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: Open only to students in the College of Engineering, approval of college.
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 or sophomores.
Experimental course development or special topics appropriate for freshmen and sophomores.

300 Technology, Society and Public Policy  
Fall. 2(2-0) P.M: Completion of Tier I writing requirement. RB: Two courses in mathematics or engineering or science. SA: EGR 200, MSM 300
Defining, describing and analyzing technology, impact of technology on society, Public policy and technology. Short history of technology. Development and use of assessment tools to measure impact and consequences of technology.

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 the College of Engineering. Pre-professional educational employment experiences in industry and government related to student’s major. Educational employment assignment approved by College of Engineering.

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 or seniors or 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.

410 System Methodology  
Spring. 2(1-3) P.M: (EGR 300) SA: SYS 410, MSM 400
System analysis and design. Needs analysis, system identification, graphical models. Team project required.

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 or seniors or 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  
Fall, Spring, Summer. 3(1-6) Interdepartmental with Marketing and Supply Chain Management. Administered by Department of Marketing and Supply Chain Management. R: Open only to 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  

092 Academic Oral Skills for Non-Native Speakers of English  
Fall, Spring. 0(3-0) 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(6-0) 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(3-0) 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(3-0) R: Approval of English Language Center.
Writing, editing, and revision of journals, essays and research papers.

097 Oral Skills for Foreign Teaching Assistants  
Fall, Spring. 0(5-0) R: Approval of English Language Center.
Practicum 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.

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 years. 4(4-2) Shakespearean plays emphasizing productions for film and television.

130 Film and Society  
Fall. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. SA: ENG 370
How films reflect social issues of gender, ethnicity, class, sexual orientation and handicapper status. How film affects and shapes social attitudes.

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. 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 the Department of English or American Studies major or English disciplinary 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 students in the Department of English or English disciplinary minor.
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 students in the Department of English or English disciplinary minor.
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.
206 Readings in Contemporary Literatures
Fall, Spring. 3(3-0) R: Not open to students in the Department of English or English disciplinary minor.
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:M: Completion of Tier I writing requirement. R: Open only to students in the Department of English or American Studies major or English disciplinary minor or Language Arts major.
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 with approval of department.
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 the Department of English or English disciplinary 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) P:M: 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:M: (ENG 210 or ENG 226)
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:M: (ENG 210 or ENG 226)
Directed practice in the writing of poetry. Special attention to the types and structures available to the poetry writer.

230 Introduction to Film
Fall, Spring. 4(4-2) P:M: Completion of Tier I writing requirement. SA: ENG 270
Basic concepts and techniques of film analysis and criticism.

231 Film and Literature
Spring. 4(4-2) P:M: (ENG 230 or ENG 210) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores. SA: ENG 473
Differences and similarities between filmic texts and literary texts and between viewing and reading. The process of adaptation from literature to film.

232 Writing as Exploration
Fall. 3(3-0) P:M: 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.

265 Classical Myths and Literature
Fall. 3(3-0) P:M: Completion of Tier I writing requirement. 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) P:M: Completion of Tier I writing requirement. R: Not open to freshmen.
Selections from the Old and New Testaments. Emphasis on major themes, genres, characterization, and style.

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) P:M: Completion of Tier I writing requirement. R: Open only to students in the Department of English or English disciplinary minor or Language Arts major.
Acquisition of oral and written English. English dialects and styles. Minority dialects and Standard English. Reading and writing English.

308 Literature for Young Adults
Spring. 3(3-0) R: Open only to English Majors with Secondary Certification
Children's fairy tales and different genres of literature for young adults, including realistic and historical fiction, fantasy, myth and legend.

309 Writing for Prelaw Students
Fall. 4(4-0) P:M: Completion of Tier I writing requirement. R: Not open to freshmen or sophomores.

310A Literature in English to 1660
Fall. 4(4-0) P:M: (ENG 210) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of English or American Studies major or English disciplinary minor or Language Arts major.
Cultural contexts, literary tradition, modes of discourse, and genres of literature in English.

310B Literature in English 1660-1789
Fall. 4(4-0) P:M: (ENG 210) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of English or American Studies major or English disciplinary minor or Language Arts major.
Cultural contexts, literary traditions, modes of discourse, and genres of English, American and world literature in English.

310C Literature in English 1789-1900
Fall. 4(4-0) P:M: (ENG 210) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of English or American Studies major or English disciplinary minor or Language Arts major.
Cultural contexts, literary traditions, modes of discourse, and genres of English, American and world literature in English.

310D Literature in English since 1900
Fall. 4(4-0) P:M: (ENG 210) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of English or American Studies major or English disciplinary minor or Language Arts major.
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. 4(4-0) P:M: (ENG 210) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of English or American Studies major or English disciplinary minor or Language Arts major.
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) P:M: Completion of Tier I writing requirement. R: Not open to freshmen or sophomores.
Directed practice in writing clear, concise and effective professional prose, with special attention to practical forms like reports, position papers, and proposals.

316E Composition Workshop for Teachers
Fall, Spring. 4(3-4) P:M: (ENG 302) R: Open only to juniors or seniors in the Department of English with a teacher certification option.
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. P:M: Completion of Tier I writing requirement. R: Not open to freshmen.
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:M: (ENG 228) R: 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:M: (ENG 229) R: Open only to students in the Department of English or American Studies major or English disciplinary minor or Language Arts major.
Further directed practice in the writing of poetry. Special attention to the types and structures available to the poetry writer.

