

## Descriptions —Electrical Engineering of Courses

**885. Artificial Neural Networks**  
*Fall. 3(3-0) Interdepartmental with Computer Science.*  
Overview of neuro-engineering technology. Basic neural network architectures. Feedforward and feedback networks. Temporal modeling. Supervised and unsupervised learning. Implementation. Basic applications to pattern recognition.

**899. Master's Thesis Research**  
*Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 24 credits in all enrollments for this course.*

**920. Selected Topics in High Performance Computer Systems**  
*Spring of odd-numbered years. 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. Interdepartmental with Computer Science. Administered by Computer Science.*  
*P: CPS 822. R: Open only to Computer Science or Electrical Engineering majors.*  
Design of high performance computer systems. Seminar format.

**921. Advanced Topics in Digital Circuits and Systems (MTC)**  
*Fall, Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Computer Science.*  
Topics vary each semester. Topics such as testable and fault-tolerant digital systems, embedded architectures.

**925. Advanced Topics in Power (MTC)**  
*Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.*  
Topics vary each semester. Topics such as advanced stability and control of power systems, power system planning, or advanced machine drives.

**929. Advanced Topics in Electromagnetics (MTC)**  
*Fall, Spring. 3 to 4 credits. A student may earn a maximum of 10 credits in all enrollments for this course.*  
Topics vary each semester. Topics such as planar waveguides and circuits, antenna theory, geometrical theory of diffraction.

**931. Advanced Topics in Electronic Devices and Materials (MTC)**  
*Fall, Spring. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course.*  
Topics vary each semester. Topics such as VLSI technology, microdevices and microstructures, properties of semiconductors.

**932. Advanced Topics in Analog Circuits (MTC)**  
*Spring of odd-numbered years. 3(3-0) A student may earn a maximum of 3 credits in all enrollments for this course.*  
Topics vary each semester. Topics such as advanced circuit analysis.

**960. Advanced Topics in Control (MTC)**  
*Fall. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.*  
Topics vary each semester. Topics such as adaptive control, or nonlinear control.

**963. Advanced Topics in Systems (MTC)**  
*Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.*  
Topics vary each semester. Topics such as system identification and adaptive filtering, robot dynamics and control, or learning in artificial neural networks.

**966. Advanced Topics in Signal Processing (MTC)**  
*Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.*  
Topics vary each semester. Topics such as discrete time processing of speech signals, multidimensional signal processing, or detection and estimation theory.

**989. Advanced Topics in Plasma (MTC)**  
*Fall of odd-numbered years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.*  
Topics vary each semester. Topics such as plasma processing for IC fabrication, plasma diagnostic techniques.

**999. Doctoral Dissertation Research**  
*Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 72 credits in all enrollments for this course.*

## ENGINEERING

### College of Engineering

**101. Preview of Science**  
*Fall. 1(1-0) Interdepartmental with Natural Science, Agriculture and Natural Resources, and Social Science. Administered by Natural Science.*  
*R: Approval of College*  
Overview of natural sciences. Transitional problems. Communications and computer skills. Problem solving skills. Diversity and ethics problems in science. Science and society.

**150. Engineers and the Engineering Profession**  
*Spring. 2(2-0)*  
*R: Open only to freshmen and sophomores.*  
Overview of the engineering profession. Historical background. Engineering specialties. Engineers at work. Professionalism and ethics. Communication skills. Future trends and challenges.

**160. Minority Engineering Education Seminar**  
*Fall. 2(2-0)*  
*R: Open only to freshmen in the College of Engineering and to freshmen no-preference students.*  
Issues relevant to underrepresented engineering minority groups. Diversity in engineering. Transitional problems. Communication skills. Career options.

**192. Environmental Issues Seminar**  
*Fall, Spring. 1(1-0) A student may earn a maximum of 4 credits in all enrollments for this course. Interdepartmental with Natural Science, Agriculture and Natural Resources, and Social Science. Administered by Natural Science.*  
*R: Open only to students in the College of Agriculture and Natural Resources, College of Engineering, College of Natural Science, and College of Social Science. Approval of College.*  
Environmental issues and problems explored from a variety of perspectives, including legal, scientific, historical, political, socio-economic, and technical points of view.

**200. Technology, Society and Public Policy**  
*Fall. 2(2-0)*  
*P: 2 courses in mathematics or engineering or science.*  
*R: Not open to freshmen.*  
Description and analysis of certain technologies and their consequences. Development of techniques for assessing consequences as an aid to formulation of public policy.

**290. Independent Study**  
*Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.*  
*R: Students in College of Engineering, approval of department.*  
Independent undergraduate research in engineering.

**291. Selected Topics**  
*Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.*  
*R: Open only to freshmen, sophomores.*  
Experimental course development or special topics appropriate for freshmen and sophomores.

**393. Engineering Cooperative Education**  
*Fall, Spring, Summer. 1(1-0) A student may earn a maximum of 6 credits in all enrollments for this course.*  
*R: Open only to students in College of Engineering. Educational employment assignment approved by College of Engineering.*  
Pre-professional educational employment experiences in industry and government related to student's major.

**400. Special Problems in International Engineering**  
*Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.*  
*R: Open only to juniors, seniors, and graduate students in the College of Engineering.*  
Supervised study of selected topics in engineering using laboratories, equipment, and engineering design techniques. Given at various international universities and institutes.

**475. Special Topics in International Engineering**  
*Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.*  
*R: Open only to juniors, seniors, and graduate students in the College of Engineering.*  
Topics selected to supplement regular courses. Given at various international universities and institutes.

**888. Capstone Project in Manufacturing**  
*Spring. 3(1-6) Interdepartmental with Marketing and Supply Chain Management.*  
*R: Open only to juniors or seniors in the Manufacturing Engineering major or to students in the Business Management of Manufacturing major.*  
Problem solving in manufacturing. Design of products and processes for manufacturing using a systems approach. Teaming and communication skills are emphasized.

## ENGLISH

## ENG

### Department of English College of Arts and Letters

**090A. Intensive English for Non-Native Speakers**  
*Fall, Spring. 0 credit. [12(20-0) See page A-2, item 3.]*  
*R: Approval of English Language Center.*  
Explanation and intensive practice of English skills. Focus on beginning grammar, speaking, listening, reading, and writing.

**090B. Intensive English for Non-Native Speakers**  
*Fall, Spring. 0 credit. [12(20-0) See page A-2, item 3.]*  
*R: Approval of English Language Center.*  
Explanation and intensive practice of English skills. Focus on intermediate grammar, speaking, listening, reading, and writing.

