatrical style as well as continuing technical growth. This course includes a history component which traces the development of modern dance. May be repeated for credit.

## DAN-3130 Jazz Dance

3 credits
Prerequisite: None.
An introduction to the movement vocabulary and style of jazz, a performance-oriented form. Students of jazz dance learn to incorporate balletic and modern dance techniques into the specialized jazz style. They also develop the ability to handle their bodies as instruments, smoothly, sharply, lyrically, percussively, and rhythmically. This course includes a historical survey of jazz dance from its roots in Africa through vaudeville, musical theater, movies, and today's jazz artists. May be repeated for credit.

## DAN-3140 African/Caribbean Dance and Culture

Prerequisite: None
The dances of Africa and the Afro-Caribbean Islands share components true of all dance forms that arise out of polytheistic cultures; they celebrate and acknowledge the complexity of the human psyche and of the forces of nature. Many of these dances are practiced as part of religious celebration and ritual; others are secular. Our exploration of these dances will be through the lens of a living mythological system. We will delve briefly into the realm of Carl Jung's collective unconscious and the
phenomenon of archetypes, and then look at how these archetypes are expressed in mythology, particularly as studied by Joseph Campbell. We will then examine myths and archetypes embodied by the dances, and experience the actual rhythms and dances, with live drumming accompaniment. Readings by Arricans, Afro-Caribbeans, and Westerners, and films portraying the great diversity within this dance form, will inform and deepen our understanding and experience.

## DAN-3180 Folk Dance II

3 credits
Prerequisite: None. (Available through EDP)
Folk Dance explores the joyous art of communal dancing from selected international origins. The way that music, food, clothing, rituals, climate, geography, religion, work, art, culture and history influence the dances of these regions will also be included. Outside readings, research and oral presentations will be expected of the student.

## DAN-4130 Advanced Ballet/Modern Dance: Technique and History 3 credits

 Prerequisite: DAN-3112 or 3020 or permission of the instructor. A solidifying of the knowledge and technique acquired in intermediate ballet and intermediate modern dance with an increasing complexity of movement combinations, a broader range of movement, and a greater emphasis on performing skills. This course requires an in-depth project on some element of dance history. May be repeated for credit.
## ECONOMICS (ECO)

## ECO-1020 Introduction to Economics

Prerequisite: None. Not open to those taking other college-level economics.
A survey. This course examines economic behavior and economic systems in society and provides a broad view of major schools of economic thought and of economic dimensions of public issues. Students become acquainted with consumer and business activities and their role in the functioning of the economy. Skills of effective writing, basic calculation, and critical reasoning also receive attention. (Shared course in VSC)

## ECO-2020 Macroeconomics

3 credits
Prerequisite: PLM-0002, MAT-1020, or MAT-1060.
A study of national economic systems. Includes national objectives such as low unemployment and low inflation, measuring economic success, the business cycle, and an introduction to international trade. The basis models using prescriptive policy tools are learned. (Shared course in VSC)

## ECO-2030 Microeconomics

3 credits
Prerequisite: PLM-0002, MAT-0221, MAT-1020, or MAT-1060.
A study of the firm and markets. Includes price theory at the firm and market level, market solutions to problems of scarcity, and the policy alternatives available to correct for inefficiency and market failure. (Shared course in VSC)

## ECO-2910/4910 Independent Study in Economics $1-12$ credits

## ECO-3010 Environmental Economics

3 credits
Prerequisite: ECO-1020 or 2030, junior or senior standing. Improving the environment usually involves difficult economic choices, and often, as an unintended side effect of economic activity, natural amenities are lost. This course examines why the economic system fails to give sufficient weight to environmental consequences and discusses policies being proposed and implemented for state and federal action to deal with the problem.

## ECO-3030 Public Finance and Administration 3 credits

 Prerequisites: ECO-2020 and 2030This course introduces students to the intertwined financial and administrative functions of government. On the financial side, the provision of public goods, public budgeting, and tax theory are covered. On the administrative side, topics include decision-making criteria, policy analysis and implementation, public regulation, and concepts of federalism.

## EDUCATION (EDU)

## EDU-1020 The Human Endeavor <br> 3 credits

Prerequisite: None.
This is an experiential, competency-based course designed to introduce students to higher education and Johnson State College. The main objective of the course is to ensure student success and to improve skills in writing, reading, critical thinking, research, and self-awareness.

## EDU-2040 Child Development

3 credits Prerequisite: PSY-1010.
A thorough examination of the physical, intellectual, and social development of the child from conception to puberty. This course focuses on viewpoints of major theoreticians, from both the past and the present. Relationships between theory and practice are consistently stressed, with students applying theoretical information and research data to the real-world problems of teaching and rearing children.

## EDU-2080 Literacy Instruction in the 4 credits Elementary School I <br> Prerequisite: Second semester sophomore standing and 2000 level writing course. <br> Theories and methods of reading instruction for the elementary school teacher are presented. A field component of one morning per week in an elementary classroom is an integral part of this course.

## EDU-2110 Introduction to Exceptional Populations

 Prerequisite: None. 3 creditsThis course examines the development and special needs of children and adolescents who have mental retardation, learning disabilities, speech and language disorders, emotional disturbance, physical disabilities, sensory disabilities, intellectual giftedness and talents, or other exceptionalities. The evolution of special education law and its implications for inclusion of exceptional students into regular classroom environments is also investigated. (Shared course in VSC)

## EDU-2170 Adolescent Development

3 credits
Prerequisite: PSY-1010.
This course examines theories and research related to the cognitive, physical, and social development during the adolescent years. The influences of parents, peers, and media are explored. Through a project focus and active learning techniques, the student explores areas of interest that relate to adolescent development.

## EDU-2910/4910 Independent Study in <br> $1-12$ credits Education

## EDU-3010 Social and Natural Science Methods for Elementary Teacher <br> 3 credits

Prerequisite: Concurrent enrollment in EDU-3811.
In this course, students study social and natural phenomena through observation, experimentation, and rational analysis, and learn to be objective while collecting data. A stress on the social, historical, economic, cultural, and political processes of social science is balanced by an equal stress on topics belonging to natural sciences, such as electricity, forces, and sound. Emphasis at all times is on methods and materials applicable to teaching elementary school children. This course is taught at our PDS site.

## EDU-3020 Educational Psychology 3 credits <br> Prerequisite: None. Recommended: PSY-1010 and EDU-2040 or 2170.

 This course offers students the opportunity to learn how psychological principles and the works of various theorists relate to teaching and learning. The roles of motivation, intelligence, attitudes, and the components of effective teaching are studied. (Shared course in VSC)
## EDU-3030 Methods and Materials for Teaching Elementary School Mathematics 3 credits

Prerequisite: Successful completion of Praxis I (math) and a 2000 -level mathematics course. Concurrent enrollment in EDU-3811.
This course provides prospective elementary school teachers with a working knowledge of the methods, materials, skills, understanding, and attitudes that will help them meet the needs of children learning mathematics. This course is taught off campus at our Professional Development School site.

## EDU-3035 Literacy Development in the Early Years: Preschool-Third Grade 3 credits

 Prerequisite: EDU-2040, EDU-2080.Students will investigate how to provide a literacy program that provides children with appropriate learning experiences during the early years of school. Major topics to be pursued include phonological and phonemic awareness; how and when to "teach phonics"; how to assess, address and respond to early language and literacy development, including advanced and delayed development; and how to conduct a successful "guided reading" program. This class requires students to engage in observation and participation in classroom settings.

## EDU-3080 Literacy Instruction in the Elementary

 School II3 credits
Prerequisite: EDU-2080.

Methods, techniques, and rationale for integrating reading, writing, speaking, and listening skills into the elementary classroom curriculum are presented in this course. Special emphasis is on relating oral language to reading instruction and on enhancing communication skills through poetry, creative writing, audio-visual media, music, and art. This course is taught at our PDS site.

## EDU-3110 Literature for Children

Prerequisite: None. Recommended: EDU-2040.
Students in this course examine literature for children of different age groups and reading levels. Critical selection and evaluation, as well as the creative use of literature, are an integral part of the course. (Shared course in VSC)

EDU-3120 Methods in Health and Physical Education for Elementary School Teachers 2 credits Prerequisite: EDU-2040, EDU-3020; for PED majors, PED-1150. This is a required course for certification in elementary education and elementary physical education. Emphasis is on various methods and teaching techniques in movement, games, and dance for use by elementary school classroom teachers.

## EDU-3210 Secondary Education Methods: General 2 credits

Prerequisite: Must be taken in conjunction with specific content area methods class, e.g., EDU-3220, 3230, 3250 or 3260.
This two-credit course focuses on the preparation of the secondary teacher, grades 7-12. The class is organized into four basic areas: (1) the role of the teacher, (2) instructional and management techniques, (3) lesson and unit planning, and (4) professionalism and ethics. Students plan, teach, and evaluate within the class. Observations and participation in area schools also provide a readiness for the student teaching experience.

## EDU-3220 Secondary Education Methods: English

Prerequisite: Concurrent enrollment in EDU-3210. 1 credit
The language arts component of secondary methods focuses on instructional and assessment strategies in teaching literature and writing in grades 7-12.

EDU-3230 Secondary Education Methods: Social Studies Prerequisite: Concurrent enrollment in EDU-3210. 1 credit
The social studies component of this course is designed to help students organize, plan, and teach social studies at the secondary level. A variety of techniques are experienced to provide active learning experiences in social studies.

## EDU-3240 Literacy Development in the Content Areas

 Prerequisite:None. 3 creditsThis course concentrates on the principles, techniques, and materials for teaching reading and writing through all content areas. Topics include the use of readability measures, vocabulary development, comprehension, research and study skills, and lesson planning. A field component is an integral part of this course. (Shared course in VSC)

## EDU-3250 Secondary Education Methods: Theater

Prerequisite: Concurrent enrollment in EDU-3210. 1 credit Students organize, plan, and teach segments of theater classes to peers. Observations and lesson and unit plans are also included.

EDU-3260 Secondary Education Methods: Dance
Prerequisite: Concurrent enrollment in EDU-3210.
1 credit
This course is designed to provide students with the necessary concepts and practical skills to develop curriculum, create course goals and lesson plans, and direct dance productions in a school setting; and to provide students with appropriate teaching techniques for teaching secondary school students.

## EDU-3300 Introduction to Classroom Management Prerequisite: EDU-2040 and EDU-2110

Advanced research, theories, and practices of classroom management at elementary, middle, and high school levels.

EDU-3811 Elementary Practicum I 6 credits
Prerequisite: Overall B average (3.0); successful completion of Praxis I exam; EDU 2040, EDU 2080, EDU 2110 with grades of B- or higher; concurrent enrollment in or previously completed EDU 3010, EDU 3030, and EDU 3040 , signature of approval from student-teacher coordinator. This half-semester course involves student teaching and participation in seminars which focus on techniques, materials and technology pertinent to teaching in the elementary school. Students are expected to maintain the public school calendar.

## EDU-4812 Art Practicum

12 credits
Prerequisite: Overall GPA of 3.0 or higher; successful completion of Praxis I exam; EDU 2040 and/or EDU 2170; EDU 2110, EDU 3020, EDU 3240 , ART 3120 and/or ART 3140 (with a grade of B- or higher in each), signature of approval from student-teacher coordinator.
This full-semester course involves full-time student teaching in art and participation in frequent seminars which focus on techniques, materials, and technology pertinent to teaching art in an elementary school.

## EDU-4820 Elementary Practicum II

12 credits
Prerequisite: EDU 3010, EDU 3020, EDU 3030, EDU 3040, and EDU 3811 with grades of B- or higher. Overall GPA of 3.0 or higher, signature of approval from student teacher coordinator.
Following a semester of prescriptive study after Practicum I, the student enrolling in Elementary Practicum II will spend a full semester student teaching in a school district. Evaluation is based on the student's demonstration of the competence generally expected of a first-year teacher.

## EDU-4830 Music Practicum

12 credits
Prerequisite: Overall GPA of 3.0 or higher, successful completion of Praxis I exam, EDU 2040, EDU 2170, EDU 2110, EDU 3020, EDU 3240, MUS 3160, and MUS 3210 (with a grade of B- or higher in each), signature of approval from student teacher-coordinator.
The full-semester course involves full-time student teaching in music and participation in frequent seminars which focus on techniques, materials, and technology pertinent to teaching music in an elementary school.

## EDU-4835 Physical Education Practicum 12 credits (Formally PED-4830)

Prerequisite: EDU-2040 and/or EDU-2170, EDU-3120 and/or PED-3140, and EDU-2110, 3020,3240 with grades of $B$ - or higher, junior class standing, signature of approval from student-teacher coordinator, 60

## 76/ COURSE DESCRIPTIONS

clock hours of field experience, overall GPA of 3.0 or better and successful completion of Praxis I exam. Beginning October 2004, students applying for initial licensure must also pass Praxis II before doing their practicum.
This course offers a full-time teaching placement in a public or private K-12 school under the supervision of an experienced physical educator. Students will apply principles, techniques, and technology appropriate to the physical education classroom. (Shared course in VSC)

EDU-4850 Secondary Education Internship 12 credits Prerequisite: Overall GPA of 3.0 or higher, successful completion of Praxis I, EDU 2170, EDU 2110, EDU 3020, EDU 3240 and a methods course in the appropriate content area (each with a grade of B - or higher), signature of approval from student-teacher coordinator. Students spend a full semester in a secondary classroom setting, gradually increasing their involvement, and culminating in a period of full-time teaching under the direction of a cooperating teacher. Practical application of teaching principles, knowledge, and understanding of adolescents is involved. (Shared course in VSC)

## ENGLISH (ENG)

## ENG-1005 College Reading

3 credits
Prerequisite: None.
This course is designed to teach critical reading skills applicable to course work in many fields. Students will learn how to recognize the essential points in a piece of reading, as well as how to discern the writer's tone and how to evaluate the relevance of supporting information. They will learn to ask questions about what they read, rather than taking what appears in print on faith. Though this course is not intended to be a speed-reading course or a remedial course for serious deficits in reading skills, students who successfully complete this course will be more comfortable and fluent with a variety of texts and better prepared for further college work.

## ENG-1031/1032 College Writing <br> 3 credits each

## 1 A and 1 B

Prerequisite: Must take ENG-1031 before ENG-1032.
These courses, which must be taken in sequence, cover the material of ENG-1051. Students must earn a grade of C- or better in ENG-1031 in order to enroll in ENG-1032. If the sequence is completed, students earn six credits towards graduation.

ENG-1051 College Writing 3 credits Prerequisite: PLE-0003 or ENG-0041.
This course emphasizes the writing of narrative, descriptive, and analytic essays developed around a central thesis. The construction of coherent, well-organized paragraphs, as well as standard punctuation, usage, grammar, and spelling, receive special attention (Shared course in VSC).

## ENG-1052 Exposition and Analysis

3 credits Prerequisite: PLE-0004 or ENG-1051 or ENG-1031/1032. This course addresses the writing of analytic essays, focusing on the structure of persuasive writing, the appropriate consideration of audience, and the development of style. The course culminates in a research
paper. Note: JSC students must take the Writing Proficiency Exam while enrolled in Exposition and Analysis to get a grade for the course.(Shared course in VSC)

## ENG-1070 Effective Speaking

3 credits
Prerequisite: None. Recommended: ENG-1052.
Students prepare and deliver short speeches, practicing how to choose, limit, and arrange what they say according to their audience and purpose, and to use visual aids and cite sources appropriately. (Shared course in VSC)

## ENG-1220 Rhetorical Expression <br> (Available through EDP) <br> Prerequisite: None.

Through intensive practice with short essays and close instruction, students in this course enhance their skills in written expression. They become more effective and comfortable with the writing process, use of good mechanics and precise language, development of a natural style, and standard rhetorical forms and strategies. Successful completion of this course satisfies the JSC Writing Proficiency requirement. (Open only to EDP students. Pass/fail only.)

## ENG-1310 Introduction to Literature

3 credits Prerequisite: None.
An examination of poetry, fiction, and drama, emphasizing key literary concepts and techniques, including plot, theme, character, point of view, and prosody. (Shared course in VSC)

## ENG-1330 Language of Film

3 credits
Prerequisite: Open to first-year students only
Just as learning a foreign language requires a sensibility for rules and structure, effective communication using film and video requires an understanding of the filmic conventions that have grown up through the past 100 years of film history. Understanding these conventions is especially important as changes in computer technology bring the tools for video creation to the PC desktop. Students and workers of today will see unprecedented opportunity for video "expression" in both their academic and professional careers.

## ENG-1360 DYSTOPIA: Cautionary Tales of a Nightmarish Future <br> 3 credits Prerequisite: Open only to freshmen <br> Probing basic questions of human nature and society, dystopian (the worst of all possible worlds) literature and film reveal anxieties that remain chillingly applicable today. We will explore such issues as the self, alienation, freedom, complicity, citizenship, Iove, faith, sex, technology, and happiness through a variety of novels and films.

## ENG-2005 The Self-Sufficient Writer 3 credits

Prerequisite: Failure of the Writing Proficiency Exam.
This three-credit course is intended to replace the Writing Proficiency Portfolio, and is the means by which students who have failed the Writing Proficiency Exam may satisfy the last element of the Core Curriculum in writing. As with the Writing Proficiency Exam, the emphasis of the course is the writing of extemporaneous persuasive essays in edited
standard American English, without help from instructors or softwarebased spelling and grammar aids. Students will be expected to write in-class essays that state a clear thesis and develop that central idea concretely, logically, and correctly. Class time will be spent reviewing and cultivating the wide range of skills necessary to prepare students for the writing of analytic essays with a minimum of errors and without assistance from the instructor: review of and quizzes over the rules of grammar, punctuation, spelling, and usage; editing passages and dictation exercises; peer teaching; and, every week, in-class writing

## ENG-2051 Introduction to Newswriting 3 credits

Prerequisite: ENG-1052
The basics of news-gathering and news-writing are taught with an emphasis on writing for a daily newspaper. Students are expected to participate as staff members of the College newspaper by gathering news, writing stories, editing stories, and designing pages. The course also covers some aspects of the history of journalism and aids students in developing news judgment and exercising journalistic ethics.

