Department of English

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Chair and Professor: J. Roger Kurtz, PhD, University of Iowa; Professors: T. Gregory Garvey, PhD, University of Wisconsin-Madison; Robert J. Gemmett, PhD, Syracuse University; Janie Hinds, PhD, University of Tulsa; Anne Panning, University of Hawaii; Graduate Coordinator and Associate Professor: Miriam E. Burstein, PhD, University of Chicago; Associate Professors: Ralph W. Black, PhD, New York University; Jennifer Haytock, PhD, University of North Carolina; Assistant Professors: Sharon Allen, PhD, Princeton University; Austin Busch, PhD, Indiana University; Brooke Conti, PhD, Yale University; Stephen Fellner, PhD, University of Utah; Stefan Jurasinski, PhD, Indiana University; Alissa Karl, PhD, University of Washington; Russell Meeuf, PhD, University of Oregon; Megan Norcia, PhD, University of Florida; Megan Obourn, PhD, New York University; Joseph Ortiz, PhD, Princeton University; James Whorton, PhD, University of Southern Mississippi; Lecturers: Jeanne Grinnan, MEd, The College at Brockport; Teresa Lehr, MA, The College at Brockport; Sidney Rosenzwig, PhD, University of Rochester.

The Department of English offers a wide range of courses in American, British, and world literatures, composition and creative writing — including workshops in poetry, fiction, and creative nonfiction. The English major is tailored for students who wish to pursue a passion for reading and writing, and for those who seek a general education in literary studies as they plan for careers in education, law, business administration, public relations, advertising, or government — indeed, any field where effective use of the English language and critical thinking skills are seen as essential to a broad humanistic perspective. Our majors choose between a literature or creative writing concentration (outlined below), where their coursework is designed to develop analytical, research, and creative skills. As an alternative, the English minor gives students an opportunity to select courses appropriate to their individual needs and interests. Students majoring or minoring in English must complete at least 50 percent of their coursework (18 credits for the major, nine credits for the minor) at The College at Brockport.

Major Specialties in English

Students who major in English must select a 36-credit major from one of two options: literature or creative writing.

Option 1: Literature

The English Major-Literature focuses on the origins and development of British and American literatures and cultural values and global issues reflected in world literatures and affords students extensive practice in critical analysis and writing. The literature track provides strong preparation for elementary and secondary teachers, for professional careers in business and law, and for the further study of literature at the graduate level.

General Guidelines: Literature courses include the genres of poetry, fiction, drama, and the essay. Most majors take 42–45 credits in English. In selecting their required courses, electives, or other courses beyond the 36-credit minimum, students are encouraged to construct personal concentrations in such areas as: American, British, or world literature; film studies; women writers; modern literature, etc., or to explore the diversity of literary and language studies. Individual courses fulfill only one requirement in the major, and only liberal arts courses (designated by an A) can be used to satisfy the 36-credit minimum requirement.

Minimum Course Requirements:

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<tr>
<th>Course</th>
<th>Credits</th>
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<tr>
<td>ENL 303</td>
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British Literature

One course in British Literature before 1800

(Examples: ENL 202 British Literature I, ENL 322 British Novel I, ENL 411 Chaucer, ENL 416 British Renaissance, ENL 417 The Age of Dryden, Pope and Johnson)
One course in British Literature after 1800 3
(Examples: ENL 203 British Literature II,
ENL 419 English Romantic Writers,
ENL 420 The Victorians and Others, ENL 424 Modern British Literature,
ENL 426 Contemporary British Literature, ENL 426 Irish Writers)

American Literature
One course in American Literature before 1900 3
(Examples: ENL 204 American Literature I, ENL 374 American Novel I,
ENL 429 Roots of American Literature, ENL 431 The Transcendental Movement)
One course in American Literature after 1900 3
(Examples: ENL 205 American Literature II, ENL 435 Modern American Poetry, ENL 443 Contemporary American Poetry,
ENL 434 American Literature of the Cold War Era)

World Literatures and Cultures
Two world literature courses, only one of which may be at the 100 level 6
(Examples: ENL 165 International Fiction,
ENL 353 The Bible and Modernism,
ENL 367 African Novel, ENL 475 Post-Colonial Literature
OR
One world literature course and one British or American literature course
which has a significant emphasis on cultural differences (Examples: ENL 235
Introduction to Afro-American Literature, ENL 237 Native-American Literature)
ENL 315 Shakespeare 3
Linguistics and Language (ENL 450, ENL 451, ENL 455 or ENL 481) 3
Two elective courses in English at the 300/400 level 6
ENL 472 Critical Approaches to Literature 3
(prerequisites: ENL 303 and 9 credits of 300/400 level study in English)

Total: 36

Teacher Certification Students: Students preparing for teaching in elementary schools are strongly advised to take ENL 305 Advanced Composition and ENL 482 Children’s Literature. Students preparing for teaching in secondary schools must take ENL 305 Advanced Composition and ENL 484 Young Adult Literature as electives.

Preparation for Business, Law and Public Service: Literature courses which emphasize psychological, social, and verbal analysis provide a solid basis for the type of critical thinking needed in professional positions, while courses in writing, business communications, journalism/publication, etc. provide a solid basis in communication skills central to these areas.

Option 2: Creative Writing
The English Major-Creative Writing allows students to follow a program of study in English which will enable them to explore their talents and develop their skills in a series of writing courses and related literature courses.

General Guidelines: Literature courses include the genres of poetry, fiction, drama, and the essay. Most majors take about 42–45 credits in English. In selecting their required courses, electives, or other courses beyond the 36-credit minimum, students are encouraged to construct personal concentrations in such areas as American, British, or world literature; film studies; women writers; modern literature, etc., as well as taking additional courses in writing or literature. Individual courses fulfill only one requirement in the major, and only liberal arts courses (designated by an A) can be used to satisfy the 36-credit minimum requirement.
Minimum Course Requirements:

- ENL 303 Introduction to Literary Analysis (minimum grade of “C”) 3
- ENL 210 Creative Writing (the prerequisite for ENL 301 and 302) 3

Literature Requirements (one course must be in literature before 1900)

- One course in British Literature 3
- One course in American Literature 3
- One course in World Literature 3

Workshop Requirements

- ENL 301 Fiction Writers Workshop 3
- ENL 302 Poetry Writers Workshop 3
- One Advanced Writers Workshop (ENL 301 or 302 are prerequisites for the related Advanced Workshops; these 400 level Workshops may be repeated once) 3
- ENL 491 Advanced Fiction Writers Workshop 3
- ENL 492 Advanced Poetry Writers Seminar 3
- ENL 493 The Creative Essay 3

- ENL 403 Writers Craft (may be repeated once) 3
- Two elective courses in English at the 300/400 level 6
- ENL 472 Critical Approaches to Literature (prerequisites: ENL 303 and nine credits of 300/400 level study in English) 3

Total: 36

Teacher Certification Students (elementary schools): Students preparing for teaching in elementary schools are strongly advised to take ENL 305 Advanced Composition and ENL 482 Children’s Literature.

Preparation for Business Law and Public Service: Literature courses which emphasize psychological, social, and verbal analysis provide a solid basis for the type of critical thinking needed in professional positions, while courses in writing, business communications, journalism/publication, etc. provide a solid basis in communications skills central to these areas.

Minor in English

The minor in English allows students majoring in other disciplines to construct a program of study in English that will be appropriate to their individual interests and prospective careers.

English Minor Requirements

The minor requires 18 credits, including ENL 303 Introduction to Literary Analysis with a grade of “C” or better. Of the additional five elective courses (15 credits), at least two must be at the 300 level or above, and only one may be at the 100 level.

Students may wish to construct their individualized English minor around concentrations in such areas as American literature, British literature, film studies, women writers, cultural studies in literature, writing, and modern literature. It is also acceptable to simply choose five electives of interest.

Student Life

The Writers Forum provides exposure to significant contemporary writers and critics. The English Club offers a variety of activities, including the publication of student writing. Sigma Tau Delta, an international honor society, recognizes significant academic accomplishment. Awards are available for student scholarship, and outstanding literary-critical, fiction, poetry, and non-fiction writing.