- 090C. Intensive English for Non-Native Speakers**  
Fall, Spring. 0 credit. [12(20-0) See page A-2, item 3.]  
R: Approval of English Language Center.  
Explanation and intensive practice of English skills. Focus on advanced grammar, speaking, listening, reading, and writing.
- 091. English Structure for Non-Native Speakers**  
Fall, Spring. 0 credit. [3(3-0) See page A-2, item 3.]  
R: Approval of English Language Center.  
Explanation and practice of advanced grammatical structures of English in relation to written communication. Emphasis on editing skills.
- 092. Academic Oral Skills for Non-Native Speakers of English**  
Fall, Spring. 0 credit. [3(3-0) See page A-2, item 3.]  
R: Approval of English Language Center.  
Intensive speaking and listening practice of spoken academic English. Lecture-listening and note-taking strategies. Oral communication skills improved through discussions and classroom presentations.
- 093. Academic Reading and Writing Skills for Non-Native Speakers of English**  
Fall, Spring. 0 credit. [6(6-0) See page A-2, item 3.]  
R: Approval of English Language Center.  
Integrative reading and writing strategies for academic purposes. Vocabulary development, intensive and extensive reading, and critical reading skills. Academic writing style and editing strategies.
- 094. Academic Reading Skills for Non-Native Speakers of English**  
Fall, Spring. 0 credit. [3(3-0) See page A-2, item 3.]  
R: Approval of English Language Center.  
Intensive and extensive reading skills. Vocabulary development, pre-reading strategies, reading for comprehension, and critical reading skills.
- 095. Academic Writing Skills for Non-Native Speakers of English**  
Fall, Spring. 0 credit. [3(3-0) See page A-2, item 3.]  
R: Approval of English Language Center.  
Writing, editing, and revision of journals, essays and research papers.
- 096. Pronunciation and Listening for Non-native Speakers of English**  
Fall, Spring, Summer. 0 credit. [3(3-0) See page A-2, item 3.]  
R: Approval of English Language Center.  
Practice in pronunciation: discrete sounds, rhythm, and stress. Listening comprehension. Listening for main ideas and details.
- 097. Oral Skills for Foreign Teaching Assistants**  
Fall, Spring. 0 credit. [3(5-0) See page A-2, item 3.]  
R: Approval of English Language Center.  
Practice in English skills for classroom instruction. Pronunciation. Presentations and handling questions. Managing student interactions and classroom situations.
- 101. Cross-Cultural Literature**  
Fall, Spring, Summer. 4(4-0)  
Fiction, drama, or poetry of major authors, written in or translated into English, reflecting a broad range of cultures.
- 102. Everyday English**  
Fall, Spring, Summer. 4(4-0)  
Contemporary uses of English. Dialects and genderlects; doublespeak; political correctness; historical origins; the "U.S. English" movement.
- 102H. Honors Writing Seminar**  
Fall. 4(4-0)  
R: Open only to Honors College freshmen or approval of department.  
Workshop in critical reading and writing emphasizing the problematic uses of voice and the development of analytic and argumentative skills. Reading and writing in various discursive modes.
- 106. Contemporary Life Through Literature**  
Fall, Spring, Summer. 4(4-0)  
Contemporary literature written since 1945 exploring issues in modern life. Personal or public, artistic or political, natural or cultural.
- 108. Children's Literature and Literature for Young Adults**  
Fall, Spring, Summer. 4(4-0)  
Children's literature and different genres of literature for young adults, including realistic and historical fiction, modern fantasy, myth, legend, poetry, and nonfiction.
- 110. The Comic Impulse in Narrative, Drama, and Film.**  
Fall, Spring, Summer. 4(4-0)  
Comedy from classical literature to the present, drawing on novels, drama, films and humorous verse. Humor and its relation to culture.
- 120. Great Books of Western Literature**  
Fall, Spring, Summer. 4(4-0)  
Literary texts of varied eras and genres that have exerted enduring influence on English and related literatures.
- 121. Shakespeare on Page and Screen**  
Fall of odd-numbered years. 4(4-0)  
A study of Shakespearean plays emphasizing productions for film and television.
- 142. Chillers and Thrillers: Introduction to Popular Literary Genres**  
Fall, Spring, Summer. 4(4-0)  
Popular literary genres such as science fiction, romance, detective novels, and spy thrillers, including film and other non-print media.
- 153. Introduction to Women Authors**  
Fall, Spring, Summer. 4(4-0)  
Writings by women from various racial, socio-economic and historical backgrounds. Women's choices of subject matter and style. Women's redefinition of literary genres.
- 203. Genres and Themes**  
Fall, Spring. 3(3-0)  
R: Not open to students in English and American Studies, and to students in English teaching minor.  
Texts organized by genre and theme with attention to the historical and cultural perspectives which define them.
- 204. Readings in North American Literatures**  
Fall, Spring. 3(3-0)  
R: Not open to freshmen. Not open to students with English majors or minors.  
Selected texts from North American literatures drawn from a variety of historical periods, genres, and cultures, reflecting the diversity of North American experiences.
- 205. Readings in British Literatures**  
Fall, Spring. 3(3-0)  
R: Not open to freshmen. Not open to students with English majors or minors.  
Selected texts from British literatures drawn from a variety of genres and historical periods, reflecting the diversity of human experiences and the continuity of human concerns.
- 205H. Honors Studies in Literary Form**  
Fall. 3(3-0)  
P: ENG 202H. R: Open only to Honors College students or approval of department. Not open to students with credit in ENG 211H.  
History and practice of selected genres and modes of literature such as novel, lyric, essay, romance, and satire. Instruction in critical writing.
- 206. Readings in Contemporary Literatures**  
Fall, Spring. 3(3-0)  
R: Not open to freshmen. Not open to students with English majors or minors.  
Selected texts of various genres from contemporary literatures written in English, reflecting the diversity of human experiences.
- 210. Introduction to the Study of English**  
Fall, Spring. 4(4-0)  
P: Completion of Tier 1 writing requirement. R: Open only to students in English and in American Studies, and to students with a teaching minor in English.  
Production, interpretation, and dissemination of texts in their political, religious, economic, social, and literary contexts. Critical methodologies and writing about texts and modes of discourse.
- 211H. Honors Foundation in Literary Studies**  
Fall, Spring. 4(4-0)  
R: Open only to Honors College students or approval of department. Not open to students with credit in ENG 205H.  
Literary form and textual analysis. Literary theory and critical methodology. Questions of historical and cultural context.
- 221. Introduction to Shakespeare**  
Fall, Spring. 3(3-0)  
R: Not open to students in English. Not open to students with an English teaching minor.  
Selected plays chosen to represent the different periods and genres of Shakespeare's career.
- 226. Introduction to Creative Writing**  
Fall, Spring. 4(4-0)  
R: Completion of Tier I writing requirement.  
Major forms and methods of creative writing: fiction, poetry, drama, narrative essay, and film.
- 228. Introduction to Fiction Writing**  
Fall, Spring. 4(4-0)  
P: ENG 210 or ENG 226. R: Completion of Tier I writing requirement.  
Directed practice in the writing of fiction. Special attention to the types and structures available to the fiction writer.
- 229. Introduction to Poetry Writing**  
Fall, Spring. 4(4-0)  
P: ENG 210 or ENG 226. R: Completion of Tier I writing requirement.  
Directed practice in the writing of poetry. Special attention to the types and structures available to the poetry writer.
- 232. Writing as Exploration**  
Fall. 3(3-0)  
R: Completion of Tier I writing requirement.  
Study and writing of non-fiction prose that reflects on experience, individual and social. Special attention to autobiography and personal essay.

**Descriptions —English  
of  
Courses**

**265. Classical Myths and Literature**

Fall, 3(3-0)

R: Not open to freshmen.

Greek myths that have been wrought into later poetry, fiction, drama, painting, sculpture, and music.

**266. Literary Interpretation of the Bible**

Spring, 3(3-0)

R: Not open to freshmen.

Selections from the Old and New Testaments. Emphasis on major themes, genres, characterizations, and styles.

**270. Introduction to Film**

Fall, Spring, 4(4-2)

R: Completion of Tier I writing requirement.

Basic concepts and techniques of film analysis and criticism.

**290. Independent Study**

Fall, Spring, 1 to 4 credits. A student may earn

a maximum of 8 credits in all enrollments for this course.

R: Approval of department.

Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

**302. Introduction to English Language Studies**

Fall, Spring, 3(3-0)

R: Completion of Tier I writing requirement.

Acquisition of oral and written English. English dialects and styles. Minority dialects and Standard English. Reading and writing English.

**307. Methods of Teaching English to Speakers of Other Languages**

Spring, 3(3-0)

R: Completion of Tier I writing requirement.

National and international approaches, methods, materials, settings, needs, and characteristics of TESOL. Survey, evaluation, and application of major effective methods and materials.

**309. Writing for Prelaw Students**

Fall, 4(4-0)

R: Not open to freshmen and sophomores. Completion of Tier I writing requirement.

Step-by-step process for organizing and writing a legal argument. Emphasis on logical, clear, and persuasive style.

**310A. Literature in English to 1660**

Fall, Spring, 4(4-0)

P: ENG 210. R: Open only to students in English and to students with a teaching minor in English. Completion of Tier I writing requirement.