## ENG-2052 Newspaper Publishing: Writing, Editing, Layout, and Design 3 credits

Prerequisite: ENG-1052 and ENG-2051.
This course will focus on editing the campus newspaper. The students will comprise the newspaper editorial staff. They will assign stories and photography; write news stories, columns and editorials; and learn layout (desk-top publishing). In addition, some of the class will be designated to handle the business end of publication: advertising sales, budget, and acquisition of supplies and equipment. This is a hands-on class required of all journalism majors and open to all majors.

## ENG-2101 Creative Writing 3 credits

Prerequisite: ENG-1051, ENG-1060, ENG-1061, ENG-1062, or ENG-2270 Students analyze and practice the techniques of poetry and prose fiction. In poetry, students work with imagery, metaphor, tone, and diction, and experiment with traditional and contemporary verse forms. In prose fiction, students work with plot, setting, point of view, and characterization. (Not repeatable for credit.) (Shared course in VSC)

## ENG-2171/2172 World Literature I, II <br> 3 Credits

Prerequisite: None. May be taken in sequence or separately.
The course introduces students to fiction, poetry, essays, and drama in translation, mainly from the European tradition, but also including works from the Near and Far East and Latin America. World Literature I focuses on work by Homer, the Greek dramatist; Biblical and Buddhist writers; and the Chinese poet Tu Fu. Major figures in World Literature II include Dante, Rumi, Chekhov, Kafka, and Neruda. Each work is looked at in its cultural context, though common themes and ideas are also examined.

## ENG-2281/2282 Survey of English Literature I , II

Prerequisite: None. May be taken in sequence or separately. 3 credits These two courses focus on representative works by writers from the British Isles and provide students with an historical perspective from which to study the development of major genres and themes in the English literary tradition. ENG-2281 begins with Beowulf and Old English literature; proceeds through the Middle Ages, focusing on Chaucer; explores representative literature from the Age of Elizabeth, including Shakespeare; and ends with Milton and Paradise Lost. ENG-2282 begins in the Age of Reason with Swift and Pope; surveys selections from Romantic and Victorian writers such as Wordworth, Keats, Browning
and Arnold; and ends in an exploration of Modernism, focusing on such writers as Eliot, Joyce, and Woolf.

## ENG-2321/2322 Survey of American Literature I, II

Prerequisite: None. May be taken in sequence or separately. 3 credits These two courses survey the American tradition of literature from the early colonial period to the present. Focus is on major figures and on genres such as diaries, journals, poetry, essays, and fiction. The first semester considers Winthrop, Bradstreet, Taylor, Edwards, and Franklin in the 17th and 18th centuries and Emerson, Poe, Thoreau, Melville, Dickinson, and Whitman as major 19th-century writers. The focus of the second semester, which may be taken without taking ENG-2321, extends from the late 19th century through the first half of the 20th and includes such writers as Twain, James, Crane, Frost, Eliot, Hemingway, Faulkner, and Stevens.

ENG-2323 1492: Reading the Conquest
3 credits
Prerequisite: Open only to first-year students
This first-year seminar will examine early literary responses to the conquest of the New World. Themes include the sense of wonder and curiosity catalyzed by the epochal encounters begun in 1492; the meanings of these journeys, discoveries, and conquests; ideas about the natural (were the Americas and their inhabitants paradisiacal or savage?); and the significance of the conquest for us today. It is hoped students will share the sense of awe expressed by our authors at the marvels they encountered during their various sojourns. This course is also designed as a beneficial introduction to college life, including research, balancing your schedule, learning how to learn, making use of campus resources, and developing successful study skills.

## ENG-2355 Tradition and Identity in Contemporary Literature <br> 3 credits Prerequisite: None

This course is designed to investigate the influence of the past on the present, especially as this influence affects individual identity, purpose, and fulfillment. Our focus will be on people's responses to family contemporary essays, autobiography, and fiction, and on our own examination of the past and its influence in our lives. Whenever we identify who we are, we make choices: What do we want or need to emphasize about ourselves? How will people respond to what they learn about us? Will our freedom and control (both short- and long-term) be enhanced or constrained as a result? What combination of skills, influences, insights, and effort will give us the best chance of meeting life on its own terms and making the most of it and of ourselves?

## ENG-2510 Women and Literature

3 credits
Prerequisite: None.
A culturally diverse survey of fiction and poetry by women authors that explores women as characters and the condition of women in the world. (Shared course in VSC)

ENG-2810/4810 Internship
1-12 credits
ENG-2910/4910 Independent Study in English
$1-12$ credits

## ENG-3020 Feature Writing

Prerequisite: ENG-1052.
An advanced course in the preparation and production of feature articles and essays. The course includes close examination of contemporary features writing in both national and regional newspapers and magazines. Opportunities for the publication of student work in this course may be available in the College newspaper and other College publications.

ENG-3022 Advanced Newspaper Publishing: Writing, Editing, Layout, and Design 3 credits Prerequisite: ENG-2052
This class is available to students who have taken ENG-2052 and choose to return to the newspaper staff a second semester. Their responsibilities include more page layout, more investigative reporting, and more line editing and rewriting. (Repeatable for credit)

## ENG-3120 Poetry Workshop <br> 3 credits

Prerequisite: ENG-2101 or permission of the instructor. Student poems serve as the basis and focus of this advanced writing workshop. Intensive and extensive writing is expected, and revisions of poems are required. Students also study the poetry and poetic theory of contemporary writers to discover how their work fits into the contemporary poetic tradition. (Repeatable for credit)

## ENG-3130 Fiction Workshop

3 credits
Prerequisite: ENG-2101 or permission of instructor. This upper-level course concentrates on the short story. Weekly class discussion ranges from critiquing fellow students' work to examining work by professional writers. Students write at least three full-length stories by the end of the semester. (Repeatable for credit)

## ENG-3140 The Creative Essay

3 credits
Prerequisite: ENG-2101, ENG-2051, or permission of instructor. The essay as creative non-fiction is analyzed as a model for students, and emphasis is placed on helping students to frame eloquent and artistic prose. Students write essays as well as study classic essays from academic and popular writing. The goal of the course is to encourage and assist students to become writers of essays that move readers as well as inform. (Spring semesters, even years)

## ENG-3270 Myth and Myth Making

3 credits
Prerequisite: ENG-1052 and ENG-1310 or ENG-2171 or ENG-2172 or ENG-2281 or ENG-2282 or ENG-2321 or ENG-2322 or ENG-2510. An interdisciplinary, team-taught inquiry which provides an overview of myth and the myth-making process, this course focuses especially on quest myths and on myths concerning sacrifice, death, and rebirth. Though most myths read will be Greek, students will also be encouraged to explore Native American and other mythologies. The course will emphasize the ways myth has been used by dramatists, poets, and visual artists. (Spring semesters, even years)

## ENG-3320 English Novel

3 credits
Prerequisite: ENG-1052 and ENG-1310 or ENG-2171 or ENG-2172 or ENG-2281 or ENG-2282 or ENG-2321 or ENG-2322 or ENG-2510. This course surveys the English novel from Sterne, Richardson, and Austen to Conrad, Lawrence, and Woolf. Dickens, Hardy, Forster, and other recent novelists are stressed. (Fall semesters, even years)

ENG-3380 British Romantic Literature 3 credits
Prerequisite: ENG-1052 and ENG-1310 or ENG-2171 or ENG-2172 or ENG-2281 or ENG-2282 or ENG-2321 or ENG-2322 or ENG-2510. In this investigation of English romanticism, student engage in close readings of poetry and prose by the major writers in the tradition: Blake, Wordsworth, Coleridge, Byron, Shelley, Keats, and Mary Shelley. (Spring semesters, odd years)

## ENG-3390 Literature of the Grotesque 3 credits

Prerequisite: ENG-1052 and ENG-1310 or ENG-2171 or ENG-2172 or ENG-2281 or ENG-2282 or ENG-2321 or ENG-2322 or ENG-2510. This course includes historical, literary, philosophic, and aesthetic approaches to the grotesque, especially examining the mix of humor and horror so essential to the genre. Rabelais, Swift, Poe, Dostoevski, Baudelaire, Beckett, Nathanael West and Flannery O'Connor, among others, will be studied, as well as slides of grotesque art works, from Hieronymous Bosch to Salvadore Dali. (Spring semesters, even years)

## ENG-3395 Satire in Literature

 3 creditsPrerequisites: ENG-1052 and ENG-1310 or ENG-2171 or ENG-2172 or ENG-2281 or ENG-2282 or ENG-2321 or ENG-2322 or ENG-2510.
This course is an introduction to the vast and varied genre of satire, tracing origins to Old Comedy and Roman Verse satire, tracing satire theory from classical models up through 20th-century structuralism and postmodern theory. We'll study Aristophanes, Horace, and Juvenal, Menippean satire of Lucian and Petronius, bits of Rabelais, Chaucer, Donne, Butler and Marvell, as well as whole works from neoclassic masters Alexander Pope, John Dryden and Jonathan Swift. As satire has evolved in the last two centuries into a predominately narrative, not verse, form, we'll study a number of anti-utopian novels such as Animal Farm, Brave New World, Memoirs From a Bathtub, as well as view "Metropolis" and "Modern Times" as cinematic satires.

## ENG-3405 Literary Journalism <br> 3 credits

Prerequisite: ENG-1052
Students are expected to analyze and understand the techniques of journalistic prose that have led to memorable stories and columns. Among those studied are muckrakers such as Steffens and Woodward, war correspondents such as Pyle and Herr, commentators such as Lippmann and Broder, and many other literary journalists.

ENG-3480 Modern Literature
3 credits
Prerequisite: ENG-1052 and ENG-1310 or ENG-2171 or ENG-2172 or ENG-2281 or ENG-2282 or ENG-2321 or ENG-2322 or ENG-2510. Students engage in close readings of representative works of major poets and fiction writers from the start of the 20th century to World War II. The course includes British and American writers such as Joyce, Yeats, Woolf, Eliot, Stevens, Faulkner, and Hemingway. (Spring semesters, odd years)

ENG-3510 Contemporary Literature
3 credits
Prerequisite: ENG-1052 and ENG-1310 or ENG-2171 or ENG-2172 or ENG-2281 or ENG-2282 or ENG-2321 or ENG-2322 or ENG-2510.
Students read representative works of major poets and fiction writers from the end of World War II to the present. The course includes writers such as Lowell, Plath, Ginsberg, Bellow, Rich, O'Connor, Atwood, Mor-
rison, and Carver. (Fall semesters, odd years)

## ENG-3520 American Poetry

3 credits
Prerequisite: ENG-1052 and ENG-1310 or ENG-2171, ENG-2172 or ENG-2260 or ENG-2270, or ENG-2281 and ENG-2282 or ENG-2321 or ENG-2322 or ENG-2510.
An examination of important works by major American poets, including such representative poets as Whitman, Dickinson, Stevens, Eliot, Pound, Williams, and Moore, with special emphasis on the Americanness of American poetry, as distinct from other traditions. (Spring semesters, even years) (Shared course in VSC)

## ENG-3530 American Novel

3 credits
Prerequisite: ENG-1052 and ENG-1310 or ENG-2171, ENG-2172 or ENG-2260 or ENG-2270, or ENG-2281 and ENG-2282 or ENG-2321 or ENG-2322 or ENG-2510.
An examination of novels by Americans in historical context, beginning with the first half of the nineteenth century, and including major works by novelists such as Hawthorne, Melville, Twain, James, Crane, Faulkner, Hemingway, and Fitzgerald. (Fall semesters, odd years) (Shared course in VSC)

## ENG-3580 African American Literature <br> 3 credits

Prerequisite: ENG-1052 and ENG-1310 or ENG-2171, ENG-2172 or ENG-2260 or ENG-2270, or ENG-2281 and ENG-2282 or ENG-2321 or ENG-2322 or ENG-2510.
An examination of the literary traditions of African-Americans, beginning with slave narratives and the oral tradition (as seen in popular song and folk tales) and including poetry, autobiography, and fiction by important African-American writers of the twentieth century. (Fall semesters, even years) (Shared course in VSC)

## ENG-3680 Linguistics and Language History 3 credits

 Prerequisite: ENG-1052. Recommended: ENG-2281. This course examines the English language from a theoretical, developmental, and practical perspective and is intended for students with a general interest in language and expression as well as those students preparing to teach language arts and literature at the secondary level. (Spring semesters, even years)
## ENG-4010 Issues in Journalism

3 credits Prerequisite: ENG-2051.
This course is a senior-level seminar designed to lead students through an examination of current ethical problems and issues in journalism: truth vs. accuracy; information biases: problems of personalizing, dramatizing, reenacting, and manipulating the news; image-making in politics; First Amendment vs. rights to privacy: naming names; photojournalism ethics; and the transformation of news into entertainment (the rise of images and the decline of meaning). (Spring semesters, odd years)

## ENG-4110 The Form and Theory of Fiction 3 credits

Prerequisite: ENG-3130 or permission of instructor. This study of novels and short stories focuses on their structure and on the ideas that give life to that structure. It is a workshop-oriented course primarily for writers, and much of the criticism read has a practitioner's focus. Topics include the form of the novella, tone and
texture in the contemporary short story, and the novel as memoir. Major fiction by American and European writers is studied, along with representative novels and short stories by non-western and Third World writers.. (Spring semesters, odd years)

## ENG-4120 The Form and Theory of Poetry <br> 3 credits

Prerequisite: ENG-3120 or permission of instructor.
This course examines the theoretical writings of 19th- and 20th-century poets on the process of poetic creation. Theories about the source of inspiration, the origin of poetic structure and technique, the relationship between theory and practice, the responsibilities and uses of poetic imagination, and the relationship between artist and society are explored. (Fall semesters, even years)

ENG-4130 The Form and Theory of Nonfiction 3 credits Prerequisite: ENG-1052. Recommended: at least one 3000-level writing course.
The structure and technique of creative essays are examined and analyzed, with stress on development and organization. Particular attention is paid to literary essays that have withstood the critical test of time and to modern essays that consciously strive to incorporate literary techniques. Discussion focuses on audience, allusion, research, patterns of development and organizing elements, as well as those literary techniques such as symbolism and irony that apply to non-fiction prose. (Fall semesters, odd years)

## ENG-4150 Literary Criticism and Theory 3 credits

Prerequisite: ENG-1052, two literature surveys, and one upper-level literature course.
This investigation of 20th-century approaches to literary criticism and theory focuses on major "schools" of criticism and on the critics and theorists associated with them. Students develop a definitive, historical perspective on this kind of discourse, including the goals criticism and theory have striven to reach and the effects such discourse has had on the study of literature. Students are encouraged to draw upon their own inclinations as readers and scholars, trying out some of these critical stances and evaluating their usefulness and their value to us as individuals and as members of various interpretive communities. (Spring semesters, odd years)

## ENG-4720 Seminar in Literature

3 credits
Prerequisite: ENG-1052, two literature survey courses, and one upperlevel literature course.
Intended for upper-level English majors, this seminar examines in depth a particular author, literary movement, or literary theme. Students prepare intensive research-based seminar presentations and extended research papers. (Spring semesters, even years) (Shared course in VSC)

## ENG-4920 Senior Thesis

3 credits
Prerequisite: Permission of instructor.
A substantial writing project is required of students pursuing a B.F.A. in creative writing. Normally this project is completed during the final semester of the senior year. Students may work in any genre. The thesis is optional for students pursuing a B.A. Consult the Writing and Literature faculty for detailed information about developing a thesis project, finding a thesis adviser, and carrying out the project. (Repeatable for credit only when the second thesis is in a different genre than the first one.)

## ENGLISH AS A SECOND LANGUAGE (ESL)

ESL-1010 Conversation and Listening Skills 3 credits Prerequisite: None.
This course offers non-native speakers of English the opportunity to develop the oral linguistic skills needed for college study. Class presentations and language laboratory work are required.

ESL-1021/1022 Written Expression I/II 3 credits each Prerequisite: ESL-1021 is a prerequisite for ESL-1022.
The objective of this course is to improve the writing of non-native English speakers. Through a review of grammar, syntax and semantics, this course attempts to develop college-level writing skills.

## ESL-1031/1032 Understanding and Using English Grammar and Vocabulary I/II 3 credits each

 Prerequisite: ESL-1031 is a prerequisite for ESL-1032.The course will emphasize the correct usage of grammar and vocabulary in written and spoken English. Students will study intermediatelevel grammar and add more challenging and complex structures as the year progresses. The vocabulary component will focus on words essential for college students.

## ESL-1040 Editing Lab

1 credit
Prerequisite ESL-1021 or permission of instructor.
This lab will deal with specific language-related problems such as syntax, grammar, and usage that appear in students' written work. Students will focus on writing and rewriting essays that have been submitted in other classes. The course is repeatable for credit and is designed to be taken in conjunction with a writing class or a class that is writing-intensive. Pass/fail only.

ESL-1050 Supplemental Instruction Bridge 1 credit Prerequisites: 500 TOEFL score or ESL-1021/1022; and ESL-1031/1032. Concurrent enrollment in core curriculum disciplinary exploration course.
The course focuses on the study skills necessary for students to master the content of a disciplinary exploration course that is centered on interpretive assignments in reading and writing and on complex, lan-guage-based content and information. Course work will be dovetailed to the syllabus of the content course. The course may be taken up to four times, provided that each bridge course corresponds to a separate main category of disciplinary exploration course work (i.e., arts and humanities; natural sciences; anthropology/sociology/psychology; political science/economics). Pass/fail only.

ESL-2910 Independent Study in English $\quad 1-12$ credits as a Second Language

## ENVIRONMENTAL SCIENCE (ENV)

ENV-1020 Introduction to Computers for 2 credits
the Sciences

## Prerequisite: None.

This course will focus on the use of the following software: Word $®$
(word processing), Excel ${ }^{\circledR}$ (spreadsheet, database, graphics, and curve
fitting), Netscape ${ }^{\circledR}$ (searching and downloading data and images), PowerPoint® (presentations), Illustrator® (figures and posters), and Photoshop® (image editing); and the following hardware: flatbed scanner, film scanner, film recorder, and standard computer hardware. (May not be taken for credit if MIS 101 taken for credit.)

ENV-1040 Introduction to Oceanography 3 credits Prerequisite: None.
Oceanography is a broad and multidisciplinary field in which many sciences are focused on the common goal of understanding how oceans work. This class is designed for the non-science major and will emphasize the role of basic scientific principles in the geological, biological, physical, and chemical processes that govern the oceanic realm and how those oceanic processes affect the terrestrial realm. In addition, the connection between various oceanic processes and their impact on human existence and development will be explored.