Study Abroad

Study-abroad programs are available. Information is available in the Office of International Education.
General Education Requirements

The following courses may be taken to meet the lower-division Humanities (H) requirement:

- ENL 165 International Fiction
- ENL 166 Literature and Culture
- ENL 202 British Literature I
- ENL 203 British Literature II
- ENL 204 American Literature I
- ENL 205 American Literature II
- ENL 235 Introduction to African-American Literature
- ENL 237 Native-American Literature

The following course may be taken to meet the lower-division Fine Arts Performance (P) requirement:

- ENL 210 Creative Writing

The following course may be taken to meet the lower-division Fine Arts (F) requirement:

- ENL 200 Art of the Film

The following course may be taken to meet the lower-division Other Worlds (O) requirement:

- ENL 166 Literature and Culture
- ENL 353 The Bible and Modernism

The following courses may be taken to meet the Diversity (D) requirement:

- ENL 165 International Fiction
- ENL 166 Literature and Culture
- ENL 204 American Literature I
- ENL 205 American Literature II
- ENL 338 Lesbian and Gay Literature
- ENL 367 African Novel
- ENL 378 Women in American Literature
- ENL 418 Significant Themes in British Literature
- ENL 439 Asian-American Literature
- ENL 457 Women and Film
- ENL 470 Women's Popular Culture
- ENL 475 Post-Colonial Literature
- ENL 476 Magical Realism
- ENL 478 Seminar in World Literature
- ENL 496 Sex and Censorship in Literature and the Media

The following courses may be taken to meet the Contemporary Issues (I) requirement:

- ENL 353 The Bible and Modernism
- ENL 367 African Novel
- ENL 378 American Women Writers
- ENL 439 Asian-American Literature
- ENL 457 Women and Film
- ENL 470 Women's Popular Culture
- ENL 475 Postcolonial Literature
- ENL 477 Issues in Science Fiction

The following courses may be taken to meet the Perspectives on Women (W) requirement:

- ENL 378 Women Writers in American Literature
- ENL 427 Women in the Novel
- ENL 439 Asian-American Literature
- ENL 441 American Literature: 19th-Century Women's Novel
- ENL 442 Topics in Women's Literature
- ENL 457 Women and Film
- ENL 470 Women's Popular Culture
- ENL 474 Caribbean Literature
- ENL 475 Seminar in World Literature
- ENL 496 Sex and Censorship in Literature and the Media
Notes: ENL 112 or equivalent is a prerequisite for any ENL course above 200. Subtitles and contents of topics, seminar, genre, mode, theme, and workshop courses vary by semester. Consult the department for information concerning offerings in any given semester. Each semester the department provides a booklet containing instructors’ descriptions of courses they offer. The booklet may be obtained in the department office.

Department of English Courses

ENL 101 English for Foreign Students (A). For speakers of other languages whose command of English is limited. Involves intensive experience in spoken and written English and prepares students for either ENL 102 or ENL 112, depending on the recommendation of the instructor. 3 Cr.

ENL 102 Fundamentals of College Composition (A). For students who need practice in expository writing skills. Provides intensive work in writing standard, edited English as preparation for entering ENL 112. 3 Cr. Every Semester.

ENL 112 College Composition (A). Cross-listed as HON 112. Emphasizes the development of written discourse with special attention to the writing process. Students generate, revise, and edit several short essays, as well as practice writing in ways that exercise their critical reading and thinking skills. 3 Cr. Every Semester.

ENL 163 Literature, the Arts and Western Culture I (A,G,W,Y). Cross-listed as HON 209. Explores works from British literature written between 800 and 1800, including those of such writers as Chaucer, Shakespeare and Milton. Examines various styles, forms, and genres. 3 Cr. Every Semester.

ENL 164 Literature, the Arts and Western Culture II (A,G). Cross-listed as HON 215. Examines the intellectual, economic, and political trends in the arts which contributed to the shape and character of American culture. 3 Cr.

ENL 165 International Fiction (A,D,H). Focuses on literary works from various cultures as vehicles for an examination of human nature. Assumes that, despite differences in nationality, race and culture, human beings share similar concerns, values, and attitudes. 3 Cr. Every Semester.

ENL 166 Literature and Culture (A,D,H,O). Examines selected works of literature to illustrate comparative religious, political, scientific, and artistic issues as well as the conflicts inherent in individual, societal, and cultural values. 3 Cr. Every Semester.

ENL 200 Art of the Film (A,F). An introduction to film as an art form combining visual, dramatic, and aural arts. Covers basic film vocabulary, elements of film art, trends in film aesthetics, and analysis of style of important selected filmmakers; includes screening of short and feature films. Required for Film Studies minors. 3 Cr. Every Semester.

ENL 202 British Literature I (A,H). Explores works from British literature written between 800 and 1800, including those of such writers as Chaucer, Shakespeare and Milton. Examines various styles, forms, and genres. 3 Cr. Every Semester.

ENL 203 British Literature II (A,H). Explores British literature written from 1800 to the present, including works by writers such as Wordsworth, Browning, Yeats and Woolf. 3 Cr. Every Semester.

ENL 204 American Literature I (A,D,H). Surveys texts written in or about America prior to the Civil War. May include exploration and captivity narratives, Puritan writing, writing of the American Revolution, and major romantic authors such as Emerson, Fuller, Hawthorne, Melville, Douglass, and Stowe. 3 Cr. Every Semester.

ENL 205 American Literature II (A,D,H,W,Y). Surveys texts written in or about America from the post-Civil War era to the present. Introduces students to literary movements of the period such as realism, modernism, the Harlem Renaissance, the Beat generation, postmodernism, and the rise of ethnic American writing. May include writers such as James, Stein, Hughes, Ginsberg, Pynchon, and Kingston. 3 Cr. Every Semester.

ENL 210 Creative Writing (A,P). Examines techniques for writing poetry; prose, and/or creative nonfiction and requires students to critique each other’s and to revise their own work. 3 Cr. Every Semester.

ENL 235 Introduction to Afro-American Literature (A,H). Cross-listed as AAS 235. Provides an introductory survey of the literature of people of African ancestry in the Americas. Acquaints students with major literary figures and significant historical periods. Discusses issues regarding the relationship between the writers and sociopolitical and cultural movements and questions concerning the socio-cultural function that the black writer serves for his/her community. 3 Cr. Every Semester.
ENL 237 Native-American Literature (A,H). Surveys Native American voices and visions on issues such as environment, sex roles, and the problems of mixed racial and ethnic people. Uses historical materials to define the issues, but with an emphasis on Native-American writings of the 20th century. 3 Cr.

ENL 301 Fiction Writer's Workshop (A). Prerequisite: ENL 210. Develops mastery of the materials and techniques of writing fiction. Requires students to objectively criticize their own work and the work of others. 3 Cr. Every Semester.

ENL 302 Poetry Writer's Workshop (A). Prerequisite: ENL 210. Examines the substances and processes of writing poetry through contemporary study and objective workshop criticism of student writing. 3 Cr. Every Semester.

ENL 303 Introduction to Literature Analysis (A). For English majors and prospective majors. Provides skills needed to understand literature in English. Includes close reading of selected texts and study of literary genres, critical terms, and the relationship between text and context. Provides practice in writing literary analyses. Emphasizes skills of generating, rewriting, and editing the documented critical essay and other nonfiction prose suitable to the needs and future careers of English majors. Majors and minors must earn a “C” or better. 3 Cr. Every Semester.

ENL 304 Creative Non-fiction Writer's Workshop (A). Prerequisites: ENL 210. Introduces students to the diverse subgenres of creative nonfiction, such as domestic memoir, travel writing, graphic novels, and critical reviews among others. Students develop a greater array of formal possibilities and areas of content in their own non-fiction writing. 3 Cr.

ENL 305 Advanced Composition (A). A workshop course. Covers analytical, persuasive, and research writing and introduces advanced writing techniques. Revision is expected. Encourages participants to think critically and solve writing problems creatively. 3 Cr. Every Semester.

ENL 308 Business Writing and Computers (B). Required for business majors. Allows students to expand word processing skills to prepare communications for the business world, including letters, memos, reports, and job applications. Emphasizes editing skills. Cannot be counted for the English major. 3 Cr. Every Semester.

ENL 311 Topics in Creative Writing (Flash Fiction) (A). This workshop course will offer close study of flash fiction, a subgenre defined less by length than by its effects and techniques, as well as practice in conceiving, drafting, critiquing, and revising students' own flash fiction. Text will include considerations of the form by David Jauss as well as exemplars by such established contemporary writers as Alice Walker, Gabriel Garcia Marquez, grace Paley, Ron Wallace, and others. 3 Cr.

ENL 312 Love, Death and Drama (A). Closely examines plays by men and women in England from 1585-1685 in cultural, historical and political contexts. Playwrights may include Marlow, Kyd, Beaumont, Fletcher, Jonson, Webster, Marston, Cary, Ford, Milton, Cavendish and Behm. 3 Cr.

ENL 313 Shakespeare to 1600 (A). Covers Shakespearean histories and early comedies. Explores the use of characters, plot, language, and dramatic convention. 3 Cr. Every Semester.

ENL 314 Shakespeare After 1600 (A). Covers Shakespearean tragedies and late comedies. Explores Renaissance conceptions of tragedy and comedy, as well as Shakespeare's characters, plots, language, and use of dramatic convention. 3 Cr. Every Semester.

