Engineering

College of Engineering

125. Orientation to Engineering Careers  
Winter. 2(2-0)  
Engineering careers, history and philosophy of engineering profession, present and future challenges, industrial job functions, employment trends.

160. Engineering Communications  
Fall, Winter, Spring. 4(1-6) MTH 108 or 111 concurrently.  
Engineering graphics, a means used by engineers to communicate their ideas to others. Freehand sketching, descriptive geometry, graphical, numerical and computer problem solutions.

161. Mechanical Drawing  
Fall, Winter, Spring. 2(0-4)  
Lettering and use of care of instruments. Orthographic projection, working drawings, machine sketching and isometric drawing.

162. Mechanical Drawing  
Fall, Winter, Spring. 2(0-4) 160 or 161.  
Continuation of 161 with emphasis on frehand lettering and sketching, advanced working drawings.

200. Technology and Society  
Winter. 3(3-0) One term of American Thought and Language. Interdepartmental with the Department of Natural Science. An attempt to describe and analyze portions of current technology and its desired and undesired consequences; an exploration of avenues for assessing such consequences for future technologies.

IDC. Introduction to Environmental Systems  
For course description, see Interdisciplinary Courses.

201. Introduction to Engineering Mechanics  
Winter. 4(4-0) PHY 237. Interdepartmental with and administered by the Department of Metallurgy, Mechanics and Materials Science. Laws of mechanics governing the behavior of rigid and deformable bodies emphasizing how these laws influence engineering design. Extensive use of demonstrations.

360. Technology and Utilization of Energy  
Winter. 3(3-0) Initial course in any sequence of courses in the Department of Natural Science. Interdepartmental with and administered by the Department of Mechanical Engineering. Problems of energy technology and its impact: energy sources, conversion, waste and environmental effects, future outlook for mankind.

322. Interior Lighting Design  
Fall, Spring. 3(3-2) REN 213, approval of department. Interdepartmental with and administered by the Department of Human Environment and Design. The basic principles and practices of interior design lighting, light control, distribution, quality and quantity of light as it affects man's near environment.

364. Architectural Drafting II  
Winter. 3(0-8) 257. Functional and standard procedure in the layout of floor plans in traditional and modern houses. Rendered plot plan and required details.

365. House Planning  
Fall, Winter, Spring. 3(1-4)  
Elementary house architecture. Drawing plans from sketches. Kitchen planning, house styles, elements of design, financing, heating, lighting.

366. Architectural Perspective Drawing  
Fall. 3(0-6) Any engineering graphics course. One-point and two-point perspective, revolved plan and measuring line methods. Pencil rendering, problems in shade and shadows. House model to scale, optional.

390. Value Engineering  
Fall, Winter. 4(3-2) EGE 580.  
The basis of value engineering is function, value, and a group of special techniques developed to aid in isolating and identifying problems created by our complex society and technology.

401. Technology Assessment  
Spring. 3(3-0)  
Seniors or approval of department. Interdepartmental with the Department of Natural Science. Sociotechnical evaluation of impact of proposed technologies on economic, political, and cultural aspects of society. Identification of technical strategies and social goals. Techniques of assessment.

410. Systems Methodology  
Winter. 3(3-0) IDC 201, MTH 113, CPS 110 or 120. Interdepartmental with and administered by Systems Science. The systems approach in multidisciplinary large scale problem solving. The development of useful systems analysis tools; systems design; feasibility study; computer simulation for feasibility evaluation.

411. Systems Project  
Spring. 2(3-0) 410. Interdepartmental with and administered by Systems Science. Completion of a systems study initiated in 410. The project may involve the design of hardware, simulation of a solution to an interdisciplinary problem, or development of a solution concept.
Descriptions — English of Courses

102. Writing and Composing Fall, Winter. 3(3-0) 101; Arts and Letters 300H. Honors Work
Freshmen only.
A continuation of 101 that develops the emphases of 101 and encourages students to write in more public and objective forms—narrative, a continuation of phases of personal narrative and description, the essay, drama, poetry, and personal functions of literature, and the aims and process of literary study, the cultural differentials applicable to major or creative dramatics. A continuation of artistic problems met and solved by these forms.