## ENV-1050 Introduction to Earth Science

Prerequisite: None.
4 credits (with lab)
An introduction to earth systems and processes. Emphasis is on understanding the reasons for distribution patterns of minerals, rocks and continents, as well as on a basic understanding of the principles of geology, geomorphology, meteorology and climatology. This course is suggested as a beginning course for students in the environmental sciences major.

## ENV-1110 Introduction to Environmental Problems

Prerequisite: None.
3 credits
A survey of the relationship between living things and the environment and the environmental issues that arise from their interaction, with particular emphasis on the impact of and on human beings. (Shared course in VSC)

## NV-2050 The Natural History of Vermont <br> 3 credits

 Prerequisite: None.The historical development of the geology, weather, wildlife, and vegetation of Vermont. Field work required. (Shared course in VSC)

$$
\begin{aligned}
& \text { ENV-2810/4810 Internship in } \quad 1-12 \text { credits } \\
& \text { Environmental Science }
\end{aligned}
$$

ENV-2910/4910 Independent Study in Environmental Science

1-12 credits

## ENV-3010 Land Use Planning

3 credits
Prerequisite: ENV-1110 and junior or senior standing.
This course covers the nature and characteristics of the land base and constraints on land use. It also looks at the institutional framework and techniques of land use control and planning. Topics such as the use of zoning, easements, variances, and subdivisions are discussed.

ENV-3020 Environmental Law
3 credits
Prerequisite: POS-1020 or 1010, ENV-1110. Juniors and seniors only. An examination of the legal profession's involvement in management
of natural resources. Students analyze major court decisions, federal and state statutes, federal rule-making procedures and administrative hearings.

## ENV-3030 Water Resources

3 credits
Prerequisite: ENV-1110, ENV-1050, and CHE-1020 or 1031. This course provides a comprehensive look at global and U.S. water resources by a detailed examination of the hydrologic cycle, precipitation distribution patterns, and water quantity and quality. Both surface and ground water sources are examined, as are various water uses and conflicts.

## ENV-3040 Energy and Mineral Resources 3 credits

 Prerequisite: ENV-1110, ENV-1050.This course considers the extent and geographical location of our mineral and energy resource base. It looks at the historical developments, changes through time, current usage, and environmental impacts of resources use. Geological constraints, transportation, pricing policies, shortages, governmental regulations, and pollution problems are some of the topics covered.

## ENV-3130 Environmental Geology

4 credits
Prerequisite: ENV-1050
Environmental geology focuses on the relationship between people and the physical environment. This course will expose students to hazardous earth processes such as floods, seismic activity, landslides, volcanic activity, and coastal threats. A limited understanding of soil formation, soil texture, porosity, and permeability is of utmost importance to environmental issues and will also be addressed in this course.

## ENV-3150 Toxic and Solid Waste Management 3 credits

 Prerequisite: ENV-1110, 1050, and CHE-1020 or 1031. An investigation of the problems associated with the handling and disposal of wastes, both ordinary solids and those that are hazardous and radioactive. The course looks at topics such as waste disposal methods currently utilized; the laws and regulations governing transport, storage, and disposal of toxic substances; how and where disposal can best be accomplished; the costs involved and who pays them; and how great a risk such materials pose to human health and the environment.
## ENV-3160 Coastal and Marine Resources 3 credits

Prerequisite: ENS-1110, ENV-1050.
This course examines the physical, chemical, biological, and geological processes of the world's oceans and how these processes interact to provide resources. Utilization of marine pollution, coastal and resources use of wetlands, and coastal development are discussed.

## ENV-3210 Current Topics in Environmental Science

 Prerequisite: None. 1 credit A number of current environmental topics will be explored in a seminar setting with a presentation by a speaker or panel followed by time for discussion. Presenters will be researchers or practitioners in environmental science. Students will keep a journal of all presentations. May be repeated for a maximum of three credits.ENV-3220 Environmental Interpretation
3 credits

Prerequisite: Competence in the natural sciences. Not open to first-year students.
An introduction to the principles and methods of environmental interpretation which considers effective communication in formal and informal settings. Topics include use of interpretive media, displays, descriptive information, conducted trips, and interpretive talks.

## ENV-3230 National Parks and Wilderness 3 credits Management

Prerequisite: ENV-1110. Not open to first-year students.
This study of national parks and wilderness area management covers the historical, functional, ecological, and evolutionary aspects of these areas. Special attention is directed to the significance of these areas in the modern world and the management options offering the best chances of meeting both the needs of users and protecting the resource.

ENV-3240 Fundamentals of Soil Science 4 credits Prerequisite: CHE-1020 or CHE-1031. Not open to first-year students. An introduction to the formative processes of soils, their organic and inorganic constituents, and physical properties. Topics include weathering processes and the role of climate and vegetation in development of soil types. Textural and structural analysis of soils, retention and movement of soil water, and soil management practices are also covered.

## ENV-3250 Meteorology/Climatology

Prerequisite: CHE-1020 or CHE-1031.
4 credits (with lab) This course provides a comprehensive look at the processes that interact together to form various types of weather and weather-related phenomena. The major processes that are explored include the composition of the atmosphere, atmospheric pressure and pressure gradients, atmospheric warming and cooling, atmospheric moisture and cloud formation, air movement, and frontal boundaries, along with a description of severe weather events such as hurricanes and tornadoes. This course also examines the link between weather and climate and how we can utilize past climate change along with current weather patterns to make predictions for future climate change.

## ENV-3310 Applications in GIS

4 credits
Prerequisite: Open to juniors and seniors only.
Geographic Information Systems (GIS) have been designed as electronic ways to store large volumes of data. In the environmental field, GIS systems have become a very important tool for storing environmental data, as a way to produce maps and encode valuable information and data about map features that can be readily accessed for environmental projects. This class is designed to give students in the environmental field and other science disciplines a working knowledge of how GIS systems are compiled and utilized.

## ENV-4010 Global Environmental Issues

3 credits Prerequisite: ENV-1110. Open to juniors and seniors only. This seminar focuses on international environmental issues such as destruction of the tropical rain forests; ozone depletion; international movement of endangered species, pelts, and live animals; the increas-
ing transport of inadequately tested pharmaceuticals and pesticides; and the export of toxic waste from industrial to less developed countries.

## ENV-4020 Remote Sensing <br> 4 credits (with lab)

Prerequisite: ENV-1050. Juniors and seniors only.
This course introduces the basic principles on which remote sensing is based. Aerial photographic interpretation and photogrammetry are studied as well as interpreted images from non-photographic sensors (such as satellite images). The two-hour lab is designed to provide a hands-on approach to such applications as air photo interpretation, land-use/land-cover mapping, geological and soil mapping, and geographic information systems (GIS).

## ENV-4710 Special Topics in Environmental Science 1-3 credits

ENV-4720 Senior Thesis
3 credits
Prerequisite: Senior Standing.
The Senior Thesis requires students to conduct an individual research project, write a thesis, conduct an oral presentation, and prepare a paper for publication. This capstone course allows the student to combine the skills and knowledge gleaned from previous courses with a self-designed research project that requires the student to ask a good question, develop appropriate techniques, and conduct appropriate research. The research topic is to be chosen by the student in consultation with a member of the faculty. A thesis outline must be submitted to the supervising faculty member (or members) prior to commencement of research. This type of practical, hands-on experience may be conducted at locations off campus, in conjunction with a work-study project, internships, or on campus research. The project must be completed within two semesters.

## ENV-4730 Senior Seminar

3 credits
Prerequisite: Senior standing.
Through this seminar, students have an opportunity to apply what they have learned by developing and completing a library or field research project under faculty guidance. The project culminates in an oral presentation and a final research paper or project report.

## FRENCH (FRE)

## FRE-1111/FRE-1111L French I

class 3 credits
Prerequisite: None. Corequisite: Coinciding lab.
(lab 1 credit)
This is the first course in a two-semester sequence. It is a comprehensive program appropriate for true beginners as well as those with one to two years of secondary French. Students develop listening, speaking, reading, and writing skills and are introduced to French and Francophone culture and civilization. This shared course may have different prerequisites at the other VSC colleges. (Shared course in VSC)

## FRE-1112/FRE-1112L French II

class 3 credits Prerequisite: FRE-1111. Corequisite: Coinciding lab. (lab 1 credit) The second semester of this introductory level course continues to build on basic skill with further development of cultural, aural, written, speaking, and reading skills. This shared course may have different
prerequisites at the other VSC colleges. (Shared course in VSC)

## FRE-2011/FRE-2011L French III <br> class 3 credits

Prerequisite: FRE-1112.
(lab 1 credit)
Corequisite: Coinciding lab or permission of instructor. This is the first semester of an intermediate program designed to review material obtained either after three or more years of secondary French or after introductory college level French. Further development of listening, speaking, writing, reading, and cultural skills, in a French and Francophone context. (Shared course in VSC)

FRE-2012/FRE-2012L French IV class 3 credits Prerequisite: FRE-2011.* Corequisite: Coinciding lab. (lab 1 credit) Continued study of French grammar, vocabulary, and syntax. Further development of oral proficiency. The course will include practice in directed composition and informal oral and written reports. This course may require work in a language laboratory in addition to regular class meetings. (Shared course in VSC)

## FRE-2910/4910 Independent Study in French

$1-12$ credits

## FRE-3010 Culture and Civilization through Correspondence and Conversation

This course is intended for students at the intermediate level. It is also intended for students wishing to get their minor in French. Based on the Cultura Project at MIT, this class pairs JSC students with Canadian students studying English at their Cegep in Terrebonne, Quebec. An email correspondence over the semester allows students to explore a wide range of topics such as food ways, family, current issues, holidays, heroes, and health care. JSC students write in English and Quebec students write in French. This native language use on questionnaires and in correspondence offers cultural nuances to be fully expressed. This cross-cultural approach offers learners a chance to observe, compare, and analyze similar materials from two target cultures. Within the classroom setting, students discuss their reactions and observations all in French, the target language. A home-stay immersion experience in Quebec may be included. May be repeated for credit.

## GEOLOGY (GEY)

## GEY-3110 Hydrogeology

4 credits (with lab)
Prerequisite: ENV-1050.
This is an applied hydrogeology course with lecture, laboratory, and field experience. Course material includes qualitative and quantitative treatment of the hydrologic cycle, ground water flow, well hydraulics, water quality, and water resource issues. (Shared course in VSC)

GEY-3120 Field Geology 4 credits (with lab) Prerequisite: ENV-1050.
This course introduces the student to the ways in which sedimentology, stratigraphy, and structural geology are applied to situations regarding the interpretation of ancient environments and orogenic belts. Knowledge gleaned from this work is applicable to mining, civil engineering and groundwater pollution.

## HISTORY (HIS)

NOTE: Upper-level (3000-4000) courses in History are offered on a rotating basis, generally every other year.

## HIS-1111 World History I 3 credits

Prerequisite: None.
An introduction to the world's major civilizations: Ancient Mediterranean (Egypt, Mesopotamia, Palestine, Greece, Rome); European; South Asian (India, Pakistan, and Bangladesh), East Asian (China, Korea, and Japan), African; Islamic and Mesoamerican from their origins to the time of the global expansion of European civilization. (Shared course in VSC)

## HIS-1112 World History II

3 credits
Prerequisite: None.
The continuing development of the world's major civilizations: European/American; South Asian (India, Pakistan, and Bangladesh); East Asian (China, Korea, and Japan); African; and Islamic from the time of European global expansion to the present, with particular attention given to the problems and challenges of globalization. (Shared course in VSC)

## HIS-1211 American History I

3 credits
Prerequisite: None.
A survey of the major events in American history from pre-colonial days to the time of the Civil War and Reconstruction. Students will examine forces behind these events, and their social, cultural, economic, and political implications for the American people and the new nation. (Shared course in VSC)

## HIS-1212 American History II

3 credits
Prerequisite: None.
Survey of the major events in American history from Reconstruction to the present, with an emphasis on understanding the social, cultural, economic, and political factors in the emergence of the United States as a dominant world power. (Shared course in VSC)

HIS-2140 The Civil War 3 credits
(Available through EDP)
Prerequisite: None.
This course explores the causes and effects of the Civil War, focusing on issues important both then and now, such as states' rights, the treatment of blacks and minorities, a political Supreme Court, and reactions to the war. (Shared course in VSC)

## HIS-2210 Women in U.S. History

3 credits
Prerequisite: None. Recommended: HIS-1211, 1212.
An examination of the changing role and important contributions of women in American history. Well-known figures, such as Abigail Adams, Elizabeth Cady Stanton, and Jane Adams, are treated, as well as those less prominent. (Spring semesters, even years) (Shared course in VSC)

## HIS-2410 Latin American History and Culture 3 credits

 Prerequisite: None.This is a course about modern Latin America's history. Students study in great detail the history of three to four countries on that continent from
the Depression onward. (Spring semesters, even years)
HIS-2440 African Civilization
3 credits
Prerequisite: None.
An interdisciplinary assessment of African culture, historical achievement and contemporary prospects, this course begins with a study of the centuries of autonomous development prior to European domination. The course offers abundant opportunity for individual student initiative in African politics, economics, art, music, and philosophy. (Spring semesters, even years)

HIS-2810/4810 Internship in History $\quad 1-12$ credits (Shared course in VSC)

## HIS-2910/4910 Independent Study in History

$1-12$ credits

## HIS-3020 Greek and Roman History

3 credits
Prerequisite: None. Recommended: HIS-1111, ENG-2171.
A study of the political, social, economic, and cultural achievements of Greek and Roman civilizations. Topics include the emergence of the Greek city-state, Athens in the 5th century, the Hellenistic world, Republican Rome, and the rise and fall of the Roman Empire.

## HIS-3040 Ancient Civilizations of the New World

Prerequisite: None.
3 credits
This interdisciplinary course traces the indigenous development of civilization in the Americas from the time of the first settlers over 10,000 years ago, through the development of agriculture and towns, to the advanced civilizations that were destroyed by European colonialism in the sixteenth century. Although we will focus on the civilizations of Mexico and Central America, the high cultures of South America and southern North America will be investigated as well.

## HIS-3050 Community in America <br> 3 credits

(Available through EDP)
Prerequisite: None
This course is designed to help non-traditional students, understand the historical and personal dimensions of the questions posed by Bellah and others: how ought we to live, how do we think about how we live, who are we as Americans, and what is our culture? It further explores the inter-relationships between individuals and institutions, with special emphasis on the concept of civic virtue.

HIS-3060 Church and State in America
3 credits
(Available through EDP)
Prerequisite: None. Recommended: HIS-1211, 1212.
This course will examine the dynamic interactions of religion and public policy in American history that have shaped the shifting boundaries of our freedom of religion and our freedom from religion.

HIS-3080 Colonial America: History and Life
3 credits Prerequisite: None.
This course provides an examination of major aspects of colonial life and the important political and economic events of the period from the early 17 th century through 1789. Attention is paid to the establishment
of colonies, lifestyles in various parts of the colonies, the American Revolution and efforts to form a new government after the Revolution, and elements of colonial history and life which form part of our heritage. (Fall semesters, odd years)

## HIS-3141/3142 History of the United States in the

 Twentieth Century I, II 3 credits each Prerequisite: None. Recommended: HIS-1212. This examination of American response to the problems of the 20th century pays particular attention to the Progressive Movement, the 1920s, the New Deal, Harry S. Truman and the Cold War, and the Kennedy-Johnson era. First semester: 1898-1945; second semester: 1945-present.
## HIS-3160 Vermont's Coastal Regions

3 credits
(Available through EDP)
Prerequisite: None.
This course explores, compares, and contrasts the social, political, and cultural dimensions of the history of Vermont's major watershed areas. Special emphasis is placed upon the cultural concepts of "Greater Vermont" and the Western and Eastern Unions of the late 1700s. (This course will be taught using Vermont Interactive TV. The course originates from the VIT site in Colchester.)

## HIS-3165 Vermont History

3 credits
Prerequisite: None.
This course examines the Vermont political tradition and explores why Vermonters, such as Senator George Aiken, have had such influence at the state and national level. (Shared course in VSC)

## HIS-3225 Latin America: Mexico to Chile; History, Politics, Cultures <br> 3 credits Prerequisite: Junior Standing

Before the Europeans and through the Spaniards, the British/French, the Soviets and the USA, the turmoil and the angst of a continent as it lurched from communism, to socialism, to exploitative and merciless capitalism; from Liberation Catholic Theology to the arrival of Protestantism; from the domination of ethnic Europeans to the domination of Indians; from a western-oriented world view to developing one of their own; from cash crops to cocaine; from political dictatorships to drug cartels; and so on.

## HIS-3250 Europe in the Middle Ages

3 credits
Prerequisite: HIS-1111.
A study of the political, social, economic, and cultural development of Europe from the fall of the Roman Empire to the Age of Humanism. Emphasis is on the growth of institutions and social change.

## HIS-3270 Renaissance and Reformation 3 credits

Prerequisite: HIS-1111 or HIS-1112.
This course examines Europe from the fifteenth century to the Peace of Westphalia, including the intellectual and cultural movements, the development of the national states, exploration and colonization, and the Protestant and Catholic Reformation. (Fall semesters, odd years)

HIS-3312 Europe in the Twentieth Century 3 credits Prerequisite: HIS-1112. Recommended: HUM-2040 or one upper-level European History course.

This course covers the development of Europe since 1914, stressing the two world wars in their international context and the phenomena of communism and fascism.

HIS-3350 Struggle for Democracy
3 credits
(Available through EDP)
Prerequisite: None.
Democracy traces its roots to ancient Athens, but rarely appeared in subsequent centuries. This course will examine the development of democratic theory and practice through a close examination of the pertinent writings of both its proponents and critics including: Plato, Aristotle, Montesquieu, Machiavelli, Locke, Rousseau, Mill, Tocqueville, Marx, Madison, and others.

HIS-3351 English History to 1714
3 credits
Prerequisite: HIS-1111 and 1112 or permission of instructor. Recommended: ENG-2282.
A survey of the political, social, economic, and cultural development of England, Scotland, Wales, and Ireland from the earliest times to 1714. Emphasis is on the origins and growth of democratic attitudes and institutions. (Fall semesters, odd years)

## HIS-3352 English History Since 1714

3 credits
Prerequisite: HIS-1111, 1112 or permission of instructor. Recommended: ENG-2282.
A survey of the political, social, economic, and cultural development of Great Britain since 1714. Emphasis is on the origins and growth of democratic attitudes and institutions and the rise and fall of the British Empire. (Spring semesters, even years)

## HIS-3370 Nationalism and Rebellion in Irish History (Available through EDP)

Prerequisite: None.
The study explores events and topics in Irish history from 1600 to present, including an examination of resistance to English rule, republicanism and reaction, emancipation and repeal, famine and mass emigration, the development of Irish nationalism and national identity, literary renaissance, separation and civil war, and the northern crisis.