ENL 315 Shakespeare (A). Shakespeare plays, relating them to their cultural, historical, and political contexts. Play titles vary depending on the instructor. 3 Cr. Every Semester.

ENL 316 Sex and Gender in the Renaissance (A). Focuses on matters of sex, sexuality and gender in the literature of the British Renaissance. Examines a variety of works from the 16th and 17th centuries, with attention to those by and about women; depictions of masculinity and femininity and the sex act; and treatments of same-sex friendships and sexual relationships. 3 Cr.

ENL 322 British Novel I (before 1800) (A). Provides a study of the rise and development of the novel as an art form in 18th-century England from the works of Daniel Defoe to the emergence of the Gothic novel. 3 Cr.

ENL 327 Loss of Innocence (A). Surveys American literary periods and literature within their historical, social, and cultural contexts. Focuses on the expansion of literary subjects, issues, and voices, particularly those of minorities. 3 Cr.

ENL 331 Modern American Drama (A). Studies selected plays by 20th-century American authors, using a variety of critical approaches. 3 Cr.

ENL 332 American Crime in Fiction and Film (A). Encourages students to understand the interconnections between the various content-streams (e.g.: vengeance, rogue religion, the isolated individual, gun culture) and the genres which specifically developed within the United States. 3 Cr.

ENL 333 American Crime in Fiction and Film (A). Encourages students to understand the interconnections between the various content-streams (e.g.: vengeance, rogue religion, the isolated individual, gun culture) and the genres which specifically developed within the United States. 3 Cr.

ENL 338 Lesbian and Gay Literature (A,D,W,Y). Cross-listed as WMS 338. Focuses on gay and lesbian authors; analyzes the intersections between race, class, gender and sexuality in contemporary...
literature. Requires oral presentations, intensive critical discussion and written responses to texts. 3 Cr.

**ENL 339 Writings By African-American Women (A,D,I,W,Y). Cross-listed as AAS 339, WMS 339.** Surveys literary representations in Afro-American fiction from the Harlem Renaissance to the present. Examines the degree to which sexism, cultural stereotypes and racism influence the portrayals and function of women in black American literature. Explores concerns with women’s issues and the emergence of the feminist movement in America. 3 Cr.

**ENL 350 World Literature I (A).** Explores literatures of the world from antiquity to the early modern world, with considerable attention to texts outside the Western tradition. 3 Cr.

**ENL 351 World Literature II (A).** Explores literatures of the world since 1700, with a focus on texts outside the British and American literary traditions. 3 Cr.

**ENL 352 Dutch Literature and Culture (A).** Dutch Literature and Culture will be given in conjunction with a month long excursion to the Netherlands. Classes will be held at Noordelijke Hoogeschool Leeuwaarden (Northern Teachers College) in the province of Friesland and will concern the different eras of literary accomplishment—from the Early Stages of 500-1550 to modern and contemporary novels and short stories. Students will also critique a number of Dutch films which are versions of required and recommended readings such as The Girl With a Pearl Earring, The Diary of Anne Frank and Soldier of Orange. Students will take part in excursions to various locations in NL which have become familiar with through their readings and films. This course fulfills the requirement of World Literature worth 3 credits. 3 Cr. Summer.

**ENL 353 The Bible and Modernism (A,I,O).** Provides an interdisciplinary investigation of controversies surrounding the Bible in the modern world. 3 Cr.

**ENL 354 Bible as Literature (A).** Provides an extensive examination of the design, moral, ethical and historical significance of the Bible, as well as its major literary forms, including short story, myth, proverbs, psalms, historical narrative and apocrypha. 3 Cr.

**ENL 355 Classical Mythology (A).** Studies Greek and Roman myths as background for Western culture, literature and fine arts. 3 Cr.

**ENL 356 World Mythologies (A).** Defines myths as prehistoric, preliterate narratives from an oral tradition and sees these narratives as fundamental in many ways, stemming from the earliest days of human thought, development and civilization. Considers myths from Africa, the Orient, American Indians, Europe and South America. Examines what myths say about death, creation, fertility, and the hero. 3 Cr.

**ENL 357 Postmodern Culture (A,I).** Explores the interrelationship between various aspects of contemporary culture, especially the cultural influences of technology and the mass media on literature, film, and other arts. Explores how social conditions, changing beliefs about human society, international capitalism, and recent technological changes have led to changes in culture, lifestyle, even thinking, that can best be described as postmodern. 3 Cr.

**ENL 358 African Novel (A,D,I). Cross-listed as AAS 358.** Examines major authors and movements in the development of the novel in Africa. Emphasizes the texts themselves, but with attention to their social and historical contexts. 3 Cr:

**ENL 360 European Popular Culture (A).** Examines what myths say about death, creation, fertility, and the hero. 3 Cr.

**ENL 369 Women Writers in American Literature (A,D,I,W,Y). Cross-listed as WMS 369.** Examines what myths say about death, creation, fertility, and the hero. 3 Cr.

**ENL 370 American Novel I (A).** A historical survey of the American novel to 1900, with readings from a number of significant novelists. 3 Cr.

**ENL 371 American Novel II (A).** Examines selected American novels after 1900 according to thematic, stylistic, and chronological patterns. 3 Cr.

**ENL 372 Women Writers in African Literature (A,D,I,W,Y). Cross-listed as WMS 372.** Examines writers, women of color, working- class women, and radical experimentalists. Provides students with an historical, social and cultural context in which to locate various works. 3 Cr.

**ENL 373 Great Black Migration (A).** Between 1910 and 1930, more than one million African Americans migrated from the rural South to the urban North. Since the publication of slave narratives, the migration of these African Americans remains a pervasive theme in American literary his-
tory. This course will examine the development of the African-American migration narrative in post-
civil War America, as well as how the Great Black
Migration evolved and informed various social
and political movements in this country. We will
examine literary, musical, artistic and journalistic
representations of this mass movement. 3 Cr.
ENL 388 Brockport Career Exploration Course
(B). Cross-listed as BCE 338. This course involves
students in internships that employ writing, ana-
lyzing, researching, explaining, problem solving
and/or other skills developed in English courses.
Students work closely with Career Services and a
faculty sponsor, as well as their internship direc-
tor. 3 Cr.
ENL 395 Introduction to Canadian Literature
(A). Covers the development of Canadian literature
in English from 1867 to the present. Emphasizes
20th-century writing throughout Canada, from
the Maritimes to British Columbia, and places it
within its cultural heritage, which often parallels
that of the US. 3 Cr.
Explores issues in contemporary poetic theory,
study of selected poets, and close readings of
texts. Intended for creative writers and serious
readers. 3 Cr.
ENL 403 The Writer's Craft (A). Allows students
to meet with the directors of the Writers Forum
and guest artists and critics to discuss contempo-
rary literature and the creative writing process.
Contact the department for names of guests set to
appear in the semester and other details. May be
repeated for credit. 3 Cr. Every Semester.
ENL 405 Creative Writing for Teachers (A).
Explores how to stimulate writing and creative
response to literature. Examines contemporary lit-
erature for models and requires students to develop
writing exercises and to produce and discuss indi-
vidual work. Reviews and analyzes current material
on the teaching of creative writing. 3 Cr.
ENL 410 Greek and Roman Poetry (A).
Exam-
ines classical Greek and/or Roman poetry, focusing
on either its narrative or lyric forms. Also examines
the later literary traditions to which Greek and
Roman poetry gave birth, with special attention
to medieval, Renaissance, and modern world
literatures. 3 Cr.
ENL 411 Chaucer and His Contemporaries
(A). Examines a variety of works by Chaucer.
Emphasizes The Canterbury Tales. 3 Cr.
ENL 412 Medieval British Literature (A).
Studies
medieval British literature in its principal forms:
lyric, drama, allegory, and romance; its antecedents
in Old English literature; its influence on 15th-
century writers; and its connections to European
and Middle Eastern literatures. 3 Cr.
ENL 416 The British Renaissance (A).
Provides
a study of selected poetry, fiction, criticism, and
philosophy by British writers, from More to
Milton. 3 Cr.
ENL 417 The Age of Dryden, Pope, and Johnson
(A). Covers selected works from British literature
written between 1660 and 1800, including samples
from Dryden, Congreve, Pope, Swift, Defoe and
Johnson. Examines some ways these writers resolve
the tensions created by the competing demands of
reason, tradition, and the imagination during this
period. 3 Cr.
ENL 418 Significant Themes in British Litera-
ture (A,D). Studies the relation of British literature
to Empire-building and Imperialism, with special
focus on texts relating to the “high imperialism”
of the late 19th century. 3 Cr.
ENL 419 English Romantic Writers (A). Covers
major authors of the Romantic period (from Blake
through Keats); examines significant figures in
Romantic literature (such as Byronic heroes and
Wordsworth’s wanderers); and assesses Romanti-
cism as a cultural phenomenon. 3 Cr.
ENL 420 Victorians and Others (A). Examines
contributions of the era, such as the writings of
Tennyson, Browning, Dickens and others from
1832 to World War I, to the development of British
literary thought and artistry. 3 Cr.
ENL 421 Seminar in British Writers (A). Provides
a study of significant authors treated singly or
in coherent combinations. Content varies, with
appropriate subtitles provided for the individual
course. May be repeated for credit with significant
change in focus. 3 Cr.
ENL 423 British Novel II (A). Surveys major
British novelists from the Victorian period to the
present day. Authors covered may include Dickens,
Eliot, Forster, Ishiguro, and McEwan. 3 Cr.
ENL 424 Modern British Literature (A). Studies
major British dramatists, poets, and novelists of
the 20th century. Usually includes Shaw, Woolf,
Lawrence, and Auden. 3 Cr.
ENL 425 Contemporary British Literature (A).
Provides a study of major British writers in the
later 20th and 21st centuries. Usually includes
Amis, Osborne, Pinter, Golding, Lessing, and
Ishiguro. 3 Cr.
ENL 426 Irish Writers (A). Covers major con-
tributions of Anglo-Irish authors to literature in
English, including selected works of Beckett, Joyce,
Synge, and Yeats. 3 Cr.
ENL 427 Women in the Novel (A,W,Y). Provides in-depth examination of select novels to consider their thematic forms and functions, their literary significance, and especially what they reveal about the roles of women and attitudes toward patriarchy. 3 Cr.