204. Forms of Literature: Drama Fall, Winter, Spring. 3(3-0) Not applicable to major or minor requirements. A study of a selected plays illustrating the powers of England’s greatest writer.

208. Forms of Literature: Poetry Fall, Winter, Spring. 3(3-0) Open to Freshmen. Major forms of poetry, designed to reveal artistic problems met and solved by these forms.

214. Composition for Secondary English Teachers Fall, Winter, Spring. 4(3-4) Sophomores, Ed. Education majors or written approval of department. Writing practice in various modes such as personal narrative and description, the familiar essay, the expository essay, poetry, and fiction. Exercises in creative drama. Discussion of the process of composing and the teaching of oral and written compositions in junior and senior high schools. Will participate in field experience.

220. English from Greek and Latin Roots Fall. 3(3-0) Interdepartmental with and administered by Classical Languages. Prefixes, roots, suffixes derived from Greek and Latin word elements used in formation of English words. Useful for improving vocabulary and spelling.

228A. Fiction Writing Fall, Winter, Spring. 4(4-0) Written approval of instructor.
The writing of short fiction. Classes and individual conferences. Approval to enroll requires a conference with the instructor and will usually be on the basis of manuscripts submitted to him.

225B. Fiction Writing Fall, Winter, Spring. 4(4-0) Written approval of instructor.
The writing of fiction. Classes and individual conferences. Approval to enroll requires a conference with the instructor and will usually be on the basis of manuscripts submitted to him.

230. Non-fictional Imaginative Prose Writing Fall, Winter, Spring. 4(4-0) Written approval of instructor.
The writing of biography, autobiography, and personal essays. Classes and individual conferences.

241. Introduction to Popular Culture Fall, Winter, Spring. 3(3-0) Freshmen or Sophomores.
Generic and thematic study of the arts and artifacts of popular culture with particular emphasis on writing about the popular culture of contemporary American society.

250. Major Themes in English and American Literature Fall, Winter, Spring, Summer. 3(3-0) May re-enroll for a maximum of 6 credits. Freshmen or Sophomores.
Study of a particular genre of popular literature (e.g., science fiction, western, gothic) through reading, discussion, and writing, and with attention to the genre’s development in media other than print.

300B. Advanced Poetry Writing Fall, Winter, Spring, Summer. 4(4-0) May re-enroll in 300A and/or 300B for a maximum of 12 credits. 229 and written approval of department.
Advanced work in the writing of poetry. Classes and individual conferences. Approval to enroll requires a conference with the instructor and will usually be on the basis of manuscripts submitted to him.

300C. Playwriting Winter, Spring. 4(4-0) May re-enroll for a maximum of 8 credits. Written approval of instructor.
Basic elements of playwriting: dramatic action, exposition, plotting, characterization, dialogue, mood, and visual effects. Class work will also include discussion of plays.

311. Scientific Writing Winter, Spring. 3(3-0) Science students or students with considerable background in the natural sciences.
Writing of papers, theses, and essays.

315. World Literature in English Fall
Freshmen or Sophomores.
Representative works, not from England or the United States, which were written originally in English, especially the English literature of present or former British Commonwealth nations, and nations from the Middle East and Africa.
318. African Literature in English
Winter, Spring. 3(3-0) HST 394 or
HUM 295 or IDC 390 recommended.
Contemporary African literature written in
English, including novels by Soyinka, Achebe,
Ngugi, Armah, La Guma, and Ekwensi; plays
and poetry by Clark, Hutchison, Nkosi, Hen­
shaw, Okara, Awoonor, Okigbo, and others.

340. Studies in Popular Culture
Fall, Winter, Spring. 3(3-0) May
re-enroll for a maximum of 9 credits. Majors:
205; others: 6 credits of literature.
Popular Cultures of the United States and
England from the 19th Century to the present.

342. Women and Literature
Fall, Winter, Spring. 3(3-0) Third
term ATL course numbered 123 or above or
ENG 102. The feminine sensibility as revealed in literary
themes and characterizations, through a study of
poetry and fiction written by women authors.