## HIS-3420 French Revolution

3 credits
Prerequisite: None.
An examination of the French Revolution of 1789, the modern democratic revolution that profoundly changed not only French society but also transformed Europe and gave birth to modern nationalism and continuing movements for social-political reform and revolution. (Fall semesters, odd years) (Shared course in VSC)

## HIS-3430 History of the Soviet Union

3 credits
Prerequisite: None.
The Revolution of 1917 and the emergence of the Communist state are stressed with emphasis on the internal problems and conflicts and the development of the Soviet Union as a world power. Students research individual topics and gain an understanding of the conflicts that dominate the contemporary political scene.

## HIS-3450 Women in European History 3 credits

Prerequisite: None. Recommended: HIS-1111 and 1112.
A study of the changing role of women in European history is offered from the end of antiquity to the 20th century. Topics include women in public and private life, the economic and legal position of women, and the changing role of women in society.

## HIS-3510 Chinese History and Culture

3 credits
Prerequisite: None.
An introductory survey of Chinese history and culture from early China to today. Topics will include arts and religion, the dynastic system and empire, major movements for reform and revolution, and China's international interests. (Shared course in VSC)

## HIS-3520 Japanese History and Culture <br> 3 credits

Prerequisite: None.
An introductory survey of Japanese history and culture from ancient times to today, including the formation and growth of the Japanese state, arts and religion, the influence of Chinese culture and Western pressure, and Japan's international interests. (Shared course in VSC)

HIS-4010 History of the Middle East 3 credits Prerequisite: None. This course sweeps through the Middle East from the ancient times to the present.

HIS-4730 Seminar in Historical Communication 3 credits Prerequisite: Senior standing or permission of the instructor. Students will read, write on, and discuss major works in the general field of history. In addition, students are expected to participate actively in class discussions and to focus on how and why things happened, not merely on what and when.

HIS-4740 Seminar in Historical Investigation 3 credits Prerequisite: Senior standing or permission of the instructor. This course is designed primarily for history majors and serves as the culmination to an undergraduate history program. Students will work intensively on a project of their own choosing, mastering the essential steps in historical research and writing. A final paper, representing a substantial piece of research, will then be submitted to the student's peers and to the faculty members of the department. A formal presentation is also required.

## HOSPITALITY AND TOURISM MANAGEMENT (HTM)

HTM-1010 Survey of Hospitality and Tourism 3 credits Prerequisite: None.
This course develops and explores the structure and components of the tourism and hospitality industry. This section will focus primarily on the lodging and foodservice segments of the industry. Industry leaders will join the class for discussion throughout the semester. Students will be expected to explore, in detail, a major lodging or foodservice company. Students will also be assigned an industry mentor whom they will meet with every week during the semester. (Fall semester)

HTM-2010 Ecotourism
3 credits
Prerequisite: None.
This course is designed to inspire students from many different disciplines to explore issues of sustainability through low-impact tourism businesses. In this course students will explore the exploding field of ecotourism. Students will learn about the major issues facing tourism professionals, governments, and local communities in creating sustainable ecotourism opportunities. Ecotourism geography, the design of ecolodges, educational programming, and native cultures are woven into the fabric of this course. (Fall semester)

## HTM-2020 Introductory Internship in HTM 1-4 credits

 Prerequisites: HTM-1010.This internship is designed to introduce the student to an entry-level position in the tourism and hospitality industry. Students are required to work a minimum of 150 hours per credit hour over a minimum of 10 weeks at an approved internship site. Students are also required to complete a set of educational requirements in order to successfully complete the internship.

## HTM-2910/4910 Independent Study in Hospitality and Tourism Management 1-12 credits

## HTM-3010 Food and Beverage Management <br> 3 credits Prerequisites: HTM-2020 or permission of the instructor

This course introduces the student to all areas of kitchen management. Students will learn menu development and planning; proper ordering, receiving, and inventory practices; food production management techniques; and how to integrate technology using restaurant management and menu development software. Students will develop and supervise a variety of food service events during the course of the semester. (Fall semester)

## HTM-3040 Cost Control

3 credits
Prerequisite: HTM-2020 or permission of instructor.
This course introduces the student to the important subject of internal control. Two-thirds of a foodservice organization's revenues are consume by food, beverage, and labor costs. Students will explore techniques to identify, monitor, and adjust these major cost areas.

## HTM-3050 Supervision and Training <br> 3 credits

Prerequisite: HTM -2020 or permission of instructor.
This course will explore, in detail, a variety of skill areas required of food and beverage managers today. First, we will explore service management. This section is designed to introduce you to the styles of service, organizing the dining room to accept guests, and managing the dining experience. You will also have a chance to study food-service design. We will explore the issues of concept development, kitchen design, and space allocation. Student teams will develop a restaurant concept and design during the course of the semester.

## HTM-3110 Lodging and Resort Operations <br> 3 credits

 Prerequisites: HTM-2020 or permission of the instructor.This course introduces the student to the operation and management of a wide variety of lodging and resort facilities. The student will explore, in detail, front desk operations, housekeeping, and reservations, as well
as other lodging property departments.

## HTM-3130 Hospitality and Tourism Law and Ethics Prerequisite: Senior standing. 3 credits

The objective of this course is to familiarize the student with the general law and legal precedents and cases pertaining to the tourism and hospitality industry. The student will be exposed to contract law, discrimination, negligence, employment law, food and liquor liability, licensing and regulations, and travel law. Ethics in the tourism and hospitality industry is integrated throughout the semester. Students will analyze a variety of cases during the semester. (Spring semester)

## HTM-3140 Hospitality Technology

3 credits
Prerequisites: HTM-2020 or permission of the instructor This course introduces the student to the hardware and software technology present in lodging operations today. Students will explore integrative Property Management Systems and yield management systems. Students will also develop, design, and build a hospitality-related web site during the semester.

## HTM-3150 Event Management

3 credits
Prerequisite: HTM-1010; BUS-2230
This course focuses on travel and tourism in Vermont. The course begins with an exploration of the history of travel and tourism in Vermont beginning in the 1800 s. From this foundation the student learns about the infrastructure of the industry as it exists today. We explore the intricate relationship between state government and local government and non-governmental agencies and associations. This course gives the student the opportunity to learn through hands-on research and direct interaction with industry professionals. The student is also expected to volunteer in a local or state tourism business for at least 50 hours during the semester. (Fall semester)

> HTM-3210 International Travel and Tourism 3 credits Prerequisite: HTM-2010, HTM-3150 This course takes students on a journey through time and space, exploring the past, the present, and the future of international travel and tourism. Students will be exposed to this international industry through a variety of learning activities, including the planning, preparation, and serving of an authentic international meal; case studies; working with an organization focused on international travelers; and conducting research on an emerging trend in international travel and tourism. (Spring semester)

## HTM-3220 Hospitality and Tourism <br> Marketing Seminar

3 credits

Prerequisites: HTM-2020; BUS-2230
This course is designed to provide the student with the basic knowledge and practical experience necessary to develop strategic marketing plans for the hospitality industry. Significant in-class discussion, case study analysis, and outside-of-class group work are utilized. (Spring semester.)

## HTM-3230 Facility Planning and Design 3 credits

Prerequisites: HTM-2020 or permission of the instructor.
This course introduces the student to the basic design principles used to develop lodging and resort properties. Student teams will plan and design a lodging facility for presentation to industry executives.

## HTM-3240 Greening the Business Environment

 (Available through EDP)3 credits Prerequisites: Junior Standing
This course is designed to increase student awareness of the impact of business processes on the natural environment. Through research, guest presentations, and field experiences, students will develop a greater understanding for the complex and fragile web of life and how business operations influence all natural ecosystems. (Spring semester)

## HTM-3710 Special Topics in Hospitality $1-3$ credits and Tourism

Prerequisites: Permission of the instructor
Current issues and advanced subjects in hospitality and tourism management are explored to complement the regular HTM curriculum.

## HTM-3810 Resort Management <br> 3 credits <br> Prerequisite: Permission of the instructor

This course offers a hands-on study of those elements that a resort must have in order to compete for market share in a global economy. Topics covered include: infrastructure, super structure, destination development, destination marketing, market segmentation, and environmental impact. The student will travel to and learn about several resort facilities during the course of the semester.

HTM-3820 Intermediate Internship in HTM 1-4 credits Prerequisite: Successful completion of HTM 2020 or permission of the internship coordinator.
This internship is designed to enhance and expand on the experience achieved in the introductory internship. Students are required to work a minimum of 150 hours per credit hour over a minimum of 10 weeks at an approved internship site. Students are also required to complete a set of educational requirements in order to successfully complete the internship.

## HTM-3910 Leadership and Quality

3 credits
Prerequisite: HTM-2020; BUS-2410
This course is designed to explore advanced issues in human resource management. The focus of the course will be on leadership, diversity, total quality management, and other contemporary human resource issues facing hospitality and tourism managers today. The course is designed to reflect an executive management seminar. Knowledge of the material and discussion participation are vital to achieving the course objectives. (Fall semester)

## HTM-4720 Hospitality and Tourism Senior Seminar

## Prerequisites: Senior status.

3 credits
This senior seminar is the capstone of the HTM program. This course focuses on two major topics: striving to achieve service excellence and developing a career portfolio. The student will research and present for class discussion information on a variety of topics: customer satisfaction, service guarantees, employee empowerment and employee reward systems, employment testing, and creating customer loyalty. Students will also develop their own career portfolio for presentation at the end of the semester. (Fall semester)

HTM-4820 Supervisory Internship in HTM 1-6 credits Prerequisites: Successful completion of HTM-3820 or permission of internship coordinator.
This internship is designed to expose the student to hands-on, supervisory work experience in a tourism or hospitality organization. Students are required to work a minimum of 150 hours per credit hour over a minimum of 12 weeks at an approved internship site. Students are also required to complete a set of educational requirements in order to successfully complete the internship.

## HUMANITIES (HUM)

HUM-1020 Cultivating the Cross-cultural Mind: Hearing, Understanding, and Engaging Other Voices 3 credits Prerequisite: Open only to first-year students only. This freshman seminar course is an invitation to take a journey. It is a growth challenge course, an invitation to develop a cross-culturebound identity. First, we will explore the notion of culture and ourselves as cultural beings - our own voices, perceptions, attitudes, values, beliefs, and needs. After this self-exploration, we will sympathetically cross into other cultures, new terrains which must be entered on their own terms. Here, we will come to identify, understand, and appreciate certain features of other voices so that we may, as individuals, build our own bridges of understanding and uncover paths that connect us.

HUM-2810/4810 Internship in Humanities $1-12$ credits
HUM-2910/4910 Independent Study in Humanities
1-12 credits

## HUM-3010 Myth and the Modern Age

3 credits
(Available through EDP)
Prerequisite: None
Myths have appeared in every society since the appearance of the human race on Earth. This course will examine recurrent mythological themes and their significance not only to their own time and place, but also to ours. Central to this study will be the role of the hero in various cultures. In the work of Joseph Campbell, one of the greatest scholars of comparative mythology, we will search for the "point of wisdom beyond the conflicts of illusion and truth..."

## HUM-3030 The Mythic Journey

3 credits
(Available through EDP)
Prerequisite: None.
Human beings are rooted in stories and myths. To tell a story is to be grounded in the present while remembering the past and peering into the future. The course will enable each student to find meaning about the human experience as depicted in myths and about one's own life experiences as a mythic journey. This course can be used to fulfill the UPR requirement.

HUM-3040 Genesis
3 credits
(Available through EDP)
Prerequisite: None.
This course focuses on The Book of Genesis and explores its contemporary relevance. Themes of creation, temptation, violence and murder,
punishment and righteousness, the perceived mission of select groups, family, truth and deceit, religious struggle, and the displacement of people will be considered.

## HUM-3045 The Bible: History, Literature, Spirituality

## Prerequisite: None.

3 credits
The course is a group inquiry into the meanings and historical/cultural contexts of several books of the Old and New Testaments. Genesis, Exodus, Psalms, Job, The Gospel of Mark, and The Gospel of Matthew will be particularly emphasized. Texts which have been considered sacred carry a special charge. You should be prepared to be open to learning, discussing, and arguing with classmates, as well as with the teacher. You will be asked to examine the gist and implications of concepts such as monotheism, the Chosen People, righteousness and its rewards, the Messiah, the Kingdom of God, forgiveness, the Day of Judgment, and, through discussion and a variety of mostly short writing assignments, to close the gap between what you read and yourself.

## HUM-3110 Native American History and Culture

Prerequisite: None.
3 credits
This course focuses upon the Native American experience in North America, using three distinct perspectives: historical ethnography, with its interdisciplinary emphasis on post-contact native culture; Native American literature, emphasizing oral and written traditions as well as myth and legends; and political science, which focuses on the sometimes troubled continent. Selected aspects of material culture, art history, and other disciplines will also be incorporated.

## HUM-3115 Native American Worldview and Spirituality Prerequisite: None. 3 credits

This disciplinary integration course will examine the world view of North America's aboriginal peoples from the disciplinary perspectives of comparative theology, anthropology, literature, and material culture (museum) studies. The geographic area covered in the course includes the Subarctic to the Southwest. The Euroamerican stereotype of Native American worldview as circles and seat-lodges denies the wonderful diversity and depth of First Nations philosophy. To see how spirit is woven through every aspect of First Nations material and political life, students will examine stories, decorative arts, and ethnohistory. We will also critically examine the component disciplines from a First Nations perspective, including the contentious issues of reburial and repatriation of sacred goods, Europamerican copyrighting of First Nations text, and New Age threats to First Nations spiritual sovereignty.

## HUM-3120 The Abenaki and Their Neighbors 3 credits

Prerequisite: None.
This course will focus upon the Abenaki experience in Northeastern North America, using three distinct Euro-American perspectives: historical ethnography, with its interdisciplinary emphasis on Abenaki culture; Abenaki literature/myth, emphasizing oral and written traditions as well as myth and legends; and political science, which focuses on the sometimes troubled relations between the Abenaki Peoples and EuroAmerican inhabitants of our continent.

HUM-3125 Religions of the World
3 credits
Prerequisite: None.
This course offers a comprehensive study that will include introductions and analyses from numerous fields of knowledge. The three western religions of Judaism, Christianity, and Islam, plus animism and polytheism in Asia, Africa, Latin America and the Pacific Islands, will be covered in the first half of the semester. The other great eastern religions of the Hindus and Buddhists, the great philosophy of the Confucianists, plus the relatively small religions of the Shintos, Taoists, Jainists, Sikhs, etc., will be covered in the second half of the semester. The geography, economics, and politics of the regions, as they relate to each religion, will be covered. Particular attention will be paid to the inequities and the discontent across the centuries and under various dynasties.

## HUM-3150 People and Cultures of the Middle East and North Africa 3 credits <br> Prerequisite: None.

This course encompasses the religions, history, and politics of these two regions, as well as general aspects of their cultures. We shall begin by studying the various histories of the Israelis, Arabs, Turks, and Iranians. Then we will study the religions of Judaism, Eastern Christianity, and Islam, and various aspects of their cultures, such as food and holidays. Briefly we shall study the political aspects of the Arab-Israeli dilemma, as well as socialism and capitalism in the Middle East and North Africa.

## HUM-3160 African Culture

3 credits
Prerequisite: None.
This course focuses on Africa's culture, history, economics, geography, politics, and religion, as well as the way the continent is interfacing with the modern world. The course will begin with a survey of Africa's history and then progress to discussion of other aspects of Africa.

## HUM-3170 Popular Culture in America 3 credits Prerequisite: None.

A consideration of the forms and functions of American popular fiction as reflectors and determinants of popular culture. Westerns, detective thrillers and sentimental romances are examined.

## HUM-3310 Cultures Through Cuisine <br> 3 credits

Prerequisite: None.
Brillat-Savarin, the famous 19th-century French writer and epicurean, said that if you told him what a man ate, he could tell you who he was. While perhaps less true today than when he spoke almost two centuries ago, the culinary habits of people still tell us a lot about who they are, where they come from, and what they believe. In this course, we study the distinctive foodways of three societies while examining as well some of the globalizing forces which influence how everyone everywhere (especially in the United States) eats (or doesn't eat) in the modern world.

## INTERDISCIPLINARY (INT)

## INT-2910/4910 Independent Study in INT

INT-3010 Natural Landscapes and Literature 3 credits
Prerequisite: Upper-division status, and completion of parts I and II of the General Education Core Curriculum (GECC).
An interdisciplinary focus on nature preserves, national parks, and wilderness areas and on ways that people's conceptions of these natural environments have changed over time. Students will examine how writers, environmentalist, and naturalists describe these "ideal landscapes"; how they define their relationships to the land; and what they say people can do, as individuals and as members of groups, to protect the integrity of the natural environment and guarantee our access to it now and in the future.

## INT-3130 Compassion and You: An Introduction to

 Mahayana Buddhism 3 credits Prerequisite: None.Over centuries, since the inception of Buddhism, many different schools of Buddhism have developed. This course examines Mahayana Buddhism and its presentation of Buddhist philosophy and psychology. Unlike other spiritual traditions, Buddhism is a synthesis of philosophy, psychology, and spirituality. Close examination of two of the greatest Buddhist literary works will be the focal point during this course to help lay the foundation for a clear understanding of Mahayana Buddhist thought. Students will explore Buddhist art, music, philosophy, and meditation to enhance a full understanding of Buddhist practice and theory.