Cultural contexts, literary tradition, modes of discourse, and genres of literature in English.

**310B. Literature in English 1660-1789**

Fall, Spring, 4(4-0)

P: ENG 210. R: Open only to students in English and in American Studies and to students with a teaching minor in English. Completion of Tier I writing requirement.

Cultural contexts, literary traditions, modes of discourse, and genres of English, American and world literature in English.

**310C. Literature in English 1789-1900**

Fall, Spring, 4(4-0)

P: ENG 210. R: Open only to students in English and in American Studies, and to students with a teaching minor in English. Completion of Tier I writing requirement.

Cultural contexts, literary traditions, modes of discourse, and genres of English, American and world literature in English.

**310D. Literature in English since 1900**

Fall, Spring, 4(4-0)

P: ENG 210. R: Open only to students in English and in American Studies, and to students with a teaching minor in English. Completion of Tier I writing requirement.

Cultural contexts, literary traditions, modes of discourse, and genres of English, American and world literature in English.

**310E. Literature in English: Modern Media and Culture**

Fall, Spring, 4(4-0)

P: ENG 210. R: Open only to students in English and in American Studies, and to students in English teaching minor. Completion of Tier I writing requirement.

Cultural contexts, modes of discourse, and generic development of twentieth-century media in an intercultural context.

**312. Workshop in Professional Writing**

Spring, 3(3-0)

R: Not open to freshmen and sophomores. Completion of Tier I writing requirement.

Directed practice in writing clear, concise and effective professional prose, with special attention to practical forms like reports, position papers, and proposals.

**313. Composition Workshop**

Fall, Spring, 4(3-4)

P: ENG 302. R: Not open to freshmen.

Intensive writing workshop with focus on writing theory and research, writing in response to literature, and the writing process.

**327. Playwriting**

Spring, 4(4-0) A student may earn a maximum of 8 credits in all enrollments for this course.

R: Not open to freshmen. Completion of Tier I writing requirement. Approval of department.

Basic elements of playwriting through writing and critical analysis of original scenes and one-act plays and through analysis of dramatic technique in selected works by professional playwrights.

**328. Intermediate Fiction Writing**

Fall, Spring, 3(3-0)

P: ENG 228. R: Open only to majors in English. Completion of Tier I writing requirement. Approval of department.

Form and technique in fiction writing. Emphasis on prose fiction themes, forms and structures. Relation of plot to meaning. Symbols and metaphors.

**329. Intermediate Poetry Writing**

Fall, Spring, 3(3-0)

P: ENG 229. R: Not open to freshmen. Open only to majors in English and to students in English teaching minor. Completion of Tier I writing requirement.

Further directed practice in the writing of poetry. Special attention to the types and structures available to the poetry writer.

**341. Introduction to Popular Culture**

Fall, 3(3-0)

R: Not open to freshmen. Completion of Tier I writing requirement.

Generic and thematic study of the artifacts and discourses of popular culture. Emphasis on contemporary societies.

**342. Popular Literary Genres**

Fall, 3(3-0)

P: 3 cr. of literature R: Not open to freshmen. Completion of Tier I writing requirement.

A particular genre of popular literature such as science fiction, crime fiction or Gothic, with attention to media other than print.

**344. Jewish-American Literature**

Fall, 4(4-2)

R: Not open to freshmen. Completion of Tier I writing requirement.

Fiction, poetry, drama, memoir and film in their artistic and cultural contexts.

**349. African-American Literature I**

Fall, 3(3-0)

P: 3 cr. of literature R: Not open to freshmen. Completion of Tier I writing requirement. Not open to students with credit in ENG 450.

From beginnings in African oral tradition to the Civil War. Autobiography, history, and slave narrative. Synthetic development and production of culture.

**350. African-American Literature II**

Spring, 3(3-0)

P: 3 credits of literature. R: Not open to freshmen. Completion of Tier I writing requirement Not open to students with credit in ENG 450.

From the ephemeral promises of Reconstruction to the present. Themes include the "New Negro" movement, the Civil Rights era, and the contemporary Black Women Writers' Renaissance.

**351. Chicano and Latino Literatures in English**

Spring, 3(3-0)

P: 3 cr. of literature R: Not open to freshmen. Completion of Tier I writing requirement.

American multiethnic literatures. Focus on the synthetic experience of early and recent immigrants.

**352. Asian American Writing**

Spring, 3(3-0) Interdepartmental with Linguistics and Languages.

P: 3 credits of literature. R: Completion of Tier I writing requirement.

Writing by Americans of Asian descent. Attention to artistic, historical, and cultural contexts.

**353. Women and Literature**

Fall, Spring, 3(3-0)

R: Not open to freshmen. Completion of Tier I writing requirement.

Relationship of women to cultural and literary texts, as revealed in literature written by women. Critical responses to these texts. Feminist approaches to literature.

**354. Native American Literature**

Fall, 3(3-0)

P: 3 credits of literature. R: Not open to freshmen. Completion of Tier I writing requirement.

Native American fiction, essays, and poetry, from early 19th century writings to contemporary works.

**360. Postcolonial Literature and Theory**

Fall, Spring, 3(3-0) Interdepartmental with Linguistics and Romance Languages.

P: 3 credits of literature. R: Completion of Tier I writing requirement.

Theories and literatures involving colonialism, decolonization, neocolonialism, cultural and political independence. Texts drawn principally from Asia, Africa, the Caribbean, Latin America and various diaspora communities.

**361. Asian Literature in English or in English Translation**

Spring, 3(3-0) Interdepartmental with Linguistics and Languages.

P: 3 credits of literature. R: Completion of Tier I writing requirement.

Literary traditions of a major Asian Civilization—Chinese, Indian or Japanese. Historical, cultural, and international contexts of Asian literature.