345. Classic Myths and Literature
Fall, Winter, Spring. 3(3-0) Greek myths that have been wrought
into poetry, fiction, drama, painting, sculpture, and music.

346. Literary Interpretation of the Bible
Fall, Winter, Spring. 3(3-0)
Literary study of the Old and New Testaments,
with emphasis upon the ideas and events which figure
prominently in English and American literature.

347. Literature and Film
Fall, Winter, Spring. 3(3-0) 208 or
211. Introduction to the relationship between film
and literature through study of themes, style, and
structure in selected film masterpieces from
different periods and cultures.

351. English Literature I
Fall. 4(4-0)
Survey of English literature to Milton. Major
representative writers and literary forms of the
specified period.

352. English Literature II
Winter. 4(4-0)
Survey of English literature, Milton to Blake.
Major representative writers and literary forms
of the specified period.

353. English Literature III
Spring. 4(4-0)
Survey of English literature, Blake to Hardy.
Major representative writers and literary forms
of the specified period.

357. Regional American Literature
Fall, Winter, Spring. 3(3-0)
Representative works of a particular geographi­
cal region as expressions of its distinctive cultural,
historical, and literary characteristics, e.g., in a given term, the
Middle West, South, New England, or Far West.

376. Canadian Literature and Culture
Spring. 4(4-0) May re-enroll for a
maximum of 8 credits.
Canadian literature and culture in bicultural,
historical and contemporary contexts.

377. Jewish-American Literature
Fall. 3(3-0)
The Jewish-American experience as reflected in
fiction, drama, poetry, essay, autobiography,
film.

380. Masterpieces of American Literature
Fall, Winter, Spring, Summer. 3(3-0)
Not applicable to major or minor requirements.
Selected masterpieces of American literature.

381. Masterpieces of English Literature
Fall, Winter, Spring, Summer. 3
credits. Not applicable to major or minor
requirements.
Selected masterpieces of English literature.

382. Masterpieces of Contemporary Literature
Fall, Winter, Spring, Summer. 3(3-0)
Not applicable to major or minor requirements.
Selected masterpieces of contemporary literature.

389. Perspectives on Literature
Fall, Winter, Spring, Summer. 4(4-0)
May re-enroll for a maximum of 12 credits.
A rich variety of perspectives on literature for
majors and non-majors. Approach and content
differs with each section.

400. Tutorial
Fall, Winter, Spring, Summer. 1 to 5
credits. May re-enroll for a maximum of 10
credits. Majors: approval of department.
Reading, discussion, and writing under the guid­
ance of a faculty member.

400H. Honors Work
Fall, Winter, Spring. Variable credit.
Open to particularly able students. Consists of
individually supervised study of a phase of
literary history.

401. Introduction to English Language Studies
Fall, Winter, Spring. 4(4-0)
The English language, including such topics as
social and regional dialects, sounds, grammar,
usage, psycholinguistics and semantics. Atten­
tion is given to practical applications.

402. Modern English Grammar
Winter, Spring. 4(4-0) 401.
English morphology and syntax, incorporating
insights from current linguistic theory and
practice.

403. The Development of Modern English
Winter. Summer of even-numbered
years. 4(4-0)
Historical development of the language; native
and foreign elements; changes in inflections,
pronunciation, vocabulary, meaning.

404. American English
Fall. 4(4-0)
Characteristic American dialects, standard and
non-standard, with analysis of usage and explana­
tions of origins and differences.

406. Comparative Linguistics
Spring. 4(4-0) 402, 403; 2 college
years of a foreign language or approval of de­
partment.
Techniques for the scientific comparison of rel­
dated languages. The comparative method and
the results of its application to the Indo-European
languages.

407. Methods of Teaching English
as a Second Language
Fall, Winter, Spring. 4(4-0) 401 or 402 or approval of department.
Survey and demonstration of theories, methods
and techniques for teaching English, both here
and abroad, to school children and adults
who are not native speakers of English.

408A. Problems in the Teaching of Reading
Fall, Winter, Spring. 5(3-5) 301 or
302.
Instruction and field experience in the teaching
of reading for prospective English teachers.