ENL 429 Roots of American Literature (A). Provides an intensive study of texts dealing with America between European contact and 1800. May include European fantasy writing, exploration and captivity narratives, Puritanism, texts of the American Revolution, and the origins of the American novel. May include representative authors such as John Smith, Bradstreet, Rowlandson, Occum, Winthrop, Franklin, Warren, and Brown. 3 Cr. Every Semester.

ENL 430 American Literature: the Romantic Era (A). An intensive study of the blossoming of American literature in the decades prior to the Civil War, the growth of individualism, and its impact on various groups through Transcendentalism, slave narratives and women’s novels. Features major authors such as Cooper, Dickinson, Melville and Stowe. 3 Cr.

ENL 431 Transcendental Movement (A). Provides an intensive study of the influential Transcendentalist cultural and intellectual movement and its theories of aesthetics, spirituality, politics, and culture. May include readings from Emerson, Thoreau, Fuller, Parker, Very, as well as important peripheral figures who were influenced by the movement such as Noyes, Garrison, Dickinson, and Stowe. 3 Cr.

ENL 432 American Realism (A). Examines American realism which, with its emphasis on the representation of everyday events and lives, chronicles the social fabric of late 19th- and early 20th-century America by tackling issues such as industrialization, race relations, women’s rights, immigration, and class struggle. May include writers such as James, Chesnutt, Harper, Far, Dreiser, DuBois, and Gilman. 3 Cr.

ENL 433 The Jazz Age to World War II (A). Study of selected American novelists and poets who deal with the cultural explosion of the period. May include Anderson, Hemingway, Fitzgerald, Faulkner, Steinbeck, Lewis, Eliot, Frost, and others. 3 Cr.

ENL 434 American Literature of the Cold War Era (A). Examines the major literary movements in post-World War II America, paying special attention to the relationship between political, economic, and cultural changes both inside and outside the United States, and American writing. May include writers such as Hersey, Okada, Friedan, Sontag, Mailer, and Ginsberg. 3 Cr.

ENL 435 Modern American Poetry (A). Provides an investigation into the formative period 1910-1945 of 20th-century American verse, emphasizing significant figures from Robinson, Lowell, and Frost, to Cummings, Stein, and Eliot. 3 Cr.

ENL 436 Postmodern American Poetry (A). Provides an investigation into American verse written after the mid-20th century, emphasizing figures such as Berryman and Lowell, as well as their contemporaries Plath and Sexton, and significant poets from more recent times. 3 Cr.

ENL 437 American Gothic (A). Starting with Poe, Brown and Hawthorne, the course traces the evolution of the Gothic to the present day. Includes other writers who have struggled to portray the power of darkness: Gilman, Faulkner, O’Connor, Oates, Koga, and Morrison. 3 Cr.

ENL 438 American Poetry: Bradstreet to Whitman (A). A survey of American verse from its beginnings to the late 19th century, emphasizing representative poets such as Bradstreet and Whitman. 3 Cr.

ENL 439 Asian-American Literature (A,D,I,W,Y). Explores Asian-American literature and culture both historically and thematically with an emphasis on the development of Asian-American literary voices and identities from the mid-20th century to the present. Includes major works of fiction, poetry, drama, prose, film, and critical and theoretical essays to facilitate discussion. 3 Cr.

ENL 440 Literature of the American Family (A,I). This course will focus on the family, family interaction, and family problems in modern American literature. Primary and secondary readings in sociology and history will be used to provide a critical perspective on this topic. 3 Cr.

ENL 441 American Literature: 19th Century Women’s Novel (A,W,Y). Cross-listed as WMS 441. Provides an intensive study of the novel as a form of women’s self-representation and cultural criticism. May include novels about family life, abolition and temperance, slave narratives; historical novels; and representations of urban and industrial experience. 3 Cr.

ENL 442 Topics in Women’s Literature (A,W,Y). Cross-listed as WMS 442. Provides advanced study of women in literature and women’s literature, focusing, for example, on some aspect of female lives, such as adolescence; on one or more female authors writing in a shared tradition, genre, or period; or on women writing on a common topic or from perspectives held in common. 3 Cr.

ENL 443 Contemporary American Poetry (A). Examines the unique character of poetry after World War II: aesthetic theory, significant themes, prominent contributors. Improves students’ critical
analytical skills via written assignments of varying character. 3 Cr.

ENL 445 American Modernism (A). Focuses upon writers of the first half of the 20th century who defined American modernism by consciously breaking away from artistic conventions of the 19th century through experimentation in language, form, style and a heightened awareness of writing itself. Writers may include Pound, Stein, Hemingway, Hurston, Hughes, and Faulkner. 3 Cr.

ENL 446 American Writers and Travel, 1870-1930 (A). Provides a study of significant American authors treated singly or in coherent combinations. Content varies, with appropriate subtitles provided. May be repeated for credit with significant change in focus. 3 Cr.

ENL 447 American War Literature (A). Focuses on literature about American experiences in several wars: the Civil War, World War I, World War II, and/or Vietnam. Examines the relationship between history, fiction, and experience as well as authoritative authority, and explores how the experience of war, at home and on the battlefront, changed the nature of American literature. 3 Cr.

ENL 450 Standard English and Its Varieties (A). Examines the development of Standard English and other varieties from a sociolinguistic, historical perspective. Provides a study of language acquisition, regional and social dialects, and the distinction between grammar and usage. Includes practice in and testing of contemporary usage. 3 Cr. Every Semester.

ENL 451 Linguistics (A). Prerequisite: Junior or senior status. Provides a study of phonology, morphology, syntax, semantics, and sociolinguistics. 3 Cr.

ENL 452 Old English (A). Focuses on forms of written English employed between 600-1100 AD, with the aim of reading substantial examples of Old English prose and verse in the original language. Readings may include selections from poems such as “Beowulf,” “Dream of the Rood” and “The Battle of Maldon,” as well as examples of laws, homilies and saints’ lives. 3 Cr.

ENL 455 Sociolinguistics (A). Prerequisite: Junior or senior status. Provides a study of language in social context. Analyzes problems in social dialects and communications, jargons, slang, bilingualism and language of social conflict. 3 Cr.

ENL 457 Women and Film (A,D,I,W,Y). Cross-listed as WMS 457. Focuses on films by women. Considers the following questions: Have women filmmakers depicted the world differently from dominant cinema? What possibilities exist for forms of “feminine” film discourse that are truly different from dominant film discourse? What has been the history of women filmmakers? How many of these women have indeed tried to speak a different “language”? 3 Cr.

ENL 458 Great American Film Actors: Selected Topics (A). Closely studies great actors of American film who have lent their unique talents to film tradition and analyzes the artistic, social, personal, and cultural aspects of these actors and their careers. Focus and actors selected may vary, but may not be repeated for credit. 3 Cr.

ENL 460 Great American Film Directors (A). Using various critical perspectives, provides an in-depth study of major films of selected American film directors --Hitchcock, Capra, Welles. Specific focus shown by subtitle. May be repeated for credit with significant change in focus. 3 Cr.