- 363. African Literature**  
Fall. 3(3-0)  
P: 3 credits of literature. R: Not open to freshmen. Completion of Tier I writing requirement.  
From the oral tradition to the contemporary novel. Variety of African literary forms. Diversity of voices and traditions.
- 370. Film and Society**  
Fall. 4(4-2) A student may earn a maximum of 8 credits in all enrollments for this course.  
P: ENG 270 or ENG 310E. R: Not open to freshmen. Completion of Tier I writing requirement. Approval of department for second enrollment.  
How films reflect social issues of gender, ethnicity, class, sexual orientation and handicapper status. How film affects and shapes social attitudes.
- 371. Film Genres**  
Fall. 4(4-2) A student may earn a maximum of 8 credits in all enrollments for this course.  
P: ENG 270 or ENG 310E. R: Not open to freshmen. Completion of Tier I writing requirement. Approval of department for second enrollment.  
Nature, purpose, characteristics, conventions, historical evolution of film genres. Cultural forces and social significance. Genre theories. Genre and gender. Genre and ethnicity.
- 372. Film Directors**  
Fall, Spring. 4(4-2) A student may earn a maximum of 8 credits in all enrollments for this course.  
P: ENG 270 or ENG 310E. R: Not open to freshmen. Completion of Tier I writing requirement. Approval of department for second enrollment.  
Themes, artistry, significance of specific film directors, with emphasis upon questions of authorship.
- 373. The Silent Film**  
Spring. 3(3-2)  
P: ENG 270 or ENG 310E. R: Not open to freshmen. Completion of Tier I writing requirement.  
History. Development of visual language, genres, social attitudes and acting style. Major films, significant directors.
- 374. Screenwriting**  
Fall. 4(4-0) A student may earn a maximum of 8 credits in all enrollments for this course.  
R: Not open to freshmen. Completion of Tier I writing requirement. Approval of department.  
Basic elements of screenwriting. Dramatic action, exposition, plotting, characterization and dialogue, finalizing the script. Markets.
- 375. American Fiction**  
Fall, Spring. 3(3-0)  
P: 3 cr. of literature R: Not open to freshmen. Completion of Tier I writing requirements.  
Selected fictional texts within the context of the historical development of fictional genres in America.
- 376. American Drama**  
Spring. 3(3-0)  
P: 3 cr. of literature R: Not open to freshmen. Completion of Tier I writing requirement.  
Significant American drama largely from the twentieth century. Such playwrights as O'Neill, Miller, Williams, Hellman, Odets, Wilder, Albee, and Hansberry, among others.
- 377. American Poetry**  
Spring. 3(3-0)  
P: 3 cr. of literature R: Not open to freshmen. Completion of Tier I writing requirement.  
Poetry writing in America from the time of European settlement to the present, with attention to historical periods, movements, genres, and figures.
- 379. American Women Writers**  
Fall. 3(3-0)  
P: 3 cr. of literature R: Not open to freshmen. Completion of Tier I writing requirement.  
The emergence of women's literary voices. Contribution of women's writing to the literary, social, cultural, spiritual and intellectual development of the nation through fiction, non-fiction and poetry.
- 380. American Cultural Criticism**  
Fall. 3(3-0)  
P: ENG 210. R: Not open to freshmen. Open only to majors in English and in American Studies, and to students with a teaching minor in English. Completion of Tier I writing requirement.  
Writers who have both criticized and contributed to American culture in works commenting on literature, politics, religion and society.
- 391. Special Topics in English**  
Fall, Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Not open to freshmen. Completion of Tier I writing requirement.  
Special topics supplementing regular course offerings proposed by faculty on a group study basis.  
SA: ENG 491
- 393H. Critique of Genre and Form**  
Fall. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
P: 4 credits of literature. R: Open only to Honors College students or approval of department. Completion of Tier I writing requirement.  
Critical approaches to the history and practice of genre and form.
- 394H. Studies in Authorship**  
Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
P: 4 credits of literature. R: Open only to Honors College students or approval of department. Completion of Tier I writing requirement.  
Intensive study of writings of one or two authors, with attention to critical, historical, and literary concerns, including the question of literary authority.
- 403. The Development of Modern English**  
Fall. 3(3-0)  
R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.  
Historical development of the English language. Native and foreign elements. Changes in inflection, pronunciation, vocabulary, and meaning.
- 404. English Dialects**  
Fall. 3(3-0)  
R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.  
Dialectal variation in English. Regional dialects, both national and international. Ethnic and social dialects. Gender and language. Standard English and American vernaculars. Dialects in literature.
- 405. Language Use in the African-American Community**  
Fall. 3(3-0)  
R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.  
Discourse and speaking styles in the African-American community. Origins and uses of Black English Vernacular. Issues in African-American language and literacy.
- 406. Topics in English Language Studies**  
Spring. 3(3-0)  
R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.  
Focus on a major issue in the study of English, such as language planning in the United States, the making and use of dictionaries, and gender and language in English.
- 408. Socio-Psycholinguistic Approaches to Reading in the Disciplines**  
Fall, Spring. 4(4-0)  
P: ENG 302. R: Not open to freshmen. Completion of Tier I writing requirement.  
Reading as a socio-psycholinguistic process and its function across disciplines. Focus on literature for children and young adults, reading theories, and research in literary development.
- 410. Chaucer**  
Fall. 3(3-0)  
P: ENG 210; ENG 310A or ENG 310B. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.  
Canterbury Tales and other works by Chaucer, read in Middle English. Historical and literary contexts of Chaucer's works.
- 411. Spenser**  
Spring. 3(3-0)  
P: ENG 210; ENG 310A or ENG 310B. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.  
The Faerie Queene and other works by Spenser. Historical and literary contexts of Spenser's works.
- 412. Milton**  
Fall. 3(3-0)  
P: ENG 210; ENG 310A or ENG 310B. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.  
Paradise Lost and other works by Milton. Historical and literary contexts of Milton's works.
- 413. Practicing English Teaching Methods**  
Fall, Spring. 3(3-0)  
P: ENG 313, ENG 408. R: Open only to juniors or seniors in the English major with a teacher certification option or to students in the English minor.  
Integrating the language arts--speaking, listening, reading, and writing - within multi-cultural classrooms. Focus on micro-teaching, evaluation, and self-critique.
- 415. Critical Studies in Language and Literacy**  
Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.  
P: ENG 302 or ENG 408 or ENG 413. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.  
Current research in language and literacy, with emphasis on implications for multicultural classrooms. Topics vary.
- 420. Language and Culture**  
Fall, Spring. 3 credits. Interdepartmental with Anthropology. Administered by Anthropology.  
P: ANP 101 or ANP 201 or ANP 320. R: Completion of Tier I writing requirement.  
Domain, issues, and methods of cultural linguistics. Relationship between language and culture. Language and ethnicity, status, and role. Pidgin and Creole languages. Crosscultural communication.

**Descriptions —English  
of  
Courses**

**421. Shakespeare**

Fall, Spring. 3(3-0)

P: 6 credits of English literature. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

Selected plays chosen to represent the different periods of Shakespeare's career and the genres in which he wrote. Attention to historical and literary contexts.

**423. Writing and Style**

Spring. 3(3-0)

P: ENG 232 or ENG 312. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Style as a significant feature of non-fiction prose. Analysis of texts, writing exercises, and directed practice in composing.

**426A. Comparative Drama: Classical and Medieval**

Fall. 3(3-0)

P: 6 credits of English or Theatre or approval of department. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

Ancient and medieval drama, with special emphasis on Greek tragedy.

**426B. Comparative Drama: Renaissance and Baroque**

Spring. 3(3-0)

P: 6 credits of English or Theatre. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

The development of European dramatic arts in the sixteenth and seventeenth centuries.

**426D. Comparative Drama: Ibsen to World War II**

Fall. 3(3-0)

P: 6 credits of English or Theatre. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

Major themes and developments in American, British, and Continental European drama seen through representative plays of the period.

**426E. Comparative Drama: 1945 to the Present**

Spring. 3(3-0)

P: 6 credits of English or Theatre. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

American, British, and Continental European drama from World War II to the present seen through representative plays of the period.

**426F. Comparative Drama: Indian Subcontinent**

Fall. 3(3-0)

P: 6 credits of English or Theatre. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

Ancient theatrical traditions in the Indian subcontinent and their relation to modern theatrical practices in the area.

**428. Advanced Fiction Writing**

Fall, Spring. 3(3-0)

P: ENG 328. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement. Approval of department.

Advanced workshop in writing short stories and longer forms of fiction. Reading and analysis of published fiction.

**429. Advanced Poetry Writing**

Fall. 3(3-0)

P: ENG 329. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

Reading contemporary poetry and writing original poems. Interdependence of idea and execution in successful poems. Emphasis on craft and poetics.

**436A. Comparative Fiction: Western**

Fall. 3(3-0)

P: 6 credits of literature. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

Comparative study of fictional narratives from different historical periods, cultures, and national or ethnic origins. Focus on European, English, and American literary traditions.

**436B. Comparative Fiction: Non-Western**

Spring. 3(3-0)

P: 6 credits of literature. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

Comparative study of English language fiction and related fiction in English translation from cultures and literary traditions outside those of Europe, England, and the United States. Emphasis on British colonial and post-colonial traditions.

**439. 20th Century English Poetry**

Fall. 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Themes, styles, forms, and aesthetics of poetry from Britain, Ireland, and other English-language countries excluding the United States.

**440. American Poetry 1900-1950**

Spring. 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in American Studies, and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Poetry representing the diversity of modern American letters. Considerations of gender, race, and class as they influence multiple poetic traditions.

**441. American Literature to 1820**

Fall. 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in American Studies, and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Colonial, Revolutionary, and early national periods. Attention to the diversity of voices in early America.

**442. American Literature: 1820-1865**

Spring. 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in American Studies, and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Works by writers such as Poe, Emerson, Fuller and Douglass chosen to illustrate the diversity of voices in early nineteenth century America and studied in their historical and cultural contexts.