408B. Problems in the Teaching of Reading
Fall, Winter, Spring. 4(2-4) 408B.
Instruction and independent work on the teaching
and learning of reading with strong empha­
sis on field experience.

409. Teaching Competencies in English
Fall, Winter, Spring, Summer. 4(4-0)
214, 301, or 408A or ED 317D. ENG 309
concurrently.
Practicum in the development of teaching com­
petencies in the fundamentals of reading and
writing within a bicultural English curriculum.
Analysis of accountability models and assess­
ment instruments in English.

410. Chaucer
Fall, Winter, Spring. 4(4-0)
Majors: 205; others: 6 credits of literature.
Chaucer's poetry, especially The Canterbury Tales. Read in Middle English.

411. Spenser
Winter. 4(4-0) Majors: 205; others:
6 credits of literature.
A representative selection of Spenser's poetry
with special emphasis on The Faerie Queene.

412. Milton
Fall, Winter, Spring. 4(4-0)
Majors: 205; others: 6 credits of literature.
Milton's prose and poetry, especially Paradise Lost.

417. Scandinavian Contributions to Literature
Tradition
Fall. 3(3-0) Approval of department.
Interdepartmental with the departments of
German and Russian and Romance and Classical
Languages and administered by the Depart­
ment of German and Russian.
Development and influence of the idea, forms
and motifs of the Scandinavian literatures in the
literatures of the world.

418. Scandinavian Contributions to Literary Tradition
Winter. 3(3-0) Approval of depart­
ment. Interdepartmental with the departments of
German and Russian and Romance and Classical
Languages and administered by the Depart­
ment of German and Russian.
Continuation of 417.
421. Shakespeare
Fall, Winter, Spring, Summer. 4(4-0)
Majors: 208; others: 6 credits of literature.

422. Shakespeare
Fall, Winter, Spring, Summer. 4(4-0)
Advanced study of several representative plays exclusive of those taught in 421.

424. Conference Course in Advanced Writing
Fall, Winter, Spring, Summer. 4 credits. Written approval of department.
Intended for the student ready to pursue an advanced project in writing. Individual conferences. Approval to enroll requires a conference with the instructor and will usually be on the basis of manuscripts submitted to him. Prior course work in writing will normally be expected.

426A. Comparative Drama
Fall, Spring. 3(3-0) Majors: 208; others: 6 credits of literature.
Studies in the development of drama: classical and medieval.

426B. Comparative Drama
Winter. 3(3-0) Majors: 208; others: 6 credits of literature.
Studies in the development of drama: Renaissance and seventeenth century.

426C. Comparative Drama
Spring. 3(3-0) Majors: 208; others: 6 credits of literature.

426D. Comparative Drama
Fall, Spring. 3(3-0) Majors: 208; others: 6 credits of literature.
The development of drama: Ibsen to World War II.

426E. Comparative Drama
Spring, Summer. 3(3-0) Majors: 208; others: 6 credits of literature.
The development of drama: World War II to the present.

436. Comparative Fiction
Fall, Winter, Spring. 3(3-0) May re-enroll for a maximum of 9 credits. Majors: 208; others: 6 credits of literature.
Types of narrative and fiction in various literatures and periods. Specific course content varies each term.

441. American Literature: Colonial and Revolutionary Period
Fall. 4(4-0) Majors: 208; others: 6 credits of literature.
Works of Taylor, Edwards, Franklin, Prenaan and others.

442. American Literature: Early Romanticism
Fall. 4(4-0) Majors: 208; others: 6 credits of literature.
Works of Cooper, Irving, Poe, Emerson, Thoreau and others.

443. American Literature: Later Romanticism
Winter, Spring, Summer. 4(4-0) Majors: 208; others: 6 credits of literature.
Works of Hawthorne, Melville, Whitman, Dickinson and others.

444. American Literature: Realism and Naturalism
Fall, Winter, Spring, Summer. 4(4-0) Majors: 208; others: 6 credits of literature.
Rise and development of realism and naturalism as exemplified in the works of such authors as Twain, James, Dreiser, Robinson, and others.

445. Twentieth Century American Fiction
Fall, Winter, Spring, Summer. 4(4-0) Majors: 208; others: 6 credits of literature.
Works of Fitzgerald, Hemingway, Faulkner and others.