## INT-3150 Gödel, Escher, Bach: An Eternal Golden Braid 3 credits

 Prerequisite: Junior or Senior standing or completion of GECC math. An examination of the beautiful underlying relationships between logic, art, and music, along with other treasures of western thought and culture. Students will read major portions of Douglas Hofstadter's book of the same name. (Fall semesters, even years)
## INT-3210 The Holocaust: An Interdisciplinary Approach Prerequisite: None. 3 credits

 This upper-level course uses analytical frameworks drawn from history, political science, literary criticism, psychology, sociology, philosophy, and religious studies to explore the dimensions of the Holocaust (19331945) and to assess its lasting impact.
## INT-4710 Special Topics in INT

3 credits
INT-4730 Topical Seminar: Peace and War 3 credits Prerequisite: Upper-division status, and completion of parts I and II of the General Education Core Curriculum (GECC).
An interdisciplinary inquiry into the roots of violence and nonviolence, this course will make use of historical, psychological, biological, and spiritual perspectives. Many of the questions we will address will have individual as well as societal and cultural resonance. Among them are: Why have wars been so prevalent and powerfully appealing in human history? Is peace just the absence of war or is it something more? What are the cognitive and emotional foundations for the expression of peace and harmony as compared with conflict? Specific areas of focus will include World War I, Gandhi in South Africa and India, and World War II.

## MATHEMATICS (MAT)

MAT-0410 Fundamentals of Algebra 3 credits
Prerequisite: Two years of high school mathematics or PLM-0001. This course provides basic mathematical literacy and competence in solving problems involving operations with the real numbers and elementary algebra. The instruction includes such topics as basic operations, algebraic expressions, equations, inequalities, problem solving, percentages, graphing, polynomials, and factoring. The course provides three credits on the transcript, but these may not be counted toward the 120 credits required for graduation.

## MAT-1020 Intermediate Algebra

3 credits
Prerequisite: At least two years of college-preparatory mathematics (preferably three) or PLM-0003.
This course offers a review of the fundamental concepts of algebra and an introduction to functions. The instruction includes such topics as exponents, radicals, inequalities, absolute value, scientific notation, variation, factoring, linear and quadratic equations, systems of equations, functions, and graphs. This course prepares students for the study of pre-calculus.

## MAT-1070 Mathematics in our Culture 3 credits

Prerequisite: Two years of high school mathematics or PLM-0001. In this course students do extensive problem-solving in groups, studying problems from a variety of areas, develop their skills at writing about mathematical ideas and problems and concepts, and research the lives and contributions of famous mathematicians. This is all done in a "user-friendly" environment which emphasizes the development of individual strengths and skills and reduces math anxiety. Topics include: the uses and limitations of inductive and deductive reasoning; different types of number sequences and their uses; the basic concepts of functions and graphing and the use of the TI-83 graphing calculator; and types of symmetry, culminating in a study of mathematical mosaics and regular and semi-regular polyhedra. For students with a documented learning disability in mathematics, MAT-1070 may count as one of the two courses in mathematics required under the Fundamental Skills component of the General Education Core Curriculum.

## MAT-1221 Finite Mathematics

3 credits
Prerequisite: Two years of college preparatory mathematics or PLM0003. Recommended: MAT-1020 or MAT-2030.

This problem solving course will focus on applications in business, finance, the social sciences, and human services. Topics may include set theory and symbolic logic, linear systems and programming, coordinate systems and graphic techniques, elementary matrix operations, probability, and math of finance. (Shared course in VSC)

## MAT-1320 Pre-Calculus

3 credits
Prerequisite:Three years of college preparatory mathematics or MAT-1020 or PLM-0003.
A study of the functions used in calculus, including the exponential, logarithmic, and trigonometric functions. (Shared course in VSC)

MAT-1531 Calculus I
4 credits
Prerequisite: Four years of college preparatory mathematics or MAT-1320, PLM-0004, or MAT-1410.

A review of analytical geometry and introduction to the calculus of one variable. Topics include limits, derivatives of algebraic and transcendental functions, rates of change, optimization, curve sketching, elements of integration of algebraic and transcendental functions, area, volume, and practical applications in many fields. (Shared course in VSC)

## MAT-2030 Probability and Statistics

3 credits
Prerequisite: Two years of college preparatory mathematics.
This course, an introduction to the basic ideas and techniques of probability and statistics, is designed to prepare students to interpret quantitative information. Topics to be covered include descriptive statistics, probability, probability distributions and the normal distribution, and an introduction to inferential statistics, including estimation and hypothesis testing.

## MAT-2140 Modeling the Environment

3 credits
Prerequisite: MAT-1320.
A first course in mathematical modeling, this course enables students to become proficient at applying some of the simpler mathematical models to practical situations. This course focuses on modeling interesting and important environmental problems, and includes models for business and finance and other areas. Students will acquire a working knowledge of the STELLA simulation programs. (Spring semesters only)

## MAT-2532 Calculus II

4 credits
Prerequisite: MAT-1514, MAT-1520, or MAT-1531.
A continuation of MAT-1531. Includes techniques and applications of integration, indeterminate forms and improper integrals, sequences and series. (Fall semesters only) (Counted as upper level in the major) (Shared course in VSC)

## MAT-2533 Calculus III

4 credits
Prerequisite: MAT-2532.
A continuation of MAT-2532. Topics include the calculus of vectorvalued functions, tangent vectors, velocity and applications, functions of several variables, partial derivatives, directional derivatives and gradients, extreme values and applications, and multiple integration. Additional topics may include line and surface integrals, parametric surfaces, and the theorems of Gauss, Green, and Stokes. (Spring semesters only). (Counted as upper level in the major) (Shared course in VSC)

## MAT-2810/4810 Internship in Mathematics $1-12$ credits

 (Shared course in VSC)
## MAT-2910/4910 Independent Study in Mathematics

 1-12 credits
## MAT-3030 Mathematics Methods for Secondary School Teachers <br> 4 credits

Prerequisite: MAT-2532 and MAT- 3210.
Contemporary secondary school mathematics curricula, their content and pedagogy. Students are expected to engage in individual/group tutoring outside of regular class meeting times for this course, as
determined by the instructor. Required before EDU-4850 Secondary Practicum. (Offered upon request, as independent study)

## MAT-3210 Linear Algebra

3 credits
Prerequisite: MAT-1531 or MAT-2120.
An introduction to linear algebra. Topics include: matrices, determinants, systems of linear equations, vector spaces, linear transformations, applications of linear algebra, eigenvalues, and eigenvectors. (Fall semesters only) (Shared course in VSC)

## MAT-3240 Probability Theory with Statistics 3 credits

 Prerequisite: MAT-2030 and MAT-2532.An introduction to probability theory for students with a background in calculus. Topics to be covered will include sample spaces, permutations and combinations, discrete and continuous random variables, probability density functions, the binomial distribution, the normal distribution and its use in approximating the binomial, curve fitting by least squares, and with numerous applications. (Fall semester, even years)

## MAT-3310 Differential Equations

3 credits
Prerequisite: MAT-2532 or permission of the instructor.
A study of first- and second-order ordinary differential equations, many of their applications, and related topics. (Fall semesters, odd years) (Shared course in VSC)

## MAT-4130 Abstract Algebra

3 credits
Prerequisite: MAT-2532 and MAT-3210, or permission of the instructor.
This course introduces the fundamental concepts of groups, rings, and fields. (Spring semesters, odd years) (Shared course in VSC)

MAT-4140 Geometry 3 credits
Prerequisite: MAT-2532 and MAT-3210, or permission of the instructor. The foundations of Euclidean geometry and an introduction to hyperbolic and Riemannian geometry. The historical and philosophical implications of the discovery of non-Euclidean geometry are examined. Topics may include the contributions of Gauss, Hilbert, Saccheri, Bolyai, Lobachevsky, and others. (Spring semesters, even years) (Shared course in VSC)

## MAT-4710 Special Topics in Mathematics 3 credits

 Prerequisite: MAT-2532 and MAT-3210, or permission of the instructor. This course is offered to advanced students as circumstances warrant. Topics are identified based on student and faculty interests. (Shared course in VSC)
## MAT-4930 Senior Project in Mathematics 3 credits

Prerequisite: Senior standing, prior completion of the core assessment examination, and at least nine credits of approved electives for the mathematics degree.
This course is intended to give students the opportunity to engage in a significant capstone project in mathematics, allowing them to demonstrate the mathematical maturity they have attained from their work in the field. Each student's project proposal will require advance approval by the Mathematics Department and will culminate in a presentation to members of the mathematics faculty and other interested parties.

All degree candidates in mathematics will be required to complete this experience satisfactorily.

## MUSIC (MUS)

## MUS-1015 Meet the Masters <br> 3 credits

Prerequisite: None.
The goal of this course is to demystify and make accessible the world of classical music. We will develop some basic ideas and terminology with which we can discuss and share ideas about music. We will listen to the music in the context of the lives of the various composers and will use the above ideas and terminology to develop listening skills that will enable us to understand and, consequently, to appreciate and enjoy what we are hearing.

## MUS-1030 Music Fundamentals <br> 3 credits

 Prerequisite: None.This is a course for beginning students interested in learning how to read and write music. Includes basic writing skills such as staff notation (pitch, rhythm, dynamic markings), and basic reading, ear training, and listening skills. (Shared course in VSC)

## MUS-1XXX Music Fundamentals II

3 credits
Prerequisite: MUS-1030
This course is offered as a continuation of Music Fundamentals, completing the cycle of music-reading and basic musical skills needed for entering Music Theory I. While Music Fundamentals covers basic note values, rhythms, time signature, key signatures, scales, and chords, Music Fundamentals II is an in-depth practicum for developing ear training and sight-reading skills associated with the fundamentals of music training. The course will provide added detail to score-reading, chord-use, and composition as well. As an added skill, students will learn to enter musical compositions and homework on the computer music-writing program, called Sibelius. There will be a listening component to this course, including simple classical and folk music, learning to listen for the basic elements of music, including melody, harmony, and rhythm. Students will be asked to identify each of those elements. Basic keyboard skills will also be introduced in this class.

## MUS-1050 Elementary Piano Class 2 credits Prerequisite: None. <br> Students in this class learn basic keyboard techniques through group instruction. The fundamentals of musical theory and structure and fundamental keyboard harmony are also stressed. No prior instruction required. May be repeated for credit.

MUS-1051/1052 Keyboard Harmony I, II 1 credit Prerequisite: None. Must be taken concurrently with corresponding theory and ear training courses. Prerequisite for MUS-1052: MUS-1051. This four-semester sequence reinforces the student's understanding of theoretical concepts by requiring that they be applied to the keyboard.

1 credit Prerequisite: None.
Prerequisite for MUS-1062: MUS-1061. Must be taken concurrently with corresponding theory and keyboard harmony sections.
A four-semester sequence aimed at developing and establishing skills
in interval recognition, sight singing, solfege, and rhythmic, melodic and harmonic dictation.

## MUS-1120 Applied Music Lessons

1 credit
Prerequisite: Prior experience and ability to read music.
Intensive private study in music through the performance of advanced concert repertoire. (Shared course in VSC)

MUS-1231/1232 Music Theory I, II 3 credits each Prerequisite: MUS-1030. Prerequisite for MUS 1232 is MUS-1231. Music Theory I is an intermediate theory course designed for music majors who already have a grasp of music fundamentals. The course includes form and analysis, and four-part harmony and voice leading. This course is a pre-requisite for advanced classical or jazz theory. Should be taken concurrently with Keyboard Harmony I and Ear Training I. Music Theory II is a continuation of Music Theory I. Non-harmonic tones, figured bass, continuation of study of musical forms. (Shared course in VSC)

MUS-2013/2014 Jazz/Contemporary Music Theory III,IV Prerequisite: MUS-1231, 1232 or permission of instructor. 3 credits Following two semesters of traditional music theory, students who choose to study jazz/contemporary theory will build from the traditional foundation of music theory but will focus on advanced aspects of the jazz/contemporary idiom. Emphasis is placed on the use of standard notation combined with chord symbols in a "lead sheet" format. Composition will be a core ingredient of the course. This will allow the analysis of melody, harmony, rhythm, form, and sound to be explored in a personal and creative way. Several techniques of jazz/contemporary composition will be covered in addition to the study of many classic jazz/contemporary performers.

MUS-2023/2024 Ear Training III, IV 1 credit
Prerequisite: MUS-1062. Prerequisite for MUS-2024: MUS-2023.

## MUS-2040 Foreign Language Diction

2 credits Prerequisite: None.
This course is designed to provide students with the necessary tools to facilitate the pronunciation of all of the Indo-European languages encountered in the field of vocal music. Students will be introduced to the symbols that comprise the International Phonetic Alphabet (IPA) and will then systematically apply these in the transliteration of texts.

MUS-2053/2054 Keyboard Harmony III, IV 1 credit Prerequisite: MUS-1052. Prerequisite for MUS-2054: MUS-2053.

MUS-2111/2112 Jazz/Contemporary Ear Training III, IV To be taken concurrently with MUS 2011/2012. 1 credit each Coinciding with Jazz Theory, this course will cover both traditional and contemporary forms of ear training techniques. Traditional exercises such as interval identification, sight singing, rhythm studies, melodic/ harmonic/rhythmic/formal standpoint. Students will learn to hear different styles of music from the aforementioned standpoint without the aid of an instrument, i.e., "by ear".

## MUS-2120 String Instrument Teaching Methods

Prerequisite: MUS-1231 or concurrent enrollment. 2 credits Basic techniques of violin, viola, cello, and double bass. Selection and presentation of teaching materials.

MUS-2130 Woodwind Instrument Teaching Methods
Prerequisite: MUS-1231 or concurrent enrollment. 2 credits
Basic techniques of flute, oboe, clarinet, saxophone, and bassoon.
Selection and presentation of teaching materials.

## MUS-2140 Brass Instrument Teaching Methods

Prerequisite: MUS-1231 or concurrent enrollment. 2 credits Basic techniques of trumpet, horn, trombone, and tuba. Selection and presentation of teaching materials.

## MUS-2160 Introduction to Technology in Music 2 credits

 Prerequisite: None.This course introduces students to the new music technologies by surveying software applications for music composition, orchestration, recording, etc. Topics include music synthesis, midi, and sequencing. Hands-on experience. (Shared course in VSC)

MUS-2211/2212 Jazz/Contemporary Keyboard III, IV To be taken concurrently with MUS 2011/2012. 1 credit each Coinciding with Jazz Theory, this course will give each student a basic foundation in the application of jazz/commercial theory to the keyboard. Harmonic concepts such as chord construction, diatonic progressions, chord/scale relationships, song structure, etc. will be among the subjects covered. Emphasis will be on developing accompaniment skills in the jazz/commercial style. Interpretation of chord symbols from the "lead sheet" format will enable students to more fully understand jazz harmony and to have the ability to accompany other musicians, students, etc.

## MUS-2220 Music Ensemble

1 credit
Prerequisite: None. (Shared course in VSC)
Chamber Singers* (must be concurrently enrolled in Concert Choir)

| Brass Ensemble | Percussion Ensemble |
| :--- | :--- |
| Concert Band | Woodwind Ensemble |
| Concert Choir | Jazz Ensembles |

## MUS-2231 Studio Recording I

3 credits
Prerequisite: MUS-2160 or permission of the instructor.
This course offers students a hands-on opportunity to explore the exciting world of multi-track recording. Topics include studio setup, use of the equipment in the recording studio, over-dubbing, mixing, and general producing concepts.

## MUS-2240 Percussion Instrument Teaching Methods

2 credits
Prerequisite: MUS-1231 or concurrent enrollment in MUS-1231. Basic techniques of snare drum, tympani, mallet instruments, and other instruments of the percussion battery. Selection and presentation of teaching materials.

MUS-2310 Jazz Improvisation
Prerequisite: MUS-1231, 1232, or permission of the instructor. Should be taken concurrently with or after MUS-2313, 2314.
Topics explored in this course include scale/chord relationships, nomenclature, ear training, and analysis performance of common jazz/commercial forms and devices.

## MUS-2313/2314 Music Theory III/VV 3 credits each

Prerequisite: MUS-1232. Prerequisite for MUS 2314 is MUS-2313. Advanced music theory for music majors. Pre-requisite: Music Theory I and II. Classical studies of advanced form and analysis including baroque, classical, romantic and 20th-century forms. (Shared course in VSC)

## MUS-2330 Elementary Voice Class Prerequisite: None.

3 credits
This course is designed for the beginning vocal student wishing to improve his or her voice. Proper vocal technique is employed along with an introduction to beginning vocal literature. The anatomy of the vocal mechanism is discussed.

## MUS-2350/4010 Music Theater Production <br> 3 credits

Prerequisite: None.
This course is designed to give students a complete experience preparing for a performance of either a full book musical or a musical theater revue. Meetings will be scheduled from two to four times per week; students will be guided through the process of exploring and creating a character through the medium of singing. Emphasis will be placed on the differences between the rigors of moving from speech to song and vice versa that are presented by the musical theater medium. Students will also learn how to work in cooperation with on-stage colleagues, musicians, and crew. In addition, they will learn how to care for their general and vocal health during the critical pre- and mid-production periods. In addition, the cast will study the particular attributes of each show or shows being performed, vis-a-vis political and social/historical context as well as any significant literary connections or foundations. MUS-2810/4810 Internship in Music 1-12 credits Prerequisite: None.
(Shared course in VSC)

## MUS-2910/4910 Independent Study in Music

## $1-12$ credits

MUS-3031 History of Western Music I
4 credits
Prerequisite: MUS-1231, 1232 or the equivalent.
A detailed survey of the art of music, covering the history of musical styles through the study of composers, their works and pertinent historical relationships. Periods include the origins of music; Greek music systems and thought; church liturgy; and Medieval, Renaissance, Baroque, Rococo, Pre-Classical, and Classical music.

## MUS-3032 History of Western Music II <br> 4 credits

Prerequisite: MUS-1231, 1232 or the equivalent.
A detailed survey of the art of music from the Romantic Period to the present, including Impressionism, Atonalism, Verism, "Neoclassicism," Expressionism, serial music, aleatory music, electronic techniques, and the influence of folk and popular music. The course covers the study of composers, their works, and pertinent historical relationships.

## MUS-3040 Jazz in America

3 credits
Prerequisite: None.
This course combines a look at the historical development of jazz in America (including a stylistic examination of such major figures as Louis Armstrong, Duke Ellington, Charlie Parker, Miles Davis, and John Coltrane) with a discussion of various critical issues pertaining to its
evolution and how it expresses and illuminates aspects of American history and culture. Students will sharpen their appreciation and understanding of historically important styles of jazz and develop an awareness of how the music and its performers have contributed to and reflected America's ongoing social and cultural development.