**443. American Literature 1865-1900**

Fall. 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in American Studies, and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Works by writers such as Whitman, Dickinson, Twain, James, Wharton, Chesnut, Crane, and Chopin chosen to illustrate the diversity of voices in middle and late nineteenth century America studied in their historical and cultural contexts.

**444. American Literature, 1900-1950**

Fall. 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in American Studies, and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Selected works by writers such as Larsen, Wright, Hurston, Cather, Hemingway, Faulkner, Pound, H.D., O'Neill, Bogan. Advent of New Criticism. Increased importance of African American and white women writers.

**445. American Literature since 1950**

Fall. 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in American Studies, and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Texts of America's recent past and present, including fiction, drama, poetry, and non-fiction, with attention to the relationships between the works and the cultures they come from.

**450. Studies in African American Literature**

Spring. 3(3-0)

A student may earn a maximum of 6 credits in all enrollments for this course. P: ENG 349 or ENG 350. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

Comprehensive analysis of a single writer, group of writers, period, genre, or theme in African American literary history. Critical reception, cultural production, and cultural criticism.

**451. Studies in Popular Culture**

Spring. 3(3-0)

P: ENG 210, ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in American Studies, and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Problems of and approaches to the study of popular cultures, principally of England and the United States.

**452. British Literature since World War II**

Spring. 3(3-0)

P: 6 credits of literature. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

English language literature of Britain, Ireland, and other countries influenced by England, exclusive of the United States.

**453. Contemporary American Poetry**

Fall, Spring. 3(3-0)

P: 6 credits of literature. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

American poetry from World War II to the present.

**454. Middle English Literature**

Spring, 3(3-0)

P: ENG 210, ENG 310A. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

In-depth study of fourteenth- and fifteenth-century English works such as "Sir Gawain and the Green Knight," "Piers Plowman," and the cycle drama. Some selections may be in modern English versions.

**455. Renaissance Literature and Drama**

Fall, 3(3-0)

P: ENG 210, ENG 310A. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Poetry, prose, and non-Shakespearean drama, 1500-1660. Conventions, genres, issues, and cultural functions.

**456. Renaissance Texts: Current Perspectives**

Fall, Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

P: ENG 411 or ENG 412 or ENG 421 or ENG 455. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Advanced study of selected works, authors, genres, and issues in light of current approaches and concerns. Gender, race, class, sexual orientation, cultural functions and contexts.

**457. British Literary Studies, 1660-1800**

Spring, 4(4-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

British writing from Restoration to the period of the French Revolution, including decline of the epic, emergence of satire and the novel, women as authors and audience, advent of literary criticism, and British revolutionary discourse. Dryden, Swift, Pope, and others.

**458. British Literature in the Age of Revolution**

Fall, 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

British writing in the age of science and revolution; Austen, Blake, Barbauld, Byron, Clare, Coleridge, Crabbe, De Quincey, Hazlitt, Mary Shelley, Percy Shelley and Wordsworth.

**459. Victorian Studies**

Spring, 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

British culture and society 1832-1870, especially as it affected the production of non-fictional prose.

**460. British Literature in the Age of Empire**

Spring, 3(3-0)

P: 6 credits of literature or approval of department. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

The textual culture of the British empire 1870-1914, including colonial discourse, naturalism, the aesthetic turn in poetry and the arts, and development of popular genres.

**461. Second Language Acquisition**

Fall, 3(3-0) Interdepartmental with Linguistics.

R: Not open to freshmen or sophomores except with approval of department. Completion of Tier I writing requirement.

Factors in second language learning such as age, motivation, language input and interaction, social influences, the role of the native language, and language universals.

**463. Studies in the Literature of Africa and the African Diaspora**

Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

P: 6 credits of literature. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

Writers, genres, regions, or themes in African and diasporic literatures.

**464. Studies in the Literature of Asia and the Asian Diaspora (W)**

Spring, 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course.

Interdepartmental with Asian Languages. Administered by Asian Languages.

R: Not open to freshmen. Completion of Tier I writing requirement.

Selected writers, genres, themes, or regions in Asian and Asian diasporic literature.

**465. Canadian Literature**

Spring, 3(3-0)

P: 6 credits of literature or approval of department. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

Canadian literature in historical and multicultural contexts.

**469. Topics in Comparative Literature**

Spring, 3(3-0) Interdepartmental with Romance Languages. Administered by Romance Languages.

R: Not open to freshmen and sophomores. Relationships among writers, themes, genres, movements, and periods in different national literatures and between literature and other arts.

**470. Film Theory and Criticism**

Spring, 4(4-2)

P: ENG 270 or ENG 310E; one other film course. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

Theories regarding film as art, medium of discourse, and cultural encoding.

**471. Third World Cinema**

Fall, 4(4-2)

P: ENG 270 or ENG 310E. R: Not open to freshmen and sophomores. Completion of Tier I writing requirement. Films of the Third World, including major directors and trends from Africa, Asia, and Latin America.

**472. Studies in British Film**

Fall, 4(4-2)

P: ENG 270 or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

British film history, genres, regional differences, and social significance.

**473. Film and Literature**

Spring, 3(3-2)

P: ENG 270 or ENG 310E. R: Not open to freshmen and sophomores. Completion of Tier I writing requirement. Differences and similarities between filmic texts and literary texts and between viewing and reading. The process of adaptation from literature to film.

**474. Aesthetic Theory and Modernism**

Fall, 4 credits. Interdepartmental with Philosophy, History of Art, Linguistics and Languages, Music, and Romance Languages. Administered by Philosophy.

R: Not open to freshmen and sophomores. Completion of Tier I writing requirement.

Problems, assumptions, and arguments of modern aesthetic theory examined in the context of debates over modernity and modernist artistic practice.

**476. American Authors**

Spring, 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C, 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in American Studies, and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Intensive study, set in historical, critical, and comparative contexts, of one to three American writers. Attention to genre, gender, and regional associations.

**477A. Comparative Epic**

Fall, 3(3-0)

P: 6 credits of literature or approval of department. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

Comparative analysis of the "Iliad," "The Old Testament," "Beowulf," and the "Song of Roland," read against their cultural backgrounds.

**477C. Comparative Epic: The Eastern tradition**

Spring, 3(3-0)

P: 6 credits of literature. R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement.

The major epics of India and Iran: Ramayana, Mahabharata, Rancarutmanas, Shahnamah. Read in English.

**480. History of Western Literary Criticism**

Fall, 3(3-0)

P: ENG 210. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in American Studies, and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Sources of the practice and theory of literary criticism in the West including the development of modern critical values in the work of Dryden, Johnson, Coleridge, Arnold, Eliot. Cambridge English, American New Criticism. Poststructuralism and oppositional practices.

**Descriptions —English  
of  
Courses**

**481. Modern Critical Theory**

Spring, 3(3-0)

P: ENG 210. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in American Studies, and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Current ways of reading, including backgrounds in formalist, linguistic, hermeneutical, feminist, Marxian, psychoanalytic, and post-colonial critical discourses.

**482. Theory and Practice of Feminist Literary Criticism**

Spring, 3(3-0) Interdepartmental with Women's Studies.

P: ENG 353 or WS 202. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in Women's Studies, and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Feminist literary critical theory and its implications for reading and studying literature.

**483. Literature and Medicine**

Spring, 3(3-0) Interdepartmental with Lyman Briggs School and Psychology.

R: Not open to freshmen and sophomores. Completion of Tier I writing requirement.

Human dimensions of medicine as seen in literature. Health, illness, mortality. Medical dilemmas. Physical and psychological self. Psychological theories used in interpreting literature.

**485. Development of the British Novel, 1660-1800**

Fall, 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

The early development of British prose fiction, focusing on the historical conditions of its production and reception, and its relationship to other modes of cultural discourse.