448. Twentieth Century American Poetry
Fall, Spring, Summer. 4(4-0) Majors: 208; others: 6 credits of literature.
Works of Eliot, Pound, Frost and others.

449. Afro-American Literature I
Fall, Winter, Summer. 4(4-0) Majors: 208; others: 6 credits of literature.
Creative thought of the black American illustrated by the participation of the black man in American culture from beginnings through Harlem Renaissance.

450. Afro-American Literature II
Winter, Spring, Summer. 4(4-0) Majors: 208; others: 6 credits of literature.
Creative thought of the black American illustrated by the participation of the black man in American culture—post-World War II.

452. Contemporary Literature
Fall, Winter, Spring, Summer. 4(4-0) Majors: 208; others: 6 credits of literature.
Contemporary British or American fiction, drama or poetry.

455. Tudor Literature
Fall. 4(4-0) Majors: 208; others: 6 credits of literature.
Poetry, prose and non-Shakespearean drama of the sixteenth century.

456. Early Seventeenth Century Literature
Winter. 4(4-0) Majors: 208; others: 6 credits of literature.
Some of the major literary works of 1600-1680.

460. The Age of Dryden and Pope
Fall. 4(4-0) Majors: 208; others: 6 credits of literature.
Literature of the Restoration and early eighteenth century, 1660-1744; Dryden, Pope, Swift, and others.

462. The Age of Johnson
Spring. 4(4-0) Majors: 208; others: 6 credits of literature.
Literature of later eighteenth century to 1785; Johnson and his circle, the novelists and others.

465. The English Romantic Period
Fall, Spring, Summer. 4(4-0) Majors: 208; others: 6 credits of literature.
The beginnings of romanticism; Blake, Wordsworth and Coleridge.

466. The English Romantic Period
Fall, Winter, Spring. 4(4-0) Majors: 208; others: 6 credits of literature.
Continuation of 465; Keats, Shelley, Byron.

467. Language and Culture
Fall, Winter, Spring. 4(4-0) Approval of department. Interdepartmental with and administered by the Department of Anthropology.
A survey exploring the interconnectedness of language and culture. Special areas to be emphasized include: Child Language Learning; Linguistic and Cultural Contact Phenomena; "Specialized" Languages, such as Cant, Argot, Trade Jargon, Lingua Franca; "Hybridization" and "Substratum"; Language and Cultural Change; and historical approaches to the development of Theories of Origins and the Sapir-Whorf Hypothesis.

468. Nature of Myth
Winter. 3(3-0) Myth in some of its theoretical aspects, with special reference to the mythical character of literature.

470. Victorian Essayists
Fall. Summer of even-numbered years. 4(4-0) Majors: 208; others: 6 credits of literature.
Selected readings from Carlyle, Newman, Arnold, Mill, Ruskin and other essayists.

471. Victorian Poets
Spring. 4(4-0) Majors: 208; others: 6 credits of literature.
Selected readings from Arnold, Browning, Tennyson and other poets.

474. Oral Folklore
Spring. 4(4-0) The nature of folklore, its social functions, and its use in literature and drama.

IDC. Canadian-American Studies
For course description, see Interdisciplinary Courses.

477. Comparative Epic
Fall, Winter, Spring. 3(3-0) May re-enroll for a maximum of 9 credits. Majors: 208; others: 6 credits of literature.
Each term will consider two epics. Fall: Odessey and the Book of Job; Winter: Dante's Inferno and Milton's Paradise Lost; Spring: Beowulf and the Song of Roland.

478. Methods of Comparative Literature
Fall. 3(3-0) Two of the following: 206, 207, 208.
Rationale and techniques of study in comparative literature.

479. Classical Christian Contributions to Literary Tradition
Spring of odd-numbered years. 3(3-0) Two of the following: 206, 207, 208.
Development and influence of the ideas, forms, and motifs of the ancient world and Christianity in literature of the world.
491H. Senior Honors Essay
Fall, Winter, Spring. 4 to 10 credits.
May re-enroll for a maximum of 10 credits. Seniors and approval of departmental honors adviser.
A substantial piece of writing under the direction of selected faculty.