ENL 462 Selected Topics in Film (A). Explores significant themes and/or eras in film, for example: films of the 1950s, romantic couples, musicals, detective and western films, and film noir in cultural context. Specific topics shown by subtitle. May be repeated for credit with significant change in topic. 3 Cr.

ENL 463 Great International Film Directors (A). Using a variety of critical perspectives, provides an in-depth study of major films of selected international film directors. Normally focuses on two or three directors such as Fellini, Ingmar Bergman, Truffaut, Renoir, Eisenstein, Sagawa, and others. Specific focus shown by subtitle; may be repeated for credit with significant change in focus. 3 Cr.

ENL 464 The Film Star (A). Focuses on the contribution of the actor to the film, differences between acting for silent and for sound films, and differences in acting on stage and in film. Screens films and provides for discussion. 3 Cr.

ENL 465 American Film Comedy (A). Surveys the development of American comic style in film from the silent era to today. Requires screenings of films from Sennett’s “Keystone” slapstick to Allen’s cerebral comedy. Explores the function(s) of comedy, the theory of laughter, comic visions of America, and personal style vs. genre in comedy. 3 Cr.

ENL 466 Studies in Literary Modes (A). Provides a study of an important literary mode through reading, analysis, and creation of selected works within selected mode. 3 Cr.

ENL 467 Tragedy as A Genre (A). Investigates tragedy as both a literary genre and a way of interpreting the world. Considers both personal and cosmic aspects of tragedy in literary works from differing eras and cultures. 3 Cr.
ENL 469 American Environmental Literature (A). An interdisciplinary course that explores American environmental writing from both scientific and literary perspectives and investigates the relationship between natural science, natural history and environmental literature. Examines how subjective and objective investigations of the natural world enrich one another and lead to a more complete sense of place. Includes lectures, discussions, group presentations and field exercises emphasizing description, measurement and aesthetic response. 3 Cr.

ENL 470 Women's Popular Culture (A,D,I,W,Y). Cross-listed as WMS 470. Explores women's popular culture to engender a cultural analysis. Examines such questions as how women's popular culture responds to women's psychosocial needs and how it functions within the dominant culture. Examines samples of the fiction and films that represent 20th-century American women's popular culture. 3 Cr.

ENL 472 Critical Approaches to Literature (A). Analyzes literary texts in terms of form and content. Requires students to write papers of analysis from at least three literary perspectives, classify and describe perspectives of various critics, and define critical terms. 3 Cr. Every Semester.

ENL 474 Caribbean Literature (A,W,Y). Surveys 20th century literature from the Caribbean, including drama, poetry and narrative. Includes Anglophone writers as well as non-English works in translation. Examines literature in the context of historical and cultural issues such as the nature of Caribbean identity, the role of language, and the reconstruction of history. 3 Cr.

ENL 475 Postcolonial Literature (A,D,I). Surveys some of the most lively literature from areas of the world that were formerly European colonies: the Caribbean, Africa, and South Asia in particular. Introduces what is sometimes called the “post-Colonial condition,” exploring what it is and how writers have responded to it. 3 Cr.

ENL 476 Magical Realism (A,D). Introduces the important 20th-century literary movement known as magical realism. Examines its roots in Latin America as well as its adoption in other locations, with particular attention to the historical context in each case. 3 Cr.

ENL 477 Issues in Science Fiction (A,I). Covers significant developments in the history of speculative and science fiction. Explores major themes such as sex, science and prejudice. Includes representative authors such as Wells, Asimov, Heinlein and Le Guin. 3 Cr.

ENL 478 Seminar in World Literature (A,D,I). Provides a study of significant authors or topics in world literature (i.e., other than British/American). Content varies, with appropriate subtitles for each individual course. May be repeated for credit with significant change in topic and content. 3 Cr.

ENL 481 English Grammar (A). Surveys Prescriptive, Descriptive, Generative, and Contextual theories of grammar. Reviews the conventions of Standard Written English. Students analyze samples of their own writing to discover grammatical structures their personal styles favor, and they become aware of the variety of structural choices available to them as writers. 3 Cr. Every Semester.

ENL 482 Children's Literature (A). Explores the conventions of children's literature; development of genres of children's literature; and biographical, bibliographical and critical resources in the field. 3 Cr. Every Semester.

ENL 484 Young Adult Literature (A). Examines the needs of the young adult reader. Surveys genre literature as well as literature in content areas. 3 Cr. Every Semester.

ENL 491 Advanced Fiction Writers Workshop (A). Prerequisite: ENL 301 and instructor's permission. Focuses on the writing of fiction and the applied criticism of fiction. Requires students to bring manuscript to a polished state of form, style and content. May be repeated for credit. 3 Cr.

ENL 492 Advanced Poetry Writers Seminar (A). Prerequisite: ENL 302 and instructor's permission. Focuses on original poetry writing and applied criticism. Requires intensive critical discussion, revision, and some consideration of work by selected contemporaries. May be repeated for credit. 3 Cr.

ENL 493 The Creative Essay (A). Prerequisite: ENL 302 and instructor's permission. Primarily a writing course in which students “workshop” essays. Explores the historical evolution of the essay and its new forms. Requires students to read a variety of essays and create their own. May be repeated for credit. 3 Cr.

ENL 495 Literature of the Holocaust (A,I,W). Prerequisite: Instructor's permission. Provides for readings and discussions concerning Hitler's attempted destruction of the European Jews, both fiction and non-fiction, including the work of survivors and victims. Incorporates esthetic, moral, and political perspectives, with special emphasis on the relevance for our time. 3 Cr.

ENL 496 Sex and Censorship in Literature and the Media (A,I,W,Y). Cross-listed as WMS 496. Considers the expression of sexual themes--and censorship of them--in contemporary literature, film and media. Includes topics such as the erotic in art, definitions of pornography and obscenity, evolution of censorship standards and practices,
Environmental problems are among the most urgent issues facing our civilization. In order to manage Earth’s environment well, we must understand the processes that shape its surface; control the chemistry of the air, water and soil; and produce and maintain the biological and other resources upon which humans depend. We must also understand the interactions of animals, plants and other living organisms with their physical and chemical environments, or their ecology. Through a curriculum with a common core and a focused concentration, environmental science majors develop conceptual knowledge and technical skills to use the disciplines of biology, ecology, chemistry, and the earth sciences to understand and solve environmental problems. Six concentrations are offered in the environmental science major: aquatic ecology/biology, terrestrial ecology/biology, combined aquatic and terrestrial ecology/biology, wetland ecology, environmental chemical analysis, and earth science.

After declaring a major in environmental science with the department secretary in 105 Lennon Hall, (585) 395-5975, a faculty advisor in the selected concentration will be assigned.

Minors in environmental science and in environmental studies are offered for non-majors. Contact the department secretary in 105 Lennon Hall, (585) 395-5975, for information and for an appointment with the department chairperson to set up an individual course of study.

Students majoring in environmental science can achieve New York State Teacher Certification to teach biology, chemistry or earth science. After making the decision to pursue certification, see your advisor in the Department of Environmental Science and Biology immediately.
Major Requirements

The major requires a minimum of 58-70 credits balanced between required courses in the core curriculum (38 credits) and required, elective, or co-requisite courses in the area of concentration (24-36 credits).

Courses (required of all majors)

<table>
<thead>
<tr>
<th>Fall Semester Courses</th>
<th>Credits</th>
<th>Spring Semester Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV 202 Environmental Science</td>
<td>4</td>
<td>ENV 202 Environmental Science</td>
</tr>
<tr>
<td>ENV 452 Environmental Laws and Regulations</td>
<td>3</td>
<td>ENV 204 Biology of Organisms</td>
</tr>
<tr>
<td>CHM 205 College Chemistry I</td>
<td>4</td>
<td>ENV 303 Ecology</td>
</tr>
<tr>
<td>GEL 201 Physical Geology</td>
<td>4</td>
<td>CHM 206 College Chemistry II</td>
</tr>
<tr>
<td>MTH 201 Calculus I</td>
<td>4</td>
<td>MTH 201 Calculus I</td>
</tr>
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</table>

Concentration in Aquatic Ecology/Biology

Required:

- ENV 419 Limnology (Fall) 3
- ENV 421 Limnology Laboratory (Fall) 2

One of the following*:

- ENV 423 Pollution Biology (Odd spring) 3
- ENV 436 Water Quality Analysis (Spring) 4
- ENV 462 Aquatic Toxicology (Even spring) 4

One of the following*:

- ENV 483 Aquatic Invertebrates (Odd spring) 4
- ENV 484 Fish Ecology (Even spring) 3
- ENV 490 Fishery Techniques and Fish Identification (Odd fall) 2

Electives: 7-10 credits chosen by advisement from:

- ENV 319 Biological Oceanography (Irregularly offered) 3
- ENV 427 Animal Behavior (Even fall) 3
- ENV 435 Restoration Ecology (Odd spring) 3
- ENV 437 Biostatistics (Fall) 3
- ENV 439 Conservation Biology (Even fall) 3
- ENV 446 Wetland Ecology (Fall) 4
- ENV 448 Northern Wetlands (Even spring) 3
- ENV 457 Marine Biology-Bahamas (Fall) 3
- ENV 464 Aquaculture I (Odd fall) 4
- ENV 474 Aquaculture II (Even fall) 4
- ENV 476 Animal Ecophysiology (Odd fall) 3
- ENV 488 Environmental Impact Analysis (Even summer) 4-6
- ENV 498 Collaborative Research (Each semester) 1-3
- ESC 412 Hydrology (Odd fall) 4

Concentrations (Required or elective courses)

<table>
<thead>
<tr>
<th>Credit</th>
<th>Corequisite</th>
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<tbody>
<tr>
<td>20</td>
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<tr>
<td>20</td>
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</tr>
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<td>31</td>
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<tr>
<td>32</td>
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<td>29</td>
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<td>20</td>
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Total Concentration Credits: 20-32
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Offered</th>
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<tbody>
<tr>
<td>ESC 418</td>
<td>Watershed Sciences (Odd spring)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GEL 462</td>
<td>Groundwater (Odd spring)</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**Co-requisite course:**
- CHM 305 Organic Chemistry I (Fall) | 4 |

*Can take additional courses from these groups as electives.

### Concentration in Terrestrial Ecology

**One of the following**:  
- ENV 400 Plant Diversity (Odd fall) | 4 |
- ENV 405 Plant Ecology (Even fall) | 4 |

**One of the following**:  
- ENV 430 Ornithology (Even spring) | 4 |
- ENV 440 Herpetology (Odd spring) | 4 |
- ENV 459 Mammalogy (Odd fall) | 4 |

**Electives: 12 credits chosen by advisement from:**
- ENV 406 Wildlife Ecology (Even fall) | 4 |
- ENV 423 Pollution Biology (Odd spring) | 3 |
- ENV 427 Animal Behavior (Even fall) | 3 |
- ENV 435 Restoration Ecology (Odd spring) | 3 |
- ENV 437 Biostatistics (Fall) | 3 |
- ENV 439 Conservation Biology (Even fall) | 3 |
- ENV 444 Terrestrial Ecosystem Ecology (Even spring) | 3 |
- ENV 446 Wetland Ecology (Odd fall) | 4 |
- ENV 448 Northern Wetlands (Even spring) | 3 |
- ENV 476 Animal Ecophysiology (Odd fall) | 3 |
- ENV 477 Field Biology (Odd summer) | 4 |
- ENV 488 Environmental Impact Analysis (Even summer) | 4-6 |
- ENV 498 Collaborative Research (Each semester) | 1-3 |
- ESC 313 Environmental Climatology (Spring) | 3 |
- ESC 431 Environmental Applications of Geographic Information Systems (Spring) | 3 |
- ESC 455 Soils Science (Even fall) | 4 |

**Co-requisite course:**
- CHM 305 Organic Chemistry I (Fall) | 4 |

*Can take additional courses from these groups as electives.

### Combined Concentration in Aquatic and Terrestrial Ecology/Biology

**Required:**  
- ENV 419 Limnology (Fall) | 3 |
- ENV 421 Limnology Laboratory (Fall) | 2 |

**One of the following**:  
- ENV 423 Pollution Biology (Odd spring) | 3 |
- ENV 436 Water Quality Analysis (Spring) | 4 |
- ENV 462 Aquatic Toxicology (Even spring) | 4 |

**One of the following**:  
- ENV 483 Aquatic Invertebrates (Odd spring) | 4 |
- ENV 484 Fish Ecology (Even spring) | 3 |
- ENV 490 Fishery Techniques and Fish Identification (Odd fall) | 2 |

**One of the following**:  
- ENV 400 Plant Diversity (Odd fall) | 4 |
- ENV 405 Plant Ecology (Even fall) | 4 |
**Concentration in Wetland Ecology**

**Required: All of (22 Credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENV 400</td>
<td>Plant Diversity (Odd fall)</td>
<td>4</td>
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<tr>
<td>ENV 446</td>
<td>Wetland Ecology (Fall)</td>
<td>4</td>
</tr>
<tr>
<td>ENV 448</td>
<td>Northern Wetlands (Even spring)</td>
<td>3</td>
</tr>
<tr>
<td>ESC 412</td>
<td>Hydrology (Odd fall)</td>
<td>4</td>
</tr>
<tr>
<td>ESC 455</td>
<td>Soils Science (Fall)</td>
<td>3</td>
</tr>
<tr>
<td>CMH 305</td>
<td>Organic Chemistry I (Fall)</td>
<td>4</td>
</tr>
</tbody>
</table>

**One of the following*: (2-4 Credits)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV 406</td>
<td>Wildlife Ecology (Even fall)</td>
<td>4</td>
</tr>
<tr>
<td>ENV 483</td>
<td>Aquatic Invertebrates (Odd spring)</td>
<td>4</td>
</tr>
<tr>
<td>ENV 490</td>
<td>Fishery Techniques and Fish Identification (Odd fall)</td>
<td>2</td>
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</table>

**Electives: 6-8 Credits chosen by advisement from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV 405</td>
<td>Plant Ecology (Even fall)</td>
<td>4</td>
</tr>
<tr>
<td>ENV 419</td>
<td>Limnology (Fall)</td>
<td>3</td>
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<tr>
<td>ENV 448</td>
<td>Restoration Ecology (Even spring)</td>
<td>3</td>
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<tr>
<td>ENV 436</td>
<td>Water Quality Analysis (Spring)</td>
<td>4</td>
</tr>
<tr>
<td>ENV 437</td>
<td>Biostatistics (Fall)</td>
<td>3</td>
</tr>
<tr>
<td>ENV 439</td>
<td>Conservation Biology (Even fall)</td>
<td>3</td>
</tr>
<tr>
<td>ENV 440</td>
<td>Herpetology (Odd spring)</td>
<td>4</td>
</tr>
<tr>
<td>ENV 488</td>
<td>Environmental Impact Analysis (Even summer)</td>
<td>4-6</td>
</tr>
<tr>
<td>ESC 418</td>
<td>Watershed Science (Spring)</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Semester</td>
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<tr>
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<tr>
<td>ESC 431</td>
<td>Environmental GIS Applications</td>
<td>Spring</td>
</tr>
<tr>
<td>GEL 462</td>
<td>Groundwater</td>
<td>Odd spring</td>
</tr>
<tr>
<td>ENV 498</td>
<td>Collaborative Research</td>
<td>Every semester</td>
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</table>

**Total:** 32

*Can take additional courses from these groups as electives.

**Concentration in Environmental Chemical Analysis**

**Required:** 24 Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 301</td>
<td>Chemical Safety</td>
<td>Fall</td>
</tr>
<tr>
<td>CHM 305</td>
<td>Organic Chemistry I</td>
<td>Fall</td>
</tr>
<tr>
<td>CHM 306</td>
<td>Organic Chemistry II</td>
<td>Spring</td>
</tr>
<tr>
<td>CHM 457</td>
<td>Environmental Geochemistry</td>
<td>Even Spring</td>
</tr>
<tr>
<td>ENV 423</td>
<td>Biology of Pollution</td>
<td>Odd Spring</td>
</tr>
<tr>
<td>ENV 436</td>
<td>Water Quality Analysis</td>
<td>Spring</td>
</tr>
<tr>
<td>ENV 462</td>
<td>Aquatic Toxicology</td>
<td>Even Spring</td>
</tr>
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</table>

**Electives:** 5 or more credits chosen by advisement from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV 419</td>
<td>Limnology</td>
<td>Fall</td>
</tr>
<tr>
<td>ENV 421</td>
<td>Limnology Laboratory</td>
<td>Fall</td>
</tr>
<tr>
<td>ENV 436</td>
<td>Water Quality Analysis</td>
<td>Spring</td>
</tr>
<tr>
<td>ENV 437</td>
<td>Biostatistics</td>
<td>Fall</td>
</tr>
<tr>
<td>ENV 476</td>
<td>Animal Ecophysiology</td>
<td>Odd Fall</td>
</tr>
<tr>
<td>ENV 488</td>
<td>Environmental Impact Analysis</td>
<td>Even summer</td>
</tr>
<tr>
<td>ENV 498</td>
<td>Collaborative Research</td>
<td>Each semester</td>
</tr>
</tbody>
</table>