**486. Development of the British Novel: The 19th Century**

Fall, 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Artistic and cultural dynamics of novels by Austen, the Brontës, Dickens, Eliot, Gaskell, Hardy, Meredith, Morris, Thackeray, Trollope, Ward, and Wilde.

**487. The 20th Century English Novel**

Fall, 3(3-0)

P: ENG 210; ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

English-language novels of Britain, Ireland, and other countries influenced by England, exclusive of the United States.

**489H. Senior Honors Independent Project**

Fall, Spring, 2 to 4 credits.

R: Not open to freshmen and sophomores except with approval of department. Open only to Honors College majors in English or approval of department. Completion of Tier I writing requirement.

A substantial critical essay, a comparable essay arising from an internship, equivalent creative writing, or a similar project. Writing supervised by a faculty adviser.

**490. Independent Study**

Fall, Spring, 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement. Approval of department.

Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

**491H. Special Topics**

Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Not open to freshmen or sophomores except with approval of department. Open only to Honors College majors in English or approval of department. Completion of Tier I writing requirement.

Intensive study of an author, topic, or critical issue.

**492. Seminar in English**

Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in American Studies, and to juniors and seniors with a teaching minor in English. Completion of Tier I writing requirement.

Specific topic in the language, literatures, or discursive practices of English. Emphasis on individual and group research and on the discussion of student papers.

**492H. Studies in Period and Genre**

Fall, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

P: Two of these courses: ENG 310A, ENG 310B, ENG 310C, ENG 310D, ENG 310E. R: Not open to freshmen and sophomores except with approval of department. Open only to Honors College majors in English or approval of department. Completion of Tier I writing requirement.

Specific works and authors in relation to their historical context. Topics such as generic conventions and techniques, and particular critical approaches.

**493. English Internship**

Fall, Spring, 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

P: 15 credits of English. R: Not open to freshmen and sophomores except with approval of department. Open only to majors in English and in American Studies. Completion of Tier I writing requirement. Approval of department.

Supervised pre-professional field experience in English.

**499. Senior Thesis Research**

Fall, Spring, 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

R: Not open to freshmen and sophomores except with approval of department. Completion of Tier I writing requirement. Approval of department.

Faculty-supervised research project that demonstrates ability to do independent research and submit or present a major paper.

**800. History of the English Language**

Fall, 3(3-0)

Native and foreign elements of English. Morphological, phonological, and semantic changes.

**801. Old English**

Fall, 3(3-0)

Phonology and morphology of English before 1100; introduction to Old English literature.

**802. Beowulf in Old English**

Spring, 3(3-0)

P: ENG 801. Textual study of the Old English epic "Beowulf". Religious, literary, and cultural background.

**807. Methods of Teaching English to Speakers of Other Languages**

Spring, 3(3-0)

R: Open only to graduate students in College of Arts and Letters.

Approaches, methods, and materials for teaching English to non-native speakers, including the teaching of listening, speaking, reading, and writing. Selection and evaluation of materials, lesson planning, and management of activities and materials.

**808. Studies in Teaching English to Speakers of Other Languages**

Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

P: ENG 807. R: Open only to master's students in English-Teaching of English to Speakers of Other Languages.

Methodology of selected areas in teaching English to non-native speakers. Materials development and syllabus design. Program administration and evaluation. Instructional evaluation. Testing methods and materials. Major contemporary issues.

**810. Medieval Literature**

Fall, Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to graduate students in English or approval of department.

Chaucer and the literature of the later middle ages read in Middle English. "Piers Plowman", "Sir Gawain", and others. Topics such as medieval aesthetics and manuscript studies.

**811. Renaissance Literature**

Fall, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to graduate students in English.

English non-dramatic literature, 1500-1600

**812. Early English Drama**

Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to graduate students in English.

Non-Shakespearean English drama from its liturgical beginnings to 1642.

**815. English Literary Studies 1660-1800**

Fall, Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to graduate students in English or approval of department.

Major topics and traditions in British writing of the Restoration and eighteenth century. Interrelations of power, gender, race, and genre.

**816. 19th Century English Literature**

Fall, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to master's students in English.

Topics such as the long poem, the novel, the lyric, non-fiction prose, and critical theory.

**817. 19th Century American Literature**

Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to graduate students in English or approval of department.

Selected genres and/or authors of nineteenth century American literature.

**821. Proseminar in Comparative Literature**

Fall, 3(3-0) Interdepartmental with Arts and Letters, Linguistics and Languages, and Romance Languages. Administered by Arts and Letters.

R: Approval of college. History and practice of comparative literature including foundational concepts and current directions.

- 822. Methods of Comparative Literature**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Arts and Letters, Linguistics and Languages, and Romance Languages. Administered by Arts and Letters.  
P: AL 821 or approval of college. R: Open only to graduate students in College of Arts and Letters. Case studies in international literary tradition, reception, and transmission. Approaches to genre and period. History and aesthetics of reception.
- 823. Seminar in Comparative Literary Criticism**  
Fall, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Arts and Letters, Linguistics and Languages, and Romance Languages. Administered by Arts and Letters.  
P: AL 822. R: Approval of college. Theory and practice of comparative literary criticism, with attention to the development of critical approaches and to current topics in the critical literature.
- 824. Topics in 17th Century English Literature**  
Fall, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to graduate students in English. English non-dramatic literature, 1600-1660, including Milton.
- 825. Comparative Critical Theory**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Arts and Letters, Linguistics and Languages, and Romance Languages. Administered by Arts and Letters.  
P: AL 822 or approval of college. R: Open only to graduate students in College of Arts and Letters. Critical theory of comparative literature, including comparative studies in rhetorical theory and discourse analysis.
- 828. Colonial and Revolutionary American Literature**  
Fall, 3(3-0)  
R: Open only to graduate students in English and in American Studies. American literature, from its beginnings in the literature of discovery and exploration to the National period (ca. 1820)
- 829. 20th Century American Literature**  
Fall, Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to graduate students in English or approval of department. Important works, writers, genres, periods, and movements in significant aspects of twentieth century American literature.
- 830. 20th Century English Literature**  
Fall, Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to graduate students in English. Literature of Great Britain and Ireland and the Anglophone literatures influenced by them.
- 832. Studies in Comparative Theatre and Drama**  
Fall, Spring, 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course. Interdepartmental with Theatre. Administered by Theatre. Comparative study of selected playwrights, developments, movements, and trends in world drama from their beginnings to the present.
- 833. Poetry Writing Workshop**  
Fall, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to graduate students in English-Creative Writing. Approval of department. A workshop in writing and reading poetry.
- 835. Fiction Writing Workshop**  
Fall, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to graduate students in English-Creative Writing. Approval of department. A workshop in writing and reading fiction.
- 837. Drama Writing Workshop**  
Fall, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to graduate students in English-Creative Writing. Approval of department. Concentration on each student's writing through workshop discussion and conferences with instructor. Attention to professional contemporary drama.
- 840. Writing Workshop for Teachers**  
Fall, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to graduate students in English. Examination of techniques for teaching. Directed practice in writing.
- 841. Topics in the Teaching of English**  
Fall, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to graduate students in English and in Literacy Instruction. Selected topics and issues in the teaching of English and the language arts.
- 843. Variation in English**  
Spring, 3(3-0)  
R: Open only to graduate students in College of Arts and Letters. Effects on English of geographic, ethnic, social, and gender variables. Attitudes toward variation. Usage and language standards.
- 845. Approaches to the English Language**  
Fall, 3(3-0)  
The linguistic study of English. Basic terms and concepts in phonology, syntax, and discourse. Acquisition and variation. Discourse processes and structures.
- 846. English Structures and Functions**  
Spring, 3(3-0)  
R: Open only to master's students in English-Teaching of English to Speakers of Other Languages. Phonological, morphological, grammatical, lexical, discourse and pragmatic systems of English, including historical origins and social, regional, and gender variations. Application to the teaching of English to speakers of other languages.
- 847. Reading and the English Teacher**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to graduate students in English and Literacy Instruction. Reading processes and reading instruction as they relate to the teaching of English in secondary schools, colleges, and universities.
- 848. Analysis of English Discourse**  
Fall, 3(3-0)  
R: Open only to graduate students in English. Oral and written narratives and conversations. Comparison of discourse structures among cultures, subcultures, and genders. Applications to medical, classroom, second-language, and literary discourse.
- 850. African American Literature**  
Fall, 3(3-0)  
Canon formation and development of critical paradigms. Comparative American literatures, critical reception, and cultural production. Emphasis varies among particular writers, periods, genres, or themes.
- 855. Shakespeare**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to graduate students in English or approval of department. Intensive study of selected plays or poems.
- 861. Advanced Studies in Second Language Acquisition**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Linguistics. Administered by Linguistics.  
P: ENG 461 or approval of department. Current issues and theories of second and foreign language acquisition. Role of language structure, personality, and general cognition. Methods of research.
- 862. Approaches to the Teaching of Literature**  
Spring, 3(3-0)  
R: Open only to graduate students in English and Literacy Instruction. Literary and reading resources. Critical approaches to and techniques for teaching literature.
- 863. The Literatures of Africa and the Diaspora**  
Spring, 3(3-0) Interdepartmental with Linguistics and Languages, and Romance Languages.  
R: Open only to graduate students in College of Arts and Letters. Literatures of Africa and the Diaspora with emphasis on Third World critical approaches, non-canonical perspectives, and problems.
- 865. Anglophone Literature of South Asia**  
Fall, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Linguistics.  
R: Open only to graduate students in College of Arts and Letters. Approval of department. Historical survey of Anglophone literature of South Asia. Special attention to literary traditions of India.
- 871. Introduction to Critical Methodology and Research**  
Fall, 3(3-0)  
R: Open only to graduate students in English. Research methods, modes of critical discourse, textual study, and scholarly writing.
- 872. Methods of Research into Language Learning and Literacy**  
Spring, 3(3-0)  
R: Open only to graduate students in English and Literacy Instruction. Concepts and procedures for designing, evaluating, and conducting applied research in English education.
- 875. The Teaching of English Language and Literature: Reading Theory**  
Spring, 3(3-0)  
R: Open only to graduate students in English and Literacy Instruction. Integration of the teaching of reading and writing. Application of research to the teaching of reading.
- 876. The Teaching of English Language and Literature: Writing Theory**  
Spring, 3(3-0)  
R: Open only to graduate students in English, American Studies, and Literacy Instruction. Integration of writing and reading. Application of research to the teaching of writing and composition.