499. Senior Proseminar
Fall, Winter, Spring. 4(4-0)
Senior English majors.
Intensive work in an area, problem or author. Students will work closely with the instructor in the preparation and evaluation of substantial research or critical papers.

The content of courses on both the 800-level and the 900-level may change from term to term, making possible a wide variety of course offerings. Students may enroll in a course for more than one term or in more than one section of a course during the same term, provided that duplication of content does not result. Brochures giving detailed information concerning all graduate courses to be offered during a given year are available in the English office throughout that academic year.

Courses numbered 500 or above (with the exception of 800, 970, and 980) are doctoral seminars. Students desiring to enroll in these courses must obtain departmental approval at least before registration, but if possible before the pre-enrollment period.

500. History of the English Language
Spring, Summer. 3 credits.

501. Old English
Fall, Summer. 3 credits.
Phonology and morphology of English before 1100.

502. Beowulf
Winter. 3 credits.

503. Old English Poetry
Spring. 3(3-0) 802.
Studies in Old English poetic literature; selections from the poetry of the Exeter Book or other works exclusive of Beowulf.

504. Middle English
Winter. 3(3-0)
Linguistic study of English writings, 1100-1400.

505. Studies in Comparative Theatre and Drama
Fall, Winter, Spring, Summer. 3(3-0)
May re-enroll for a maximum of 13 credits. Approval of department. Interdepartmental and joint administration with the Department of Theatre.
Comparative study of selected playwrights, movements, trends and developments in world drama from the beginnings to the present day.

506. Medieval Languages
Fall, Winter, Spring. 3(3-0)
Gothic, Old Norse, and Old Irish.

507. Advanced Methods of Teaching English as a Second Language
Fall. 3(3-0) 407.
Advanced study of linguistic theory and applications to classroom practice of methods of teaching English as a second language, specifically with regard to oral drill, reading, writing, testing, language and cultural heritage.

810. Medieval Literature
Fall, Winter, Summer. 3(3-0)
Chaucer and the literature of the fourteenth century.

811. Renaissance Literature
Fall, Winter, Spring. 3(3-0)
English nondramatic literature, 1500-1600.

815. Restoration and Eighteenth Century Literature
Fall, Winter. 3(3-0)
English literature, 1669-1798.

818. Nineteenth Century Literature
Fall, Winter, Spring, Summer. 3(3-0)
American literature, 1820-1900.

821. Nineteenth Century American Literature
Fall, Winter, Spring, Summer. 3(3-0)
American literature, 1820-1900.

824. Twentieth Century Literature
Fall, Spring. 3(3-0)
English nondramatic literature, 1900-1660, including Milton.

825. Comparative Literature: Studies in Theme and Idea
Fall. 3(3-0) May re-enroll for a maximum of 9 credits. Interdepartmental with the departments of Romance and Classical Languages and German and Russian and administered by the Department of Romance and Classical Languages.
Myths, archetypes, Topoi, significant ideas and intellectual currents in different periods and cultural traditions.

828. Colonial and Revolutionary American Literature
Winter. 3(3-0)
American literature, from the beginnings to 1820.

829. Twentieth Century Literature
Fall, Spring. 3(3-0) May re-enroll for a maximum of 8 credits.
English and American literature, 1800 to the present, with attention to foreign backgrounds.

830. Major Writers of American Literature
Fall. 3(3-0) Major in English—Secondary School Teaching or approval of department.
Franklin through Whitman.

831. Major Writers of American Literature
Winter. 5(4-0) Major in English—Secondary School Teaching or approval of department.
Twain to the present.

833. Writing Workshop: Poetry
Fall, Winter, Spring. 3(3-0) May re-enroll for a maximum of 6 credits. Approval of instructor.
Concentration on individual student's writing, through workshop discussion and conferences with instructor. Some attention to professional contemporary poetry.
840. Writing Workshop for Teachers
Fall, Spring, Summer. 5(5-0) Major in English—Secondary School Teaching or approval of department.
Emphasis on personal and public modes of writing; some discussion of methods of teaching writing, class discussion and evaluation of student writing; individual conferences.