**Total:** 29

**Concentration in Earth Science**

**Twenty credits chosen by advisement:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV 419</td>
<td>Limnology</td>
<td>Fall</td>
</tr>
<tr>
<td>ENV 421</td>
<td>Limnology Laboratory</td>
<td>Fall</td>
</tr>
<tr>
<td>ENV 436</td>
<td>Water Quality Analysis</td>
<td>Spring</td>
</tr>
<tr>
<td>ENV 488</td>
<td>Environmental Impact Analysis</td>
<td>Even summer</td>
</tr>
<tr>
<td>ENV 498</td>
<td>Collaborative Research</td>
<td>Each semester</td>
</tr>
<tr>
<td>ESC 313</td>
<td>Environmental Climatology</td>
<td>Spring</td>
</tr>
<tr>
<td>ESC 314</td>
<td>Climatology Laboratory</td>
<td>Spring</td>
</tr>
<tr>
<td>ESC 325</td>
<td>Wetland Systems</td>
<td>Fall</td>
</tr>
<tr>
<td>ESC 350</td>
<td>Computational Methods</td>
<td>Each semester</td>
</tr>
<tr>
<td>ESC 412</td>
<td>Hydrology</td>
<td>Odd fall</td>
</tr>
<tr>
<td>ESC 418</td>
<td>Watershed Sciences</td>
<td>Odd spring</td>
</tr>
<tr>
<td>ESC 420</td>
<td>Atmospheric Sensing Methods</td>
<td>Even spring</td>
</tr>
<tr>
<td>ESC 421</td>
<td>Air Pollution Meteorology</td>
<td>Odd spring</td>
</tr>
<tr>
<td>ESC 431</td>
<td>Environmental Applications of Geographic Information Systems</td>
<td>Spring</td>
</tr>
<tr>
<td>ESC 455</td>
<td>Soils Science</td>
<td>Even fall</td>
</tr>
<tr>
<td>ESC 457</td>
<td>Marine Geology-Bahamas</td>
<td>Fall</td>
</tr>
<tr>
<td>ESC 464</td>
<td>Environmental Internship</td>
<td>Each semester</td>
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<tr>
<td>GEL 415</td>
<td>Geomorphology</td>
<td>Odd fall</td>
</tr>
<tr>
<td>GEL 457</td>
<td>Geochemistry</td>
<td>Even spring</td>
</tr>
<tr>
<td>GEL 462</td>
<td>Groundwater</td>
<td>Odd spring</td>
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**Corequisite: choose one of:**

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<thead>
<tr>
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<tbody>
<tr>
<td>PHS 205</td>
<td>Introduction to Physics</td>
<td>Fall</td>
</tr>
<tr>
<td>PHS 235</td>
<td>Physics 1</td>
<td>Fall</td>
</tr>
<tr>
<td>CHM 305</td>
<td>Organic Chemistry I</td>
<td>Fall</td>
</tr>
</tbody>
</table>
Environmental Minors—Environmental Science/Environmental Studies
The environmental science minor (18 credits) prepares students for postgraduate education or employment in environmentally related fields. To ensure maximum breadth and depth of training, the schedule of elective courses for the minor in environmental science must be in disciplines other than the student’s own major and be formally developed with the department chairperson.

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENV 202</td>
<td>Environmental Science</td>
<td>4</td>
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<tr>
<td>ENV 303</td>
<td>Ecology</td>
<td>4</td>
</tr>
<tr>
<td>ENV 452</td>
<td>Environmental Laws and Regulations</td>
<td>3</td>
</tr>
</tbody>
</table>

300 and 400-level ENV electives by advisement (7 credits minimum)

The environmental studies minor (18 credits) offers students a variety of scientific, social, economic, political, and literary perspectives on environmental issues. Gaining these perspectives will help students become environmentally literate citizens and employees.

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENV 202</td>
<td>Environmental Science</td>
<td>4</td>
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<tr>
<td>ENV 303</td>
<td>Ecology</td>
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</tr>
<tr>
<td>ENV 452</td>
<td>Environmental Laws and Regulations</td>
<td>3</td>
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</table>

Elective courses by advisement (7 credits minimum):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ANT 316</td>
<td>Food and Culture</td>
<td>3</td>
</tr>
<tr>
<td>ANT 323</td>
<td>Anthropological Perspectives on Global Issues</td>
<td>3</td>
</tr>
<tr>
<td>ANT 325</td>
<td>Indigenous Peoples and Globalization</td>
<td>3</td>
</tr>
<tr>
<td>CHM 372</td>
<td>Environmental Issues</td>
<td>3</td>
</tr>
<tr>
<td>ENV 469</td>
<td>American Literature &amp; Environmental Imagination</td>
<td>3</td>
</tr>
<tr>
<td>ESC 364</td>
<td>Water Resource Issues</td>
<td>3</td>
</tr>
<tr>
<td>GEL 362</td>
<td>Energy &amp; Mineral Resources Issues</td>
<td>3</td>
</tr>
<tr>
<td>HLS 303</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>HST 302</td>
<td>History of Science &amp; Technology in America</td>
<td>3</td>
</tr>
<tr>
<td>HST 407</td>
<td>American Environmental History</td>
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<tr>
<td>PLS 338</td>
<td>Global Issues</td>
<td>3</td>
</tr>
<tr>
<td>SOC 306</td>
<td>Development and Globalization</td>
<td>3</td>
</tr>
<tr>
<td>SOC 495</td>
<td>Environmental Sociology</td>
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Department of Environmental Science and Biology Courses

ENV 201 Environmental Science (A,N,Y). Non-majors only. Environmental science is an interdisciplinary study combining ideas and information from the natural and social sciences. The eight integrated themes of lecture and discussion are biodiversity, sustainability, connections in nature, pollution and its prevention, population growth, energy consumption and efficiency, solutions to environmental problems, and the importance of individuals changing their lifestyles and working with others to bring about environmental change.

3 Cr. Every Semester.

ENV 202 Environmental Science (A,L,Y). Required for majors. Open to non-majors. Environmental Science is an interdisciplinary study combining ideas and information from the natural and social sciences. The eight integrated themes of lecture and discussion are biodiversity, sustainability, connections in nature, pollution and its prevention, population growth, energy consumption and efficiency, solutions to environmental problems, and the importance of individuals changing their lifestyles and working with others to bring about environmental change. Laboratory and field activities emphasize hands-on applica-
tions of environmental science methods, problem solving, and proper writing of laboratory reports. 4 Cr. Every Semester.

ENV 203 Biology of Organisms (A,N). Explores basic concepts in the biological sciences from a whole organism (animals and plants) and environmental science perspective. The unifying theme for the course is evolution, and T. H. Dobzhansky's dictum that "Nothing in biology is understandable except in the light of evolution." Topics include the scientific method, molecular and population genetics, fundamentals of cell biology, diversity of life, and evolution and natural selection. 3 Cr. Spring.

ENV 204 Biology of Organisms (A,L). Required for majors. Open to non-majors. Explores basic concepts in the biological sciences from a whole organism (animals and plants) and environmental science perspective. The unifying theme for the course is evolution, and T. H. Dobzhansky's dictum that "Nothing in biology is understandable except in the light of evolution." Topics covered in lectures and laboratories include scientific method, molecular and population genetics, cell biology, diversity of life, and evolution and natural selection. 4 Cr. Spring.

ENV 303 Ecology (A,Y). Cross-listed as BIO 303. Prerequisites: ENV 202 or ENV 204. Required for majors, open to non-majors. Ecology addresses interrelationships among organisms and the physical environment. Considers energy flow, nutrient cycling, population and community dynamics, principles of animal behavior, and natural history in lecture, laboratory and field studies. 4 Cr. Spring.

ENV 304 Ecology Laboratory (A). Cross-listed as ESC 304. Prerequisite: ENV 303. Required for majors, open to non-majors. Includes field exercises on lakes, using department equipment and computer modeling. Required for students interested in oceanography and marine biology. 2 Cr. Fall.

ENV 305 Plant Ecology (A). Prerequisite: ENV 303. Introduction to the relationships among plants as well as with the environment including physiological ecology and describing the plant environment; population ecology and interactions between plants and other organisms; and community ecology including plant diversity and temporal dynamics. Field exercises explore local plant communities using experimental and quantitative techniques. Students analyze and discuss current readings in plant ecology. 4 Cr. Even Fall.

ENV 306 Wildlife Ecology (A,Y). Prerequisite: ENV 303. Introduction to the scientific study of wildlife biology. Lecture topics include population ecology, behavior, nutrition, disease, habitat management, predator prey systems, economics, and the human dimensions of wildlife management. Laboratories and field work include radio telemetry, census methods, aging white-tailed deer, and computer modeling. 4 Cr. Even Fall.