**Descriptions —English  
of  
Courses**

- 877. Myth, Ritual, and Folklore in Literature**  
Fall, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Romance Languages.  
R: Open only to graduate students in College of Arts and Letters.  
Scholarship in mythology, ritual, and folklore and its use in literature and drama.
- 885. History of Literary Criticism**  
Fall, 3(3-0)  
R: Open only to graduate students in English.  
Major traditions, concepts, terminologies, and problems in the history of literary criticism from classical antiquity to the early 20th century.
- 886. Modern Criticism**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to graduate students in English and American Studies or approval of department.  
Modern and postmodern critical theory. Structuralism and poststructuralism. Psychological, feminist, Marxian, formalist, post-colonial and historicist critical discourse.
- 890. Independent Study**  
Fall, Spring, Summer, 1 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course.  
R: Open only to graduate students in English and American Studies. Approval of department.  
Special project, directed reading, and research arranged by an individual graduate student and a faculty member in areas supplementing regular course offerings.
- 891. Special Topics in American Literature**  
Fall, Spring, Summer, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to graduate students in English and American Studies or approval of department.  
Special topics supplementing regular course offerings proposed by faculty on a group study basis for graduate students.
- 896. Practicum in English Language and Literature**  
Fall, Spring, Summer, 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.  
R: Open only to graduate students in the Department of English. Approval of department.  
Supervised graduate practicums, observations, or internships in the teaching of English language and literature.
- 898. Master's Research**  
Fall, Spring, Summer, 1 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course.  
R: Open only to graduate students in English and American Studies. Approval of department.  
Directed research in support of Plan B master's degree requirements.
- 899. Master's Thesis Research**  
Fall, Spring, Summer, 1 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course.  
R: Open only to graduate students in English and American Studies. Approval of department.  
Directed research leading to a master's thesis, used in partial fulfillment of Plan A master's degree requirements.
- 955. Studies in Shakespeare**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to doctoral students in English. Approval of department.  
Issues in Shakespeare studies of critical and current interest.
- 975. The Reading Process and the Concept of Literacy**  
Spring, 3(3-0)  
R: Open only to doctoral students in English. Approval of department.  
Contributions of language and literacy studies to research into the reading process and definitions of literacy.
- 980. Studies in Rhetoric**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to graduate students in English and American Studies. Approval of department.  
Historical and theoretical perspectives on the traditions of rhetoric.
- 990. Independent Study**  
Fall, Spring, Summer, 1 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course.  
R: Open only to doctoral students in English. Approval of department.  
Special project, directed reading, and research arranged by an individual doctoral student and a faculty member in areas supplementing the regular course offerings.
- 991A. Topics in English Language Studies**  
Fall, Spring, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to graduate students in English and American Studies. Approval of department.  
A major issue in the study of English such as language planning in the United States, power and status in English discourse, or literary applications of linguistic analysis.
- 991B. Topics in Comparative Literature**  
Fall, 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course. Interdepartmental with Romance Languages, and Linguistics and Languages.  
R: Open only to Ph.D. students. Approval of department.  
Critical approaches to genre, periodization, and influence in English and other literatures.
- 991C. Topics in African American Literature**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
P: ENG 850. R: Approval of department.  
Analysis of contemporary controversies in African American literary studies.
- 991D. Topics in the Literature of Africa and the African Diaspora**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Romance Languages, and Linguistics and Languages.  
Authors, movements, and cultures of the literature of Africa and the African diaspora.
- 991E. Topics in Anglophone South Asian Literature**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Linguistics and Languages.  
R: Open only to graduate students in College of Arts and Letters. Approval of department.  
Analysis of an area of South Asian literature written in English.
- 992. Seminar in American Studies**  
Fall, Spring, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to doctoral students in College of Arts and Letters. Approval of department.  
American literature in a the context of popular and fine arts, the history of ideas, or the history of social movements.
- 992A. Seminar in English Education**  
Fall, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to doctoral students in English. Approval of department.  
The teaching of English literature, language, and composition.
- 992B. Seminar in English as a Second Language**  
Fall, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to doctoral students in the Department of English. Approval of department.  
Contemporary theories and issues relating to learning English as a second language.
- 992C. Seminar in Earlier English Literature**  
Fall, Spring, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to doctoral students in English. Approval of department.  
Special problems in English literature, beginnings to 1660.
- 992D. Seminar in Later English Literature**  
Fall, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to doctoral students in English. Approval of department.  
British literature 1660-1900. Culture and society, periodization and genres.
- 992E. Seminar in 20th Century English Literature**  
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to doctoral students in English.  
Literature of Great Britain, Ireland, and other Anglophone countries, exclusive of the United States.
- 992F. Seminar in American Literature to 1900**  
Fall, Spring, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to doctoral students in English. Approval of department.  
Issues in American literature of critical and current interest.
- 992G. Seminar in 20th Century American Literature**  
Fall, Spring, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course.  
R: Open only to doctoral students in English. Approval of department.  
A particular problem, topic, theme, genre, issue, or period in twentieth century American literature.
- 992I. Seminar in Literary Form and Theory**  
Fall, Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to doctoral students in English. Approval of department.  
Theories of periodization, genre, form, signification, and cultural production which influence the study of literature and language.