## MUS-3050 The Social History of Rock and Roll 3 credits

## Prerequisite: None.

An interdisciplinary study of the evolution of rock music from 1950 to the present, with attention to the social climate of this period. Social issues examined include rock ' $n$ ' roll and racism, the hippie culture, technological advances, economic forces, and the political climate. Students study a specific rock style as a field project. Open to all students; previous background or experience in musical study and performance is not required.

## MUS-3060 Vocal Pedagogy K-12

2 credits Prerequisite: None.
Students in the course will receive a thorough grounding in the structure and function of the vocal mechanism, combined with a survey of the standard pedagogical approaches to healthy phonation and singing technique. Special emphasis will be given to the particular psychological and technical problems manifested by children in various stages of development. The net gain from this course will be the ability to deal more effectively and efficiently with young voices, resulting in a significant improvement in the sound of one's choral ensembles.

## MUS-3080 Choral Literature

2 credits
Prerequisite: Permission of instructor.
The study and performance of choral literature written for vocal ensembles of all sizes. Literature studied spans all historical periods and styles from the early Renaissance through the 20th century. May be repeated for credit.

## MUS-3090 Song Interpretation: Bringing Songs to Life Prerequisite: MUS-2330 and THA2121 3 credits

 The overall objective of this course is to provide singing actors with the tools to make a song come alive onstage without relying on the context of a show, props, costumes, and makeup. We explore each song from the dual perspectives of textual/dramatic and musical structure. Once we have come to a thorough understanding of what the song is "about", we employ various acting techniques to help each singer to arrive at a performance that is honest, meaningful, convincing, and effective. The semester's work is presented in a final cabaret performance.MUS-3130 Composition
3 credits
Prerequisite: MUS-1231, 1232 or equivalent.
Students learn to write in styles from Baroque to Contemporary. During the latter part of the class, the development of personal style is stressed, and students often meet with the instructor on a one-to-one basis.

MUS-3140 Jazz Arranging
3 credits
Prerequisite: MUS1231, 1232, 2011, 2012 or permission of the instructor.
A study of techniques in writing for the common instruments found in a band. Emphasis is on the trumpet, trombone, saxophone, and rhythm section instruments. Students learn the correct notation for each of
the above. Other topics include music copying, two-part writing, and arranging for the small combo. Written arrangements are required.

## MUS-3160 Elementary School Music Methods 3 credits

 Prerequisite: None.A survey of teaching methods for music in the elementary school classroom through singing, playing, movement, and listening experiences. Emphasis on the child's voice and on the development of creative educational materials. Students also learn about special instructional techniques, including the Orff, Kodaly, and Delcroze methods.

## MUS-3210 Secondary School Music Methods <br> 3 credits

 Prerequisite: None.Emphasis in the course is on vocal and instrumental music in the secondary schools, organization, and rehearsal techniques. General music classes and musical theater also receive attention.

## MUS-3215 Music Technology for the Classroom 3 credits

 Prerequisites: MUS-1231, MUS-1232Wonderful opportunities exist for using music and technology in many classroom settings: elementary, middle school, special services, general music, chorus, and instrumental music. This course will explore some of the tools that are available in music composition, computer-assisted instruction, music keyboards, multimedia, and presentation formats. The course is designed to meet the needs of a variety of individuals with varied backgrounds and abilities in music.

## MUS-3220 History of Blues

## 3 credits

Prerequisite: None.
This course traces the history and development of blues form African origins through the rural blues of Mississippi, the East Coast, and Texas to the electric blues of Chicago, the blues revival of the 1960's, and modern blues today. A close examination of the music itself, the people who make it, the rural and urban social contexts that have supported it, the mutual influence and interconnection of blues and rock-and-roll, and the relationship of blues to African-American history and culture.

MUS-3230 Survey of American Musical Theater 3 credits Prerequisite: None.
This course will follow the development of the American (Broadway) musical from its roots in the musical revue and operetta at the beginning of this century to its full flowering in the 1940's and onward. Primary emphasis will be given to the works of the major creators of the genre.

## MUS-3240 Applied Music Lessons

2 credits
Prerequisite: MUS-1120 or equivalent. Permission of the instructor required.
A study of techniques and literature in the music performance media. One hour per week.

MUS-3272 Studio Recording II
3 credits
Prerequisite: MUS-2231.
A continuation of MUS-2231 at a more advanced level. Topics covered include continued research in analogue recording, as well as information required to work with the most recent technology in digital recording.

## MUS-3330 Worlds of Music

## Prerequisite: None.

A survey course dealing with diverse styles and musical sounds found among the different cultures of the world, including Asian, African, and Black American. Examples of the various forms and styles of music are presented both recorded and live by guest lecturers/performers. Students build simple non-western musical instruments and study a specific musical culture as a field project. Open to all students; previous background or experience in musical study and performance is not required.

## MUS-3350 Music of the Americas

3 credits

## Prerequisite: None.

This course will acquaint students with various styles of North and South American music, and place those styles in social and cultural perspective. The course will examine Brazilian, Reggae, Afro-Cuban, Cajun, and Zydeco; the cultural elements that influenced their development , and how each style has influenced American popular music.

## MUS-3401 Conducting I

3 credits
Prerequisite: None.
This course covers fundamentals of baton technique, score study and analysis, score reading, principles of interpretation, and rehearsal technique using representative works from choral and instrumental literature.

## MUS-3402 Conducting II

3 credits
Prerequisite: MUS-3401.
This course is a continuation of MUS-3401 with an emphasis on extensive refinement of techniques.

## MUS-3710 Special Topics in Music

## MUS-3720 Seminar in Music Education

Prerequisite: Open to music education majors only.
Repeatable for credit. To be taken in rotation with elementary and secondary music methods courses and continuously thereafter until the practicum. Course addresses on-going issues of professional concern, and development of a professional portfolio.

## MUS-4020 Final Production in Studio Recording

2 credits
Prerequisite: MUS-1231, 1232, 2011, 2012, 2160, 2231, 3140, 3272. Students will design individual projects that combine various skills in composition, performance, engineering, and production. The project will culminate in the production of a professional-quality compact disk recording containing each student's proposed musical format.

## MUS-4030 Applied Music Lessons <br> 3 credits

Prerequisite: MUS-1120
MUS-4720 Senior Recital
2 credits
(Shared course in VSC)
Prerequisite: None.
A public presentation of representative works in student's primary applied area. Fulfillment of all requirements outlined in the student
handbook. Consent of department chairperson required.

## OUTDOOR EDUCATION AND RECREATION (OER)

OER-1000 Introduction to Outdoor Education 4 credits
Prerequisite: Outdoor Education major or permission of instructor. This course introduces students to the field of outdoor education through a variety of first-hand outdoor learning experiences in combination with classroom sessions. The course includes an introduction to historical and philosophical backgrounds of the field as well as career exploration. Integral to the course is participation in a range of adventure-based experiences, activities that emphasize an understanding and appreciation of the natural environment, and outdoor learning experiences integrating various curriculum content areas.

## OER-1030 Outdoor Education Activities . 5 credits each Prerequisite: None. <br> Snowshoeing Cross-Country Skiing <br> Introduction to River Kayaking Flyfishing

## OER-1050 Hiking and Camping

1 credit
Prerequisite: None.
In this course students will be introduced to outdoor living and travel skills. Topics will include personal preparedness, equipment selection, camp craft skills, outdoor cooking, basic land navigation, trip planning, low-impact practices, and safety. This course includes a multi-day trip.

## OER-1060 Ropes Course

1 credit
Prerequisite: None.
In this class students will have an opportunity to experience group initiative problems, trust building activities, and low and high ropes course challenges. Students will gain an understanding of how the ropes course is a valuable recreational, educational, and developmental tool.

## OER-1061 Backpacking

1 credit
Prerequisite: None.
This course is designed to introduce students to backpacking and to provide them with the skills and knowledge to safely participate in this recreational activity on their own. Topics will include personal preparedness, equipment selection, camp craft skills, trip planning, low-impact practices, outdoor living skills, and safety. This course includes a multi-day trip.

OER-1070 Orienteering
1 credit
Prerequisite: None.
This course will include instruction in map and compass use for land navigation. Through practical outdoor experiences, students will gain the skills and knowledge to participate in the recreational sport of orienteering and to aid them in wilderness travel.

## OER-1131 Rock Climbing I

1 credit
Prerequisite: None.
This course is designed to introduce students to technical rock climbing. The instruction focuses on personal preparedness, equipment selection and use, knot-tying, belaying and rappelling techniques, climbing movement, safety practices, and ethics for climbing and the
environment. (Shared course in VSC)
OER-1161 Whitewater Kayaking
1 credit
Prerequisite: Introduction to River Kayaking or equivalent kayaking experience. Permission of instructor required.
This course is designed to enable kayakers to negotiate the challenge of whitewater, focusing on equipment, river dynamics, and safety procedures. Students will be taught in controlled and off-campus locations.

## OER-1162 Coastal Kayaking <br> 1 credit <br> Prerequisite: None.

This course is designed as an introduction to recreational kayak touring. Course content will include physical preparation, equipment requirements, paddling and self-rescue skills, and minimum-impact techniques. It will focus primarily on the experience of lake touring and will include some exposure to technical skill development. Students will practice skills in the college pool and partake in an off-campus field trip.

OER-1170 Ice Climbing
1 credit
Prerequisite: OER-1131 or equivalent or permission of the instructor required.
This course introduces students to technical ice climbing, focusing on personal preparedness for cold-weather environments, equipment selection and use, low-impact practices and safety. Students will be taught in controlled and off-campus locations. (Shared course in VSC)

## OER-2050 Rock Climbing Instructor

2 credits
Prerequisite: OER-1131 or equivalent rock climbing experience and permission of instructor.
This course serves as an introduction to the philosophy and principles of top rope climbing instruction. Emphasis will be placed on technical safety systems, site and participant management, and curriculum development. The intent of this course is to introduce students to the skills involved in basic top rope climbing programs found in camps, schools, and outdoor centers. The in-the-field sessions will include bouldering, selection of equipment, anchor systems, rope management, climbing techniques, and personal climbing experience.

OER-2060 Wilderness First Responder 4 credits
Prerequisite: Not open to first-year students.
This course prepares students to provide emergency medical care in remote areas involving prolonged patient care and severe environments. Certification available upon successful completion of the course. (Shared course in VSC)

## OER-2062 Advanced Backpacking

2 credits
Prerequisite: OER-1061 or equivalent backpacking experience and permission of instructor required.
This course is designed to provide students with the opportunity to enhance their backpacking skills and experiences, and to learn the intricacies of group leadership for backpacking. Topics will include route planning, equipment selection and care, meal and ration planning, group travel, decision-making, recognizing weather patterns, and group
safety. The field session of this course may include greater challenges than those found in the introductory backpacking course due to weather conditions, length of trip and/or terrain.

## OER-2080 Advanced Rock Craft

2 credits
Prerequisite: OER-1131.
This course is designed to give students a wider breadth of knowledge and experience in the rock-climbing arena. This class will provide field days in which students will participate in a progression of skill development that will allow students to experience and learn safe and efficient techniques for rock climbing from basic movement to advanced anchor construction.

## OER-2140 Ropes Course Leadership

2 credits
Prerequisite: OER-1060 or permission of instructor.
This course prepares students to lead groups in team building challenges, focusing on selected initiative tasks, trust building exercises, and ropes course programming. (Shared course in VSC)

OER-2810 Internship in Outdoor Education 1-12 credits Prerequisite: Contract required. This shared course may have different prerequisites at the other VSC colleges. (Shared course in VSC)

OER-2910/4910 Independent Study in Outdoor Education 1-12 credits

OER-3010 Learning in the Outdoors 4 credits
Prerequisite: EDU-2040 or 2170 or PSY-2070, or permission of instructor.
This course involves the development and implementation of a program of outdoor education activities conducted for the sixth grade students of Grand Isle County at Camp Abnaki, North Hero, Vermont. Students develop instructional, recreational, and counseling activities in various disciplines. Class preparation and planning sessions precede the week-long residential component. A fee is charged for food service and facility usage during the May program.

## OER-3020 Program Planning in Outdoor Education

 Prerequisite: Junior or senior standing. 3 credits Study of the principles for administering safe, high-quality outdoor education experiences, including program philosophy and goals, risk management and liability, fiscal administration and budgeting, organization, and leadership and program evaluation. This shared course may have different prerequisites at the other VSC colleges. (Shared course in VSC)
## OER-3070 Adventure Education Theory and Practice 3 credits

Prerequisite: Minimum of three outdoor education activity classes; junior or senior standing.
This course explores the nature of the adventure participant's experience from a variety of theoretical perspectives, including risk-seeking, motivations, fear, optimal arousal, self-efficacy, attribution, expectancy, and flow theory. Also explored are experiential education, leadership theories as applied to adventure education, and the ethics of adventure leadership. Students will participate in role playing scenarios, simulations and field trips to better understated the functioning of these
theories in practice.
OER-3150 Winter Expedition
3 credits
Prerequisite: Permission of instructor
This course is designed to develop the essential skills and knowledge associated with winter backcountry travel. Topics may include personal preparation; physical conditioning; equipment selection, use and care; backcountry touring and travel techniques; winter camping skills; shelter construction; thermoregulation and energy conservation techniques; snow science; avalanche assessment; route selection; trip planning; nutrition; and group management skills. Students will be expected to create an interdisciplinary aspect to the course by researching and presenting information on such topics as: Geology, Glaciology, Mountain Weather, Cold Weather Injuries, Ecology, etc. This course involves lecture and an extended expedition. Course topics, travel techniques, and venue of the expedition may change annually.

OER-4030 Wilderness Leadership Techniques 4 credits Prerequisite: OER-2060 or equivalent, OER-2062, OER-3070; junior or senior standing.
This course provides practical applications of advanced skills of trip planning, logistics, risk management, group leadership techniques, effective instruction, expedition behavior, and low-impact wilderness travel and camping practices. The course will include an extended field experience. Modes of travel used on the trips (backpacking, canoeing, snowshoeing, ski touring, etc.) will be determined by the time of year the course is offered.

## OER-4710 Special Topics in Outdoor Education and Recreation 3 credits

OER-4810 Internship in Outdoor Education 1-12 credits Prerequisite: OER-3010. Junior or senior standing, 2.5 cumulative GPA, leadership documentation for Adventure Education and Wilderness Leadership majors only, and faculty recommendation. Contract required. This shared course may have different prerequisites at the other VSC colleges. (Shared course in VSC)

0ER-4900 Research in Outdoor Education 3 credits
Prerequisite: MAT-2030; junior or senior standing.
This course consists of a survey of research in the field of outdoor education, giving students a perspective on past trends as well as contemporary research themes. The connections of theory with practice will be explored. Students will design and carry out a simple outdoor education research project of their own.

## PHYSICAL EDUCATION (PED)

PED-1010 Physical Education Activities . 5 credits each Prerequisite: None.
Beginning Volleyball, Aerobics: Total Body Conditioning, Yoga, Water Aerobics, Weight Training (coed), Women's Weight Training, Tae Kwon Do, Advanced Tae Kwon Do, Winter Sports Conditioning, Tennis

## PED-1150 Foundations of Physical Education 3 credits

 Prerequisite: None.This course is designed to introduce students to the foundations of the profession of physical education. Students will explore topics such as the historical and philosophical bases of physical education and related fields, the role and objectives of physical education and sport in our society, current trends and issues, career opportunities, and professional involvement. (Shared course in VSC.)

## PED-2030 Educational Games, Dance and Gymnastics Prerequisite: None. <br> 2 credits

This course will introduce students to a variety of active games, dance and educational gymnastic experiences for children. Students will learn how to design, modify, present, and evaluate these activities.

## PED-2040 Team Sports

2 credits
Prerequisite: None.
This course will provide students with opportunities to analyze the similarities and differences among various team sports. Students will learn how to design, modify, present, and evaluate a selection of team sports activities.

## PED-2110 Individual, Dual and Lifetime Activities <br> Prerequisite: None. <br> 2 credits <br> This course will introduce students to a variety of individual, dual and lifetime physical activities. Students will learn how to design, modify, present, and evaluate these activities.

> PED-2810 Internship in Elementary Physical Education Corequisite: EDU-3120, contract required. .5 credits

PED-2810 Internship in Physical Education for Exceptional Populations .5 credits
Corequisite: EDU-2110, contract required.

## PED-2910/4910 Independent Study in Physical Education <br> $1-12$ credits

## PED-3120 Measurement and Evaluation 3 credits

Prerequisite: None
This course is designed to apply principles of measurement and evaluation to teaching physical education. A special emphasis will be placed on test construction, selection, and administration. Additionally, the student will be presented with various assessment tools in the psychomotor, cognitive, and affective domains used in physical education. (Shared course in the VSC.)

PED-3140 Methods of Teaching Secondary School Physical Education 4 credits (with lab)
Prerequisite: EDU-2170 and PED-1150 or permission of instructor. Examines theory and implementation of the secondary physical education curriculum. Includes practical application in the field. This shared course may have different prerequisites at the other VSC colleges. (Shared course in VSC)

Note: PED-4830 Physical Education practicum can now be found under EDU-4835.

## PHILOSOPHY (PHI)

## PHI-1010 Introduction to Philosophy 3 credits

Prerequisite: None.
This course is a survey of some of the major philosophical issues, including our knowledge of reality, the nature of the mind or self, the existence of God, the problem of evil, freedom and determinism, morality, and the good life. (Shared course in VSC)

PHI-1030 Introduction to Logic 3 credits
Prerequisite: None.
This course is a study of the principles of good reasoning, including the nature of argument and inference, deductive and inductive reasoning, and informal fallacies. (Shared course in VSC)

## PHI-1040 Introduction to Ethics 3 credits

Prerequisite: None.
This course introduces some of the major ethical theories about morally right action, the morally good person, and the just society. Such theories may include ethical absolutism, ethical relativism, ethical egoism, utilitarianism, formalism, and rights theory. Topics may be drawn from contemporary moral issues such as capital punishment, abortion, and euthanasia. (Shared course in VSC)

PHI-2910/4910 Independent Study in Philosophy 1-12 credits

PHI-3150 Philosophy Through Literature 3 credits
Prerequisite: Two semesters of philosophy or literature.
Philosophical problems and world views, as presented in literature from Greek tragedies to contemporary novels, are surveyed in this course. Particular attention is given to historical, political, and scientific events that formed and changed the concept of our place in the universe.