ENV 319 Biological Oceanography (A). Cross-listed as ESC 319. Review of the oceans' physical, geological and chemical properties followed by study of the classification, biology and life history of marine animals and plants. Concludes with ecology of selected marine ecosystems such as intertidal, deep sea and coral reef. 3 Cr.

ENV 400 Plant Diversity (A). Prerequisite: ENV 303. Introduction to the diversity of plants from an evolutionary perspective to taxonomic and botanical characteristics. Laboratory and field work surveys plant structures and principles of plant classifications and identification from the cellular to organisal level. Projects include plant collection and preservation, plant propagation, plant reproduction, and review and presentation of botanical literature. 4 Cr. Odd Fall.

ENV 405 Plant Ecology (A). Prerequisite: ENV 303. Introduction to the relationships among plants as well as with the environment including physiological ecology and describing the plant environment; population ecology and interactions between plants and other organisms; and community ecology including plant diversity and temporal dynamics. Field exercises explore local plant communities using experimental and quantitative techniques. Students analyze and discuss current readings in plant ecology. 4 Cr. Even Fall.

ENV 406 Wildlife Ecology (A,Y). Prerequisite: ENV 303. Introduction to the scientific study of wildlife biology. Lecture topics include population ecology, behavior, nutrition, disease, habitat management, predator prey systems, economics, and the human dimensions of wildlife management. Laboratories and field work include radio telemetry, census methods, aging white-tailed deer, and computer modeling. 4 Cr. Even Fall.

ENV 413 Topics in Plant Biology (A). Students with a substantial background in plant biology or ecology review recent scientific literature while addressing selected topics in plant biology, ecology or systematics. 3 Cr.

ENV 419 Limnology (A). Prerequisite: ENV 303. Introduces students to the physical, chemical and biological characteristics of lakes and streams. Topics include top-down: bottom-up control of food webs, eutrophication, nutrient cycling, acid precipitation effects on lakes, paleolimnology, etc. Recommended for students interested in oceanography and marine biology. Required for students in the aquatic ecology track of the environmental science major. ENV 421 is the complementary laboratory. 3 Cr.

ENV 421 Limnology Laboratory (A). Pre-requisite: ENV 303. Introduces students to the laboratory and field methods of limnology. Topics include sampling and identification of selected aquatic organisms, chemical analysis of water, and operation of physical and chemical sampling gear. Includes field exercises on lakes, using department vessels, and streams. Recommended for students interested in oceanography and marine biology. Required for students in the aquatic ecology track of the environmental science major. ENV 419 is the complementary lecture course. 2 Cr. Fall.

ENV 423 Biology of Pollution (A,Y). Prerequisite: ENV 303. Introduction to the chemistry and biology of pollution. Primary focus on water pollution problems and effects of pollutants on organisms at the molecular, cellular, physiological and behavioral levels, plus effects on populations, communities and ecosystems. Overview of toxicity testing techniques and data analysis. 3 Cr. Odd Spring.

ENV 427 Animal Behavior (A). Prerequisite: ENV 303. Introduction to the science of animal behavior. Explores the behavior of animals in relation to adaptations and phylogenetic history. Topics include methods of studying behavior, the effects
of genes and environment on behavior, relationships between neural and endocrine function and behavior, foraging strategies, mating strategies and systems, and social systems. 3 Cr. Even Fall

ENV 430 Ornithology (A). Prerequisite: ENV 303. Introduction to the scientific study of birds. Explores their form, function, ecology, and evolution. Topics include anatomy, physiology, origins and biophysics of flight, migration and annual cycle, mating systems, and population and community ecology of birds. Includes lab and field study of anatomy and flight, identification techniques, census methods, and trapping and banding. 4 Cr. Even Fall

ENV 435 Northern Wetlands (A). Prerequisite: ENV 446. Introduction to wetlands of the northern United States – peatlands and Great Lakes coastal marshes. Wetland development will be addressed starting with underlying geology and hydrology, then proceeding to biogeochemistry and development of plant communities and faunal habitats. Human impacts on these wetland types will be assessed, along with potential means for preventing degradation and restoring wetland functions. 3 Cr. Even Spring

ENV 436 Water Quality Analysis (A). Prerequisite: CHM 206. Introduces standard methods and analytical techniques associated with environmental chemistry. Students gain experience, including set up and trouble shooting, with UV-V spectrophotometry, wet chemical techniques by autoanalyzer, fluorometry, gas chromatography and atomic absorption spectrophotometry, by analyzing unknowns. Although the medium for analysis is water, methods are applicable to air samples, tissues and soils. 4 Cr. Spring.

ENV 437 Biostatistics (A). Prerequisite: MTH 121 or higher. Introduction to statistical analysis including descriptive statistics, test selection (including t-tests, regression, ANOVA, and nonparametric alternatives), calculation, interpretation, hypothesis formation and testing. Consideration is given to experimental design and appropriate evaluation of statistical application and interpretation. 3 Cr. Fall.

ENV 439 Conservation Biology (A). Prerequisite: ENV 303. Introduction to the scientific study of conservation biology. Examines current theories and data from evolutionary biology, ecology, and genetics as they relate to the conservation of biological diversity. Topics include causes of extinction, habitat loss and fragmentation, design of nature reserves, landscape ecology, application of basic principles of population biology to species conservation, and restoration ecology. 3 Cr. Even Fall.

ENV 440 Herpetology (A). Prerequisite: ENV 303. Introduction to the scientific study of reptiles and amphibians. Explores their form, function, ecology, and evolution. Topics include anatomy, physiology, mating systems, population and community ecology of herpetofauna, and their conservation biology. Includes lab and field study of identification techniques and capture and census methods. 4 Cr. Odd Spring.

ENV 444 Terrestrial Ecosystem Ecology (A). Prerequisite: ENV 303. Introduction to the major terrestrial ecosystems of the world and the stresses they face due to global environmental change such as rising atmospheric carbon dioxide levels, global warming, declining biodiversity, invasive species and elevated nitrogen deposition. Systems are compared with respect to their major characteristics, including vegetation, energy flow, and nutrient cycling and inputs. 3 Cr. Even Spring.

ENV 446 Wetland Ecology (A). Prerequisite: ENV 303. Introduction to wetland science, including wetland types, functions, values, hydrology, biogeochemistry, development, succession, and plant and animal communities. Laboratory exercises consist of field trips to local wetlands of different types, field sampling experiences, practice in wetland delineation, and lab experiments. Directed toward practical application of knowledge gained and concludes with problems related to wetland management and restoration. 4 Cr. Fall.

ENV 448 Restoration Ecology (A). Prerequisite: ENV 303. Introduction to restoration of terrestrial, wetland, and aquatic ecosystems to be addressed by focusing on regulatory constraints, site characterization/evaluation, conceiving and designing restoration projects that fit within the surrounding landscape, monitoring requirements, control of invasive species, and adaptive management. Students working in groups will develop conceptual restoration projects of their own choosing. 3 Cr. Odd Spring.

ENV 452 Environmental Laws and Regulations (A). Required for majors, open to non-majors. Introduction to key federal and state environmental laws, how branches of government interact to enforce environmental laws and regulations, and the roles scientists and lawyers play in resolving environmental problems. 3 Cr. Fall.

ENV 457 Marine Biology-Bahamas (A). Cross-listed as ESC 457. Prerequisite: One laboratory science course. Prepare in the fall semester for a two-week January intersession field experience in coral reef biology and geology at San Salvador island in the Bahamas. Study identification, behavior, and ecology of marine organisms in five habitats associated with coral reefs. Learn how to prepare a scientific field notebook and to design,
Introduction to the business aspects of...
ENV 495 Topics in Environmental Science (A). Introduces a special field of study in the environmental sciences not offered in the regular curriculum. Details reflect student demand, needs, topics of interest, and instructor availability. 3-4 Cr. By Arrangement.

ENV 497 Undergraduate Internship. Designed for the student who wishes to gain experience working with an environmental organization in the public or private sector (e.g., industry, government, environmental organizations). A total of three credits from ENV 497, ENV 498 (Collaborative Research) and ENV 499 (Independent Study) combined can be applied toward the environmental science major. 1-3 Cr.

ENV 498 Collaborative Research (A). In collaboration with a faculty mentor, the student designs, conducts and prepares a scientific report on a research project in the field or laboratory. A total of three credits from ENV 498 and ENV 499 (Independent Study) combined can be applied toward the Environmental Science major. 1-3 Cr. By Arrangement.

ENV 499 Independent Study (A). In collaboration with a faculty mentor, the student reviews literature and prepares a report on a topic of interest in the environmental sciences. A total of three credits from ENV 497 (Undergraduate Internship) and ENV 498 (Collaborative Research) combined can be applied toward the Environmental Science major. 1-3 Cr. By Arrangement.