**999. Doctoral Dissertation Research**  
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 36 credits in all enrollments for this course.  
R: Open only to doctoral students in English.

## ENTOMOLOGY

## ENT

### Department of Entomology College of Agriculture and Natural Resources College of Natural Science

**205. Pests, Society and Environment**  
Fall, Spring. 3(3-0) Interdepartmental with Botany and Plant Pathology.  
Nature of pests and their impact on society. Principles of integrated pest management in relation to environmental quality and sustainable development.

**222. New Horizons in Biotechnology**  
Fall. 2(2-0) Interdepartmental with Crop and Soil Sciences. Administered by Crop and Soil Sciences. Perspectives on biotechnology for safer food production, environmental quality, and improved human health. Impacts of biotechnology on the national economy. Political and ethical ramifications of applied biotechnology.

**319. Introduction to Earth System Science**  
Fall. 3(3-0) Interdepartmental with Botany and Plant Pathology, Geological Sciences, Zoology, and Sociology.  
P: Completion of one course in biological or physical science.  
Systems approach to Earth as an integration of geochemical, geophysical, biological and social components. Global dynamics at a variety of spatio-temporal scales. Sustainability of the Earth system.

**362. Management of Turfgrass Pests**  
Fall. 4(3-2) Interdepartmental with Crop and Soil Sciences, and Botany and Plant Pathology. Administered by Crop and Soil Sciences.  
P: CSS 232.  
Chemical, biological, and cultural methods of managing weeds, diseases, and insect pests of turfgrass. Environmental considerations in pest management.

**401. Directed Studies**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 8 credits in all enrollments for this course.  
R: Approval of department.  
Individual field or laboratory research, or review of published literature, on a topic of interest.

**404. Insects: Success in Biodiversity**  
Fall, Summer of even-numbered years. 4(3-4)  
P: BS 110 or BOT 105, BOT 106.  
Biological adaptations of insects to the environment. Evolution, behavior, ecology, metamorphosis, classification, importance to humans, and pest management.

**407. Diseases and Insects of Forest and Shade Trees**  
Spring. 4(3-3) Interdepartmental with Botany and Plant Pathology. Administered by Botany and Plant Pathology.  
P: BOT 105 or BS 110 or LBS 144; BOT 218 or FOR 204 or HRT 211. R: Completion of Tier I writing requirement. Not open to students with credit in BOT 405.  
Diseases, insects, and environmental problems affecting trees in forests, parks, suburbs, and nurseries. Methods of control.

**410. Apiculture and Pollination**  
Fall. 2(1-2)  
Biology of bees and their relationship to flowers, pollination and crop production.

**419. Advanced Earth System Science**  
Spring. 3(2-2) Interdepartmental with Botany and Plant Pathology, Geological Sciences, Zoology, and Sociology.  
P: ENT 319  
Systems science theory applied to analysis of the biological, geological, physical, and social causes and consequences of global changes. Issues of sustaining the Earth system.

**420. Stream and Aquatic Insect Ecology**  
Fall. 4(3-3) Interdepartmental with Fisheries and Wildlife, and Zoology. Administered by Fisheries and Wildlife.  
P: BS 110, CEM 141.

Biological and environmental factors determining structure and function of stream and aquatic insect communities. Aquatic insect systematics.

**442. Concepts of Biological Information Systems**  
Spring. 3(3-0) Interdepartmental with Resource Development.  
R: Open only to seniors and graduate students.  
Systems approach to managing biological information using computer technology.

**460. Medical and Veterinary Entomology**  
Spring of even-numbered years. 3(2-3)  
P: BS 110. R: not open to freshmen and sophomores  
Insects and other organisms related to human and animal health. Ectoparasites, ecology of vector-borne diseases, epidemiology, and management of arthropod vectors.

**470. General Nematology (W)**  
Spring of odd-numbered years. 3(2-3)  
P: BS 110 or BS 111, BS 111L. R: Completion of Tier I writing requirement.  
Biology of nematodes with special reference to the influence of phytoparasitic, entomopathogenic, animal parasitic, microbiotrophic and marine species on human ecology.

**477. Pest Management I: Pesticides in Management Systems**  
Fall. 3(3-0) Interdepartmental with Horticulture, Crop and Soil Sciences, and Fisheries and Wildlife.  
P: CEM 143; BOT 405 or CSS 402, ENT 404 or ENT 470 or FW 328.  
Chemistry, efficient use, and environmental fate of pesticides. Legal and social aspects of pesticide use.

**478. Pest Management II: Biological Components of Management Systems (W)**  
Spring of odd-numbered years. 3(2-3) Interdepartmental with Horticulture, Crop and Soil Sciences, Fisheries and Wildlife, and Forestry.  
P: ENT 404 or ENT 470 or BOT 405 or CSS 402 or FW 328. R: Completion of Tier I writing requirement.  
Principles of host plant resistance and biological control and their relationship to the design of agroecosystems. Classification of insect biological control agents.

**485. Tropical Biology**  
Spring. 3(3-0) Interdepartmental with Zoology, and Botany and Plant Pathology. Administered by Zoology.  
P: ZOL 250. R: Open only to juniors and seniors.  
Tropical biota emphasizing evolutionary and ecological principles compared across tropical ecosystems.

**485L. Field Tropical Biology**  
Spring, Summer. 2 credits. Interdepartmental with Zoology, and Botany and Plant Pathology. Administered by Zoology.  
P: ZOL 485 or concurrently. R: Open only to juniors and seniors. Approval of department.  
Intensive field experience to study tropical ecosystems. Individual project required. Given at various sites in Costa Rica by the Organization for Tropical Studies.

**805. Integrated Pest Management Systems**  
Fall. 3(2-2)  
Biological, ecological and sociological factors which can be exploited for integrated pest management. Design and management of environmental systems for pest prevention and non-chemical control.

**812. Graduate Seminar**  
Fall, Spring. 1(1-0) A student may earn a maximum of 10 credits in all enrollments for this course. Current research topics. Student presentation required.

**815. Insect Behavior**  
Fall of odd-numbered years. 3(2-3)  
P: ENT 404.  
Fundamentals of insect behavior with emphasis on mechanisms. Quantitative methods.

**818. Systematics, Morphology, Biology: Adults**  
Spring of even-numbered years. 3(1-7)  
P: ENT 404.  
Classification, identification, morphology, biology and evolutionary relationships of adult insects. Specimens provided.

**838. Systematics, Morphology, Biology: Immatures**  
Fall of even-numbered years. 3(1-7)  
P: ENT 404.  
Classification, identification, morphology, biology and evolutionary relationships of immature insects. Emphasis on terrestrial holometabola. Collection required.

**844. Insect Ecology and Evolution**  
Spring of odd-numbered years. 3(3-0)  
P: ENT 404.  
Unique characteristics and principles of insect ecology and evolution including trophic relationships, community structure, speciation and coevolution.

**845. Ecology and Evolution: the Interface**  
Fall. 3 credits. Interdepartmental with Zoology, and Botany and Plant Pathology. Administered by Zoology.  
P: BOT 849  
Conceptual and methodological issues common to both ecology and evolutionary biology.

**850. Insect Physiology**  
Spring of odd-numbered years. 4(3-2)  
P: ENT 404.  
System by system description of insect form and function. Examples of how physiological systems are coordinated for complex biological functions.

**851. Molecular Entomology**  
Fall of odd-numbered years. 3(3-0) Interdepartmental with Genetics.  
Analysis of molecular processes unique to insects, and their potentials for genetic engineering.

**870. Plant Nematology**  
Spring of even-numbered years. 3(2-3) Interdepartmental with Botany and Plant Pathology.  
P: BOT 405.  
Biology, host parasite relationships and management of selected nematode diseases of economic plants.

**890. Independent Study**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 8 credits in all enrollments for this course.  
R: Open only to graduate students.  
Individual study on a field or laboratory research topic or review of published literature on a topic of interest.