## PHYSICS (PHY)

PHY-1041 Physics I
4 credits (with lab)
Prerequisite: PLM-0003, PLM-0004, PLM-0005, MAT-1020, MAT-1103,
MAT-1330, MAT-1420, MAT-1421, MAT-1520, or MAT-2532.
Provides students in engineering technology the basic principles of physics. (Shared course in VSC)

PHY-1042 Physics II 4 credits (with lab) Prerequisite: PHY-1041 or PHY-2041.
This is a continuation of PHY 1041 for electrical and computer engineering technology students. Emphasis is on understanding the basic physical principles as they relate to practical situations and semiconductor physics. (Shared course in VSC)

PHY-2910/4910 Independent Study in Physics $1-12$ credits

## POLITICAL SCIENCE (POS)

NOTE: Upper-level ( $3000 / 4000$ ) courses in Political Science are offered on a rotating basis, generally every other year.

## POS-1010 Introduction to Political Science 3 credits

 Prerequisite: None.A survey and analysis of modern political regimes, movements, parties, governmental organizations, and the relations between social interests and authority and the values and processes of government. (Shared course in VSC)

## POS-1020 American Politics and Government 3 credits Prerequisite: None.

Introduction to key topics and fundamental issues of American politics and government, including political parties; elections; interest groups; the authority and function of the various branches and levels of government; the rights of the individual and the pursuit of justice; equality, life, liberty, and happiness. (Shared course in VSC)

## POS-1040 African-American History and Politics Prerequisite: None. 3 credits

 From slavery to emancipation, through civil rights movements and urban racial conflict, this course examines the cultural, economic, and political dynamics of African-American life. Through books, films, essays, and music, the course considers the contributions of Sojourner Truth, Dubois, Brendt, King, Malcolm X, Spike Lee, Toni Morrison, and others.
## POS-2010 Observation of the Legislative Process

 Prerequisite: None.3 credits
This course gives students an opportunity to observe the legislative process, party caucuses, committee meetings, and public hearings.

## POS-2050 International Economics and Politics

 Prerequisite: None.3 credits
This course examines fundamental contemporary global issues such as conflict and peace, resource and human crisis conditions, mechanisms of trade and transnational investment, shifting power balances, and problems of development. Designed to prepare students for further sophisticated investigation of international subjects, the course focuses on tools for analyzing the global vicissitudes that impinge on the lives of all citizens.

## POS-2110 State and Local Government

3 credits

## Prerequisite: None.

This course provides a study of the principles and problems of American government at the state and local level.

POS-2810/4810 Internship in Political Science $1-12$ credits

POS-2910/4910 Independent Study in Political Science 1-12 credits

POS-3010 Survey of Western Political Thought 3 credits Prerequisite: None
An examination of European/Asian views of the citizen, the state, law,
justice, and the nature and use of power, plus an analysis of modern global doctrines on communism, democracy, fascism, internationalism, liberalism, and Nazism. (Fall semesters, odd years)

## POS-3030 Contemporary Political Theory: Race, Class and Gender 3 credits

 Prerequisite: None.This course focuses on contemporary issues that relate to the dynamics of race, class, and gender. Specific problems are examined to demonstrate that these categories must be studied in detail in order to understand our contemporary lives and the social, political, and economic institutions that affect them. (Spring semesters, even years)

## POS-3040 The Politics of Gender

3 credits
Prerequisite: None.
This course explores the politics and philosophies of gender relationships. It examines the dynamic of power and the political forces that shape the relationships between men and women, women and women, and men and men. Of particular interest are the social institutions and activities that shape and express power relationships in everyday life.

## POS-3050 Environmental Ethics and Politics 3 credits Prerequisite: None.

This course explores the relationships between our natural and human environments. How do our socio-economic concerns affect our ethical relationships within this total environment? How is our ethical understanding of ourselves related to our connection with nature? The class will consider a variety of issues and problems that seek to understand ecological limits and the moral obligations that need to be confronted. POS-3060 Vermont Politics 3 credits Prerequisite: None. Vermont Politics examines the electoral and political party structures, partisan activities, interest groups, the role of the media, and other timely issues. (Fall semesters, odd years) (Shared course in VSC)

## POS-3070 Terrorism, Religion, and the Nation-State Prerequisite: None 3 credits

 This course will offer a rapid background in the histories and theologies of Judaism, Christianity, Islam, and Hinduism-the four religions in the territories of which terrorism seems to be endemic and which regions (primarily the Middle East and India) have been divided into a myriad of artificial states. The instructor will explain the effect of reactions to the encroaching storm of modernity with its accompanying tidal waves of democracy and capitalism, and also give a brief explanation of the histories of the various nation states in the regions above. Different interpretations of "terrorism" will also be discussed. Is terrorism a tool and a weapon of war on par with guns and fighter-bombers? Is it anarchism? Nihilism? Cold-blooded murder? Is it a romantic throwback to some romantic notion of what some peoples' ancestors used to do? What exactly? The students and professor will debate together the effect of reactions to the encroaching storm of modernity with the accompanying tidal waves of capitalism, democracy, innumerable new religions sects and the loosening-up of the authoritarian patriarchal and moral systems.
## POS-3150 Campaigns and Elections

3 credits Prerequisite: None.
Students examine activities of critical importance to elected officials and gain an understanding of the choices that face such officials in
their dealings with the electorate. The way voters choose among candidates, factors which influence voter turnout, and campaign strategy and tactics are among topics discussed. Polls and surveys and the raising and spending of campaign funds also receive attention. Students are encouraged to work for the candidate of their choice.

## POS-3160 Modern Politics Through Drama and Fiction Prerequisite: None. 3 credits

 This course provides an intensive reading of world literature dealing with systems of government, ideologies, and the vicissitudes of political power. Each student prepares an interpretation of a political situation or problem based on a literary text (read by the entire class) and on individual research. Topics vary with each offering.
## POS-3170 U. S. Constitutional Law <br> 3 credits Prerequisite: None. <br> This course examines Supreme Court decisions, constitutional law in the United States, and the rights of state governments and of the individual. (Shared course in VSC)

## POS-3210 Canadian Politics

3 credits
Prerequisite: None.
This course will examine the Canadian parliamentary system of government. The class will meet with members of parliament, political leaders, and representatives of the media.

## POS-3220 Genocide: Inhumanity Across <br> 3 credits the Ages <br> Prerequisite: None. <br> The study of the history and geographical background of, and the political, economic, and religious motivations for, physical and cultural genocide.

## POS-3230 Third World Politics

3 credits
Prerequisite: None.
Students explore the integration of life and ideology as exemplified by selected revolutionary figures of Africa, Asia, and Third World America. Students are responsible for conveying to the class, in seminar style, their assessments of typical Third World leaders and thinkers, including conservative and revisionist figures.

## POS-3270 Revolutions, Transformed Economics, and Social Change 3 credits

Prerequisite: None. Recommended: One POS or HIS course.
From 1688 to 1978 the world was wracked by a series of violent upheavals referred to as revolutions that affect our lives on a daily basis on every continent on the globe. From the English revolution in 1688, through the American in 1776 and the French in 1789, the Bolshevik in 1917, to that of Iran in 1978 and the Christian and Muslim fundamentalist revolutionary movements in the 21st century. What were/are these movements? How do they come about? What factors play a role in their development? What are their religious, national, psychological, economic, and social consequences? Who leads and participates in them, wins and loses, and why? We shall study all.

## POS-4010 American Foreign Policy

3 credits
Prerequisite: None.
In this course, students analyze the forces behind the formulation of American foreign policy and its objectives and strategies since 1776. Particular emphasis is given to the period from World War II to the present. (Spring semesters, even years)

## POS-4020 International Relations

3 credits

## Prerequisite: None.

This seminar provides an investigation of the political and economic elements of national power, transnational interests, and international organizations.

## POS-4730 Senior Seminar in Political Science 3 credits

 Prerequisite: None.Senior-level students choose a major topic for collective investigation, complete a common core of reading, and contribute individual research presentations on aspects of that topic.

## PSYCHOLOGY (PSY)

## PSY-1010 Introduction to Psychology <br> 3 credits

Prerequisite: None.
This course is a survey of major concepts, issues, theories, and research methods in psychology. In the process, it offers a sense of how psychological issues are involved in students' personal lives. Course content includes such topics as states of consciousness, learning, memory, development, motivation, emotion, stress management, theories of personality, abnormal behavior, approaches to therapy, intelligence, social psychology, neurophysiology, and sensation and perception. (Shared course in VSC)

## PSY-2040 Social Psychology

3 credits
Prerequisite: None.
This course presents a systematic study of how people think about, influence, and relate to one another. Course content includes topics such as attitudes, norms, aggression, conformity, attraction, self-justification, prejudice, group processes, interpersonal interaction and communication, altruism, conflict resolution, persuasion, and impression formation. There is a broad opportunity for application of these concepts to understanding the self and interpersonal relationships, as well as to social issues of importance, such as war and peace, consumer behavior, and political strategy. (Shared course in VSC)

## PSY-2070 Developmental Psychology

3 credits
Prerequisite: PSY-1010.
This course focuses on emotional, cognitive, identity, social, and moral development throughout the life span with, special emphases on the theories of Piaget, Freud, Erikson, and Kohlberg.

## PSY-2410 Research Methods in Psychology

3 credits Prerequisite: PSY-1010, MAT-2030.
The purpose of this course is to provide students with an introduction to the theory and practice of research in the broad field of psychology. The emphasis of the course is practical and behavioral; students design research working individually and in teams. The course acquaints
students with survey research and experimental, correlational, and quasi-experimental designs.

## PSY-2420 Group Process: Theory and Practice 3 credits

 Prerequisite: PSY-1010.This course acquaints students with current theory, practice in interpersonal communication, and group dynamics, including recent social, educational, and therapeutic uses of small groups.

PSY-2810/4810 Internship in Psychology
1-12 credits
Prerequisite: Permission of internship coordinator. (Shared course in VSC)

PSY-2910/4910 Independent Study in Psychology $1-12$ credits

PSY-3010 Theories of Personality 3 credits
Prerequisite: PSY-1010. Recommended: Sophomore standing. This course focuses on significant theories which describe the development, structure, and dynamics of personality, with an emphasis on pertinent research findings. Approaches such as psychodynamic, behavioral, social learning, biosociological, humanistic, cognitive, and existential are included. Particular emphasis is placed on practical applications of personality concepts for understanding self and others. (Shared course in VSC)

## PSY-3030 Organizational Psychology 3 credits

## Prerequisite: PSY-1010.

This course examines the application of psychological principles to organizations. Topics studied include the individual in organizations, motivation and reward systems, leadership styles, and organizational culture and communications.

## PSY-3065 Abnormal Behavior

3 credits
Prerequisite: PSY-1010, PSY-3010 or permission of instructor. Recommended: Sophomore standing.
This course focuses on the symptoms, causes, and treatment of a wide variety of psychological disorders, such as mood disorders, anxiety, schizophrenia, personality disorders, somatoform disorders, dissociative disorders, childhood disorders, eating disorders, sexual disorders, and organic brain syndromes. Historical views of understanding and treating abnormal behavior, and diagnostic methods used to classify disorders, are also explored. (Shared course in VSC)

## PSY-3110 Adulthood and Aging <br> 3 credits

(Available through EDP)
Prerequisite: PSY-1010 or PSY-1050. Recommended: Sophomore standing.
This course takes a life-span approach to exploring the physiological, cognitive, and psychosocial changes that take place throughout adulthood. Among topics considered are: transitional expectations of ages and stages, gender-based psychological differences, changing family configurations, work and retirement issues, personality and biological shifts, death and bereavement. (Shared course in VSC)

PSY-3120 Philosophical Psychology
3 credits Prerequisite: PSY-1010.
The fundamental issues in philosophy are psychological because they are grounded on the human capacity for cognition, feeling, moral judgment, and action. The course focuses on abortion, homosexuality, civil liberties, euthanasia, imagination, and cross-cultural psychology. Students will learn about the most significant issues in each of these areas as discussed by scholars in philosophy and psychology.

PSY-3140 Play and Its Role in Human Development
(available through EDP)
3 credits Prerequisite: EDU-2040 or PSY-2070.
This course will explore the role of play in human development, with primary emphasis on the first 12 years. We will examine the following dimensions of play: definition and categories of play; interplay between developmental stages and types of play; benefits of play in enhancing physical, cognitive, social, and emotional growth and well-being; consideration of historical, political, cultural, and gender issues; uses of play in education and therapy; the adult role in promoting play. Students will understand how to use play in their present or future work in human services/education.

## PSY-3230 Psychology of Gender

3 credits
Prerequisites: PSY-1050 or PSY-2070 and junior standing.
This course explores the psychological aspects of gender, particularly the process of gender socialization in childhood, and the psychological significance of gender throughout the life-span, with a focus on the feelings, attitudes, and belief systems inherent in gender roles. The course explores research on both similarities and differences of males and females. (Shared course in VSC)

## PSY-3250 Multicultural Psychology

3 credits
(Available through EDP)
Prerequisite: PSY-1010, PSY-2070.
The study of the effect of culture, subculture, and cultural trends on human behavior and human development. This course will extensively examine the impact and relationship of race, religion, sex, and other cultural factors on the psychological development of women and men.

## PSY-3320 Psychology of Religion <br> 3 credits

Prerequisite: PSY-1010.
This course explores the psychological underpinnings of religious experience through an in-depth review of literature representing both Eastern and Western religions. Through dialogue, debate, and active inquiry, students will reveal the ways that psychology and religion shed light upon one another in their integration and application within the actual cultural contexts of current America, Europe, and the Middle and Far East.

## PSY-3330 Psychology of Addictions

3 credits
Prerequisite: PSY-1010.
This course is intended to serve as an introduction to problems associated with addiction. It is targeted at problems associated with substance abuse, but will also address issues associated with other compulsive behaviors: eating disorders, addictive sexual behavior, and so on.

## PSY-4010 Biological Psychology <br> 3 credits

Prerequisite: Nine credits in Psychology or BIO-1210 and BIO-1211, and junior standing, or permission of instructor.
This course offers a study of the physiological influences on human behavior with particular emphasis on the role of the nervous system. The instruction emphasizes current research in neurological and biochemical mechanisms as they influence memory, motivation, perception, consciousness, and sensory and behavioral processes. (Shared course in VSC)

## PSY-4040 Cognition, Creativity and Language 3 credits

 Prerequisite: PSY-1010; Junior/Senior standing.This course explores the nature of schemas and scripts during cognition, how our use of language reveals our cognitive approaches, and the logic and functions of creativity. Each focal point will serve to disclose the cognitive and affective underpinnings of the individual's construction of the world and self. Another significant aspect of our journey in knowledge will be seeking ways of altering schemas, language, and creativity to enhance well-being.

## PSY-4080 Psychology and the Civil War

3 credits
Prerequisite: PSY-3010 recommended.
This interdisciplinary course examines important psychological issues, both societal and interpersonal, that affected the conduct and outcome of the American Civil War. Historical readings will concentrate on the pivotal battles at Chancellorsville and Gettysburg. Students will learn about important personality dimensions of battlefield and government leaders through in-class exercises and reenactments.

## PSY-4090 Controversial Issues in Psychology 3 credits

Prerequisite: PSY-2410 and junior or senior standing
Through primary source readings, this course explores controversial issues and debates within psychology. Topics covered include the use of animals in research, measuring intelligence, mental illness as a cultural construction, the effectiveness of psychotherapy, and opposing research findings on the effects of television, corporal punishment, and divorce on children's psychological health.

## PSY-4110 Creative Therapies

3 credits
(Available through EDP)
Prerequisite: PSY-4151.
This is a study of the use of art, music, and movement for creative expression in counseling and psychology. The focus of the course is an exploration of theory and application of creative therapies in working with children and adults. (Shared course in VSC)

## PSY-4125 Historical Readings in Psychology 3 credits Prerequisite: Junior/Senior standing. In this course, students read excerpts of unedited, foundational research and theory in psychology. In seminar style, students will discuss the historical context and significance of each piece, the implications of the piece to the current state of the field and contemporary modifications to each piece, along with students' reactions and critiques.

PSY-4151 Counseling
3 credits
(Available through EDP)
Prerequisite: PSY-1010 and PSY-1160 or PSY-1050 and PSY-3010.
Recommended: PSY-3070.
The purpose of this course is to provide students with an introduction to both the counseling profession and the process of counseling itself. Students learn about the relationship between counselor and client, theoretical approaches to counseling, and the application of intervention skills to facilitate client change. (Shared course in VSC)

## PSY-4220 Seminar in Jungian Personality Types

Prerequisite: None.
3 credits
This course explores the 16 Jungian-based personality types. Students will learn their own types and explore the impact of type on learning style, friendships, romantic relationships, career choice, and work styles. Students will explore how different types can complement each other or irritate each other, and how to use type to facilitate best outcomes. A high level of student involvement, in and out of class, will be expected.

## PSY-4760 Topical Seminar in Psychology 3 credits

Prerequisite: PSY-1010. Recommended: 2000 and 3000 level courses in psychology.
Primarily for students concentrating in psychology, this course explores significant areas in psychology with topics varying from year to year. The seminar emphasizes presentation and discussion, and may be repeated for credit. (Shared course in VSC)

## PSY-4770 Senior Seminar in Psychology 1 credit

Prerequisite: PSY-1010, PSY-2420, senior standing and permission of instructor.
This course is a capstone experience for seniors and must be taken in conjunction with two credits of PSY-4810, Internship in Psychology. Students will process and discuss their learning, as well as explore current topical issues in psychology, in this seminar. *Internships must be arranged the semester prior to when they are to occur.

## SCIENCE (SCI)

SCI-1031/1032 Evolution of the Universe I \& II Prerequisite: SCI-1031 is a prereqisite for SCI-1032 4 credits each This two-semester course, which integrates the major scientific disciplines, has been designed to enhance the scientific literacy of non-science majors. The course takes a historical journey through time that encompasses major concepts of physics, chemistry, geology, and biology as they apply to the evolution of the universe. Students will gain a perspective of how continuity, form, and change have occurred in matter and how ideas such as uniformitarianism and thermodynamics have shaped scientific thought and subsequent events. Laboratory experience and field trips will be designed to make the concepts relevant and applicable to the lives in personal scientific inquiry and investigation.

## SCI-2910/4910 Independent Study in Science

1-12 credits

SCI-4020 Science Methods 3 credits Prerequisite: None.
This course is designed for prospective secondary science teachers. The course focuses on science teaching methods and materials, chemical hygiene training, classroom observations, and the prospective secondary science teacher portfolio that is required for teaching certification. This course must be completed prior to the student teaching practicum.