841. Topics in the Teaching of English
Winter, Spring. 3 to 5 credits.
Selected topics and issues in the teaching of English and the language arts. Investigation of problems of special concern to the students, especially those directly related to teaching.

845. Approaches to Language
Fall, 3(3-0) Major in English—Secondary School Teaching or approval of department.
Modern linguistic approaches to language and their application to writing.

846. Approaches to Language
Fall, 3(3-0) Major in English—Secondary School Teaching or approval of department.
Continuation of 845.

847. Reading and the English Teacher
Spring, Summer, 5(5-0)
Investigation of applied linguistics and psycholinguistics to the reading process with particular emphasis on the application to problems in the teaching of reading and literature.

848. Teaching English in Bicultural Settings
Winter, Spring, 3(3-0)
Viewing a bilingual-bicultural group from their novels, plays, stories, or poems, and from historical, sociological, or linguistic works. Applications to teaching.

849. English Teaching Workshop
Fall, Winter, Spring, Summer, 2 to 5 credits.
Workshop in the development of teaching materials and resources in English. Investigation of sources and bibliographies. Emphasis on seeking practical solutions to particular problems in the teaching of English.

855. Shakespeare
Fall, Spring, 3(3-0)
Intensive study of selected plays.

856. Comparative Literature: Literature and Other Disciplines
Winter, 3(3-0) May re-enroll for a maximum of 9 credits. Interdepartmental with the departments of Romance and Classical Languages and German and Russian and administered by the Department of Romance and Classical Languages.
Relations between literature and the sciences and other arts: social, historical, psychological, philosophical bases of literary study.

857. Methods of Literary Research
Fall, Spring, Summer. 3(3-0)
Bibliography and use of library: preparation of reports, reviews, and scholarly papers.

858. Comparative Literature: Methods in the Study of Comparative Literature
Fall, 3(3-0) Interdepartmental with the departments of German and Russian and Romance and Classical Languages.
Rationale and techniques of study in comparative literature.

859. Myth, Ritual and Folklore in Literature
Fall, 3(3-0)
The concepts, scholarship, and methods of study and research in mythology, ritual, and folklore, with special attention to their use in literature and drama.

860. Proseminar for Master's Degree Candidates
Fall, Winter, Spring, Summer. 3(3-0)
Individual scholarly work under guidance.

865. Studies in the History of Literary Criticism
Fall, Winter, Spring, Summer. 3(3-0)
The history of literary criticism.

866. Studies in Modern Criticism
Fall, Winter, Spring, Summer. 3(3-0)
Continuation of 865.

885A. College Teaching of English Language and Literature: History and Issues
Fall, Winter, Spring, Summer. 3(3-0) Approval of department.
Literature, literary criticism, writing, and reading in the English language as academic subjects.

885B. College Teaching of English Language and Literature: Reading
Winter. 3(3-0) Approval of department.
Integration of the teaching of reading and writing in English with special emphasis on relevant research in reading in such areas as linguistics, applied linguistics, psycholinguistics and language acquisition.

885C. College Teaching of English Language and Literature: Writing
Spring. 3(3-0) Approval of department.
Integration of the teaching of writing and reading in English with stress on relevant research in writing and composition such as linguistics, applied linguistics, psycholinguistics, and language acquisition.

889. Practicum in English Language and Literature
Fall, Winter, Spring. 2 to 6 credits. Approval of department.
Supervised graduate practicums, observations, internships in the teaching of English language and literature.

890. Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

902. Comparative Literature: Studies in Form and Genre
Winter, Spring, 3(3-0) Interdepartmental with the departments of German and Russian and Romance and Classical Languages.
Development and interrelationships of individual and collective forms and genres of literature of the Western world, including the drama, tragedy, the novel, the short story, the theory and forms of poetry, popular literature, and the tale.

903. Comparative Literature: Studies in Periodization
Fall, Winter, Spring. 3(3-0) Interdepartmental with the departments of German and Russian and Romance and Classical Languages.
Analysis of the manner in which various genres, conventions and continuing traditions of literature interact with the creative and critical climates of particular periods and movements, such as classicism, the Middle Ages, the baroque, or romanticism, in qualifying or modifying characteristic literary works.