## SOCIOLOGY (SOC)

## SOC-1010 Introduction to Sociology <br> 3 credits

Prerequisite: None.
A systematic introduction to the study of social behavior and organization. The major conceptual tools of sociology are used to explore the structure, processes, and content of social action, to provide insight into the regularity and diversity of human social behavior. (Shared course in VSC)

## SOC-1040 Integrative Health and Professional Series

Prerequisite: None 1 credit
This is a weekly evening series that brings credentialed, experienced alternative healthcare professionals to JSC for both JSC students and the general public to conduct lecture/workshops on the history, nature, practices, technologies, career creden tials, and evidence for healing disease and creating wellness in people's lives. Students attend these lectures/demonstrations, engage in critical dialogue with both the public and other health professionals, and critically review text material related to lecture topics. Students complete the course with a final written paper and oral presentation that reflectively evaluates the reading and experiential learning in the lecture/workshop series.

SOC-2040 Race/Ethnicity/Class and Gender 3 credits Prerequisite: None.
An exploration of the historical and contemporary roots of discrimination on the basis of race, ethnicity, class, and gender. Issues such as culture, identity, and oppression are examined. (Shared course in VSC)

SOC-2050 Drugs, Herbs, and Society 3 credits Prerequisite: None.
An examination of the role that legal and illegal drugs play in our society and the consequences of drug use and drug policy. The course focuses on the sociological nature of issues such as the "war on drugs" and illegal drug trafficking, and concepts like addiction and deviance.

## SOC-2140 Sociolinguistics

3 credits
Prerequisite: None.
This course surveys the development of linguistics and explores how social factors such as sex, age, and class affect speech, understanding, and meaning at both the interpersonal and institutional levels.

## SOC-2150 Social Solutions <br> 3 credits

Prerequisite: None.
This course explores the roots of poverty and oppression through combined academic research and community service involvement. Homelessness, welfare, AIDS, racism, and sexism are examined for their social structural causes and for their interpersonal solutions.

SOC-2810/4810 Internship in Sociology
$1-12$ credits

## SOC-2910/4910 Independent Study in Sociology

1-12 credits

SOC-3020 Environment and Society
3 credits
Prerequisite: None
The purpose of this course is to demonstrate and analyze, empirically and theoretically, the crisis of the environment (at the global, national, and local levels). Specific topics include the "toxics crisis," Central America, work, environmental racism, global warming, and others; but rather than focus on specific physical aspects of the environment, the course is designed to interpret societal structures and processes that lead to ecological crises. In this sense, students should not feel limited to that subject matter on the syllabus and are encouraged to incorporate their personal interest into the class.

## SOC-3040 Social Movement, Culture, and Activism Prerequisite: None. 3 credits

 This course examines the topic of post-modern youth culture from a range of perspectives that are incorporated under the umbrella of an interdisciplinary field of scholarship known as cultural studies. Youth culture and its relation to popular culture will be explored historically and cross-culturally using theories and methods drawn from disciplines such as communications, geography, literary criticism, sociology, philosophy, film studies, English, art history, anthropology, psychology, and musicology.
## SOC-3050 Gender and Society

3 credits
Prerequisite: None.
An exploration of the impact that sex and gender have on our interpersonal relationships in our everyday life and on the social structure that creates and sustains them. (Shared course in VSC)

SOC-3060 Sexuality and Intimacy
3 credits
Prerequisite: None. Limited to juniors and seniors.
This course examines sexual issues of concern to students and emphasizes the role of participants as rational and emotional beings confronting a fundamental human concern-managing their sexuality throughout lives in which they will inevitably accommodate considerable personal and social change.

## SOC-3080 Wellness and Alternative Medicine 3 credits

 Prerequisite: Permission of the instructor.This course documents the history, nature, and scientific basis of wellness and alternative medicine from Era I and the biomedical model, through Era II and mind/body medicine, to Era III and non-local medicine. Diverse healing traditions including Native American, Ayurvedic, and Chinese medicine are explored. Alternative health care proactices including acupuncture, homeopathy, and naturopathy are examined. The nature of scientific evidence for the field of psychoneuroimmunology is discussed in addition to the changing nature of the medical treatment environment-new doctor/patient relationships, new protocols for scientific evidence, integrated diagnosis, and new ways of conceptual-
izing health and illness.

## SOC-3130 Mass Media and Society

3 credits
Prerequisite: None.
An examination of life in mass media-saturated societies. This course examines the operation of mass media industries and the political, social, and psychological consequences of media culture. Television, print, film and popular music are considered to explore the different dimensions of advertising, news and entertainment.

SOC-3230 Alternative Medicine, Science, and Disease Prerequisite: SOC-3001 3 credits
This course investigates the nature of diverse global healthcare systems and critically compares claims for healing disease. Students use a sociocultural interdisciplinary lens to examine the language, concepts, theories, practices, technologies, and evidence of healthcare models that include Allopathic Biomedicine, Chinese medicine and Acupuncture, Indian Ayurveda, Naturopathy, Chiropractic, and Native American Healing; to examine Mind/Body modalities that include Meditation, and Biofeedback; and to examine Yoga and Energetic Medical models that include Reiki, Aromatherapy and Homeopathy. Students learn investigative research skills to evaluate the science, the safety, and the efficacy of evidence for healing, and also the cross-cultural communicative fluency skills to articulate collective evidence that bears upon disease healing.

## SOC-4010 Family Violence

3 credits
Prerequisite: ANT-1010 or SOC-1010 and permission of the instructor. This course explores the nature of family violence through academic study and on-site community training workshops with local professionals. Theory and research findings will be examined to understand why people batter, sexually abuse, and kill within families.

## SOC-4020 Sociological Theory

Prerequisite: SOC-1010 or permission of instructor.
Analysis of the development of sociological thought from Comte to the present, with particular emphasis on the theoretical contributions which have been instrumental in the emergence of sociology as an academic discipline. (Shared course in VSC)

SOC-4030 Global Health, Diversity, and Policy 3 credits Prerequisite: Junior Standing or permission of instructor. In this course students will analyze the crises of the environment, the economy, biological diversity, human health, and social justice at the global level. Students will explore the manners in which social processes and social organizations create conditions that threaten the sustainability of environmental and human health. Although these are interdisciplinary areas of study, in its approach to these questions, the course draws on sociological theory. To provide an appropriate background for our analyses, the readings cover topics ranging from case studies of health conditions in African communities, to land distribution in Central America, to U.S. foreign policy and to corporate control of genetic engineering.

## SOC-4730 Topical Seminar in Sociology

3 credits Prerequisite: None.
This course explores new topics and current developments in the
discipline. The seminar emphasizes student research, presentation, and discussion, and may be repeated for credit.

## SOC-4740 Senior Integrative Healthcare Seminar

Prerequisite: Senior standing or permission of instructor. 1 credit This seminar course is designed to help students identify, integrate, and evaluate their interdisciplinary learning in wellness and alternative medicine, to create a life/career plan for ways to integrate that learning into personal self-care and/or professional healthcare, and to create a theoretical and practical model of how wellness and alternative medical systems might "integrate" with the allopathic medical model at the personal, interpersonal, community, societal, and global levels.

## SOCIAL SCIENCE (SSC)

Courses not included in traditional disciplines of anthropology, psychology, or sociology are designated social science courses (SSC). These multi-disciplinary courses are an important component of our curriculum and may be used to meet degree requirements in anthropology and sociology (ANS) and/or psychology (PSY).

## SSC-1020 Career Choices

3 credits
Prerequisite: Sophomore standing.
This course is designed to help students learn and practice processes of personal exploration and decision-making which will assist them in making satisfying career choices.

## SSC-2910/4910 Independent Study in Social Science

 1-12 creditsSSC-3150 Sociodrama
3 credits
Prerequisite: PSY-1010 or PSY-1160 and any 2000-level PSY or ANS course or THA-2121
This course is a practical and experiential introduction to sociodrama -the spontaneous role-playing methods for exploring group themes, issues and situations-and to the experiential science of sociometry, both created by Dr. J.L. Moreno. It will acquaint participants with the basic techniques use to facilitate role-playing and explore methods to increase individual and collective spontaneity and empathy. Discussions will focus on applications for education, community action and industry.

## SPANISH (SPA)

## SPA-1011/1011L Spanish I

Class 3 credits, Lab 1 credit
Prerequisite: None. Corequisite: Coinciding lab.
The first course in a two-course sequence. Systematic introduction to the Spanish language. Development of aural comprehension, speaking, reading, and writing skills. Also provides an introduction to the culture of Latin America and Spain. A one-hour laboratory per week is required. (Shared course in VSC)

SPA-1012/1012L Spanish II
Class 3 credits, Lab 1 credit
Prerequisite: SPA-1011 or permission of instructor.
Corequisite: Coinciding lab.

The second course in a two-semester sequence designed to introduce students to the Spanish language. Continued development of aural comprehension, speaking, reading, and writing skills. Further study of elements of the culture of Latin America and Spain. A one-hour laboratory per week is required. (Shared course in VSC)

## SPA-2011/2011L Spanish III

## Class 3 credits, Lab 1 credit

Prerequisite: None. Corequisite: Coinciding lab.
Systematic and intensive review of first-year college Spanish (or the first two years of high-school Spanish), followed by work leading to the further development of oral proficiency, the continued study of Spanish grammar, directed composition, and acquisition of vocabularies for everyday use. Informal oral and written reports. Laboratory work may be required. (Shared course in VSC)

## SPA-2012/2012L Spanish IV

Class 3 credits, Lab 1 credit
Prerequisite: SPA-2011 or permission of instructor. Corequisite: Coinciding lab.
Further development of oral proficiency, the continued study of Spanish grammar, directed composition, and acquisition of vocabularies for everyday use. Informal oral and written reports. Laboratory work may be required. (Shared course in VSC)

## SPA-2910/4910 Independent Study in Spanish

$$
1-12 \text { credits }
$$

## THEATER ARTS (THA)

## THA-1040 Interpreting Contemporary Dramatic Literature 3 credits

 Prerequisite: None. This study provides an interdisciplinary understanding of contemporary dramatic literature. Period plays and masterworks are looked at from the vantage point of the actor, the playwright, the technician, and the critic. The play is observed as a force within a cultural context influenced by and influencing the social, political, and economic realities of its time.
## THA-1041 Introduction to Theater Arts

3 credits Prerequisite: None.
This course is designed as an introduction to the collaborative nature of theatre in addition to the analysis and criticism of dramatic literature. The imaginative process is stressed as history, playwriting, audience, acting, directing, producing, and designing for both theatre and film are individually examined as elements of the collaborative process. (Shared course in VSC)

## THA-1111 Stagecraft

3 credits
Prerequisite: None.
This hands-on course introduces students to the basic techniques of scenery and set construction and philosophy and mechanics of lighting, properties, sound, and technical effects. The course also includes crew work on productions. (Shared course in VSC)

THA-2020/4050 Theater Lab
3 credits
Prerequisite: Permission of the instructor.
This course is designed to introduce the student to serious hands-on work in technical theater. Repeatable for credit, the student can work at entry-level positions and repeat the class at more advanced levels of responsibility. The major areas included are stage carpentry, stage electrics, and sound engineering. The course provides an opportunity for students to develop career skills while working with international touring companies in music, dance, and theater as well as with a wide range of departmental productions and other events.

## THA-2030 Costume History and Design 3 credits

 Prerequisite: None.An introduction to function, purpose, and design of clothing and of theatrical costumes in each of the major periods of theatrical history from the era of Classical Greece to the 20th century. The course includes both study of historical styles of clothing and their adaptations for the stage, as well as some of the outstanding examples of costume created exclusively for the theater. The relationships of costuming and costume design to other production elements, the working vocabulary of the costume designer and costumer, and the emotional responses created by costuming are also examined. (Odd years)

## THA-2035 Costume Construction and Stage Make-up Prerequisite: THA-1041, THA-2030. 3 credits

 This course is designed primarily to acquaint the student with the principles of drafting, cutting and construction costume for the theater. In addition to drafting and cutting projects, costume crew work on department productions will be expected. Theatrical make-up in relation to costuming will also be explored.
## THA-2040/4010 Performance and Production <br> 3 credits Lab

Prerequisite: Permission of the instructor either through audition or interview; for THA-4010: previous credit for TAD-2040 and upper-level standing.
Rehearsal and performance of a major faculty-directed theatre production or equivalent performance project in theater. In order to receive full credit for this course, students must be cast in the semester production or fulfil a crew assignment. Students may also be expected to complete one academic exercise by production's end. May be repeated for credit.

## THA-2121 Acting I

3 credits
Prerequisite: None.
This course explores the basic nature of the actor's creative process. It includes study of the actor's physical instrument, impulses, intuition, and creative imagination. The evolving study of the course focuses on the fundamental elements of the acting craft: imaginary environment, character analysis and development, voice, body, relaxation, and concentration is applied to work on monologues and scenes. (Shared course in VSC)

THA-2122 Acting II
3 credits
Prerequisite: THA-2121.
This course continues developing basic acting skills through advanced
character analysis and the development of character begun in fundamentals of acting. Emphasis is placed on the inner, emotional layers of character development through scene study, rehearsal, and performance of modern, realistic dialogue scenes and a look at film and television vs. stage acting. (Shared course in VSC)

## THA-2810/4810 Internship in Theater 1-12 credits

## THA-2910/4910 Independent Study in Theater 1-12 credits

## THA-3010 Shakespeare "On the Stage and on the Page"

 3 creditsPrerequisite: Upper-division status, and completion of parts I and II of the General Education Core Curriculum (GECC).
Team-taught by theater and English faculty, this survey of Shakespeare will examine the playwright's use of various dramatic genres-comedy, tragedy, history and romance - from the perspective of both literary history and the theater. We will explore ways in which a playwright's blueprint, the text of the play, becomes a full-blown theater production. We will also investigate some of the outstanding features of dramatic structure and the creation of dramatic character and subject matter, as these are embodied in performance. In addition, the course will challenge students to consider the effects on Shakespeare of issues of intellectual and social history: the concept of the divine right of kings; the concern with order and degree throughout nature; questions of gender, social role, and autonomy; evolving attitudes toward language and imagery and toward the function of literature in social, political, and aesthetic life.

## THA-3030 Children's Theater

3 credits
Prerequisite: None.
A study of the techniques of children's theatre. Students employ these techniques in the field during the last eight weeks of the semester when they tour to local elementary schools and perform/work with the children hands on. (Even years) (Shared course in VSC)

## THA-3040 Improvisation for Actors

## 3 credits

Prerequisite: THA-1041, THA-2121.
This course is an introduction to the essence of improvisational acting, namely "play." Through a variety of exercises, improvisational games, solo work, and improvised scenes, students should develop the confidence to let go of the need "to perform" and focus rather on the willingness "to live in the moment." They should find the courage to give up having to "get it right" and instead trust in the adventure of spontaneity.

## THA-3110 Dramatic Literature: Classical/Modern

 3 creditsPrerequisite: THA-1041, 2121 and ENG-1052; or any literature course. Study of selected plays from the classical Greek period through the modern. Plays are examined for dramatic style and structure, content, and their place in the historical evolution of drama. Attention also focuses on the predominant social, political, and cultural events at the time of writing as well as the meaning and subject for the contemporary
audience. (Odd years)
THA-3123 Acting III
3 credits
Prerequisite: THA-2122.
The study of period styles of acting and advanced techniques of character creation. The course emphasizes continuing developing of practical acting craft and expanding the student's understanding of the range and variety of performance styles through the ages. The course culminates in a public performance. May be repeated for credit. (Odd years) (Shared course in VSC)

## THA-3130 Introduction to Scene Design and Stage

 Lighting3 credits
Prerequisite: THA-1111.
An introduction to the basic techniques, concepts, and skills required for a completed scene design for a theatre production and a completed lighting design for a theatre production or other performance event (e.g., dance and music concerts). Visual interpretation of a script is the preliminary point of departure. Ground plans, working drawings, elevations, color renderings, lighting plots, dimmer charts, instrument schedules, and cue sheets will be the working material of the class, particularly as they apply to interpretive cooperation with actors and directors.

## THA-3140 Theater History

3 credits
Prerequisite: THA-1041; THA-1111 or 2121.
Intensive study of the major aspects of theatrical production and performances in two significant historical periods in the evolution of theater from the Greeks to the middle of the 20th century. The study emphasizes practical historical research and performance that is historically accurate. In order to fully appreciate the history, students study such elements as physical theatre space and architecture, audience/performer relationships, acting styles, methods of financing, scenic and costuming styles, theatrical and dramatic conventions, and social and aesthetic values of the historical period. (Odd years)

THA-3210 Introduction to Directing
3 credits
Prerequisite: THA-1041, 1111, 2121, and 3130.
This course covers the basic preparation necessary for the stage director before beginning actual production. Topics include auditioning and casting a production, rehearsal planning, production planning, script analysis, and working with actors. A major project consisting of the preparation of the pre-production prompt book for a one-act play is required. (Odd years)

## THA-3710 Special Topics in Theater <br> 3 credits

## THA-3720 Playwriting Workshop <br> 3 credits

Prerequisite: THA-1041 or ENG-2101; permission of the instructor. This course is designed to develop the ability of students to create a theatrically viable play. It will also include as background study the analysis of selected contemporary one-act and full-length plays of various styles, in order to understand more fully the solutions of successful playwrights to problems of dramatic structure, character creation, plot development, dialogue, and theatrical style. May be repeated once for credit. (Odd years)
THA-4720 Senior Project in Theater ..... 3 creditsPrerequisite: Senior Standing.Students design and complete a project in any one or a combination ofthe performing or design concentrations with approval of an advisor.Students should meet with advisors during the first semester of theirsenior year to begin planning for the senior project. (Shared course inVSC)
THA-4730 Seminar in Professional Preparation for the
Actor 3 creditsPrerequisite: THA-1041, 2121, 2122.This capstone course will focus on preparing auditions, resumes,photos, feature articles, techniques for interviewing, self-marketing,and additional practicalities essential for this profession.


[^0]:    CSV-1011 Principles in Community Service 2 credits Learning
    Prerequisite: None.
    This course outlines the history of volunteerism, analyzes why we choose to become volunteers, and provides an opportunity to share and reflect upon our volunteer experiences. The classroom setting assists students