904. Studies in Influence
Fall, Winter, Spring. 3(3-0)
Mutual influences of the English, Romance and Germanic literatures in general and in terms of specific authors and literary kinds, together with studies of the intermediaries of transmission, translations and sources.

930. Studies in English Drama
Fall of even-numbered years. Winter and Spring of odd-numbered years. 3(3-0).
Liturgical beginnings to 1642.

940. Studies in Shakespeare
Winter of odd-numbered years. 3(3-0)
To receive credit, both 940 and 941 must be completed satisfactorily.

941. Studies in Shakespeare
Spring of odd-numbered years. 3(3-0)
To receive credit, both 940 and 941 must be completed satisfactorily.

970. Graduate Reading Course
Fall, Winter, Spring, Summer. 1 to 5 credits. Approval of department.
Supervised reading course in English and American literature for Ph.D. candidates.

975. The Reading Process and the Concept of Literacy
Spring. 3(3-0) Approval of department.
The contributions of language and literary studies to our understanding of the reading process and our definitions of literacy.

980. Studies in English Language
Fall, Winter, Spring. 3(3-0)
The English language from the viewpoint of historical problems, literary analysis and pedagogical implications.

981. Seminar: Earlier English Literature
Fall, Winter, Spring. 3(3-0)
Special problems in English literature, beginning to 1660.

982. Seminar: Later English Literature
Fall, Winter, Spring. 3(3-0)
Special problems in English literature, 1660-1900.
337. Forest and Shade Tree Entomology
Fall. 4(3-2) Three terms of natural science.
Provides an understanding of significance and nature of insect injury to forest and shade trees, based upon morphology, physiology, biology, and taxonomy of insect and host. Analyzes biological, chemical, cultural and silvicultural approaches to insect control in order to equip student with competence to carry out survey and action program assignments.

411. Seminar
Fall, Winter, Spring. 1(1-0) Majors or approval of department.
Reports by students, faculty, and representatives of the profession, with emphasis on current problems not covered in regular college subjects.

ENTOMOLOGY

College of Agriculture and Natural Resources

College of Natural Science

350. Pesticides, Their Alternatives and Environmental Quality
Winter. 3(0-4)
Impact of agricultural pesticides on man and his environment. Emphasizes the effect of chemicals on food production and combating diseases and ecological imbalance. Presents pesticide alternatives for the future.

301. General Entomology
Fall, Spring. 3(3-0) B S 211 and 212 recommended.

302. General Entomology Laboratory
Fall, Spring. 2(0-6) 301 or concurrently.
Experiments in morphology, physiology, behavior of insects. Populations and classification of major groups.

401. Problems
Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 12 credits. Approval of department.
Advanced individual work on a field or laboratory research problem or a study of published literature on a selected topic.

404. Field Entomology
Summer. 6 credits. One year of zoological science or teaching major in general science or approval of department. Given at W. K. Kellogg Biological Station. Basic field survey in entomology. Emphasis on the biology, collection and identification of insects common to the Gull Lake Biological Station area.

410. Apiculture and Pollination
Spring. 3(2-3)

418. Systematic Entomology
Winter. 4(1-9) 301, 302.
General taxonomic course to acquaint the student with the various groups of insects.

420. Aquatic Insects
Spring. 4(3-1) 301, 302.
Biological, ecological, and systematic study of aquatic insects. Insect collection required.

421. Stream Ecology
Fall. Summer sessions at W. K. Kellogg Biological Station. 3(4-0) 410 or approval of department. Interdepartmental with the Department of Fisheries and Wildlife.
An in-depth examination of stream ecosystems—physical, chemical, and biological aspects. Field work will be centered on local streams. Laboratory exercises will involve manipulations necessary for the determination of population energy budgets, with special emphasis on aquatic insects. Field trips required.

430. Economic Entomology
Fall. 3(3-3) 301, 302.
Recognition, life histories, behavior, ecology, and integrated control of insects of economic importance.

438. Taxonomy of Immature Insects
Spring of even-numbered years. 4(1-9)
Identification of immature insects with particular emphasis on the Holometabola.