330 Film Theory
Fall. 3(3-2) P:M: (ENG 230) SA: ENG 470
Theories of film aesthetics, meaning, and spectatorship; film's relation to other arts.
408 Socio-Psycholinguistic Approaches to Reading in the Disciplines
Fall, Spring. 4(4-0) P:M: (ENG 302) and completion of Tier I writing requirement. R: Open only to sophomores or juniors or seniors in the Department of English with a teacher certification option.
Reading as a socio-psycholinguistic process and its function across disciplines. Focus on literature for children and young adults, reading theories, and research in literacy development.

410 Chaucer
Fall. 3(3-0) P:M: (ENG 210) and (ENG 310A or ENG 310B) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.
Canterbury Tales and other works by Chaucer, read in Middle English. Historical and literary contexts of Chaucer's works.

412 Milton
Fall. 3(3-0) P:M: (ENG 210) and (ENG 310A or ENG 310B) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.
Paradise Lost and other works by Milton. Historical and literary contexts of Milton's works.

415 Critical Studies in Language and Literacy
Spring. 3(0-0) A student may earn a maximum of 9 credits in all enrollments for this course. P:M: Completion of Tier I writing requirement. RB: (ENG 302 or ENG 408 or ENG 413) R: Not open to freshmen or sophomores except with approval of department.
Current research in language and literacy, with emphasis on implications for multicultural classrooms. Topics vary.

420 Language and Culture
Fall, Spring. 3(3-0) Interdepartmental with Anthropology. Administered by Department of Anthropology. P:M: ANP 101 or ANP 201 or ANP 320) and completion of Tier I writing requirement. R: 

421 Shakespeare
Fall, Spring. 3(3-0) P:M: Completion of Tier I writing requirement. RB: 6 credits of literature. R: Not open to freshmen or sophomores except with approval of department.
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:M: (ENG 226 or ENG 232 or ENG 312) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of English.
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:M: Completion of Tier I writing requirement. RB: 6 credits of English or Theatre. R: Not open to freshmen or sophomores except with approval of department.
Ancient and medieval drama, with special emphasis on Greek tragedy.

426B Comparative Drama: Renaissance and Baroque
Spring. 3(3-0) P:M: Completion of Tier I writing requirement. RB: 6 credits of English or Theatre. R: Not open to freshmen or sophomores except with approval of department.
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:M: Completion of Tier I writing requirement. RB: 6 credits of English or Theatre. R: Not open to freshmen or sophomores except with approval of department.
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:M: Completion of Tier I writing requirement. RB: 6 credits of English or Theatre. R: Not open to freshmen or sophomores except with approval of department.
American, British, and Continental European drama from World War II to the present seen through representative plays of the period.

429 Advanced Poetry Writing
Fall. 3(3-1) P:M: (ENG 228 and ENG 229) or (ENG 327 or ENG 334)
Reading contemporary poetry and writing original poems. Interdependence of idea and execution in successful poems. Emphasis on craft and poetics.

430 Studies in Film Theory and Criticism
Spring. 3(3-2) P:M: (ENG 230 and ENG 330 and ENG 331) SA: ENG 470
Topics in film theory and criticism, including directors, genres, modes of criticism, theories of film as art, medium of discourse, and cultural encoding.

431A Studies in Ethnic Film
Spring. 4(4-2) P:M: (ENG 230 and ENG 331) RB: (ENG 330 and ENG 332)
Film traditions and /or film makers studied from the perspective of a particular ethnic group, such as Native American, Chicana/o, Latina/o, Jewish, or other American ethnic groups.

431B Third World Cinema
Spring. 4(4-2) P:M: (ENG 230 and ENG 331) RB: (ENG 330 and ENG 332) SA: ENG 471
Films of the Third World, including major directors and trends from Africa, Asia, and Latin America.

431C Studies in Film and Gender
Fall. 4(4-2) P:M: (ENG 230 and ENG 331) RB: (ENG 330 and ENG 332)
Study of films by women and about women, gender, masculinity, or sexuality.

432 Studies in the History of Film
Fall. 4(4-2) A student may earn a maximum of 8 credits in all enrollments for this course. P:M: (ENG 230 and ENG 332)
Selected movements or traditions in film history. Silent film, studio film, New Wave, or British film.

436A Comparative Fiction: Western
Fall. 3(3-0) P:M: Completion of Tier I writing requirement. RB: 6 credits of literature. R: Not open to freshmen or sophomores except with approval of department.
Comparative study of fiction 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:M: Completion of Tier I writing requirement. RB: 6 credits of literature. R: Not open to freshmen or sophomores except with approval of department.

439 20th Century English Poetry
Fall. 3(3-0) P:M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.
Themes, styles, forms, and aesthetics of poetry from Britain, Ireland, and other English-language countries excluding the United States.

440 American Poetry 1900-1950
Fall. 3(3-0) P:M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.
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:M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores.
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:M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.
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.M: (ENG 210) and (ENG 310 A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

Works by writers such as Whitman, Dickinson, Twain, James, Wharton, Chesnutt, 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.M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

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.M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

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.M: (ENG 349 or ENG 350) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

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.M: (ENG 310E or ENG 341 or ENG 342) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

Problems 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.M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

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.M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

American poetry from World War II to the present.

454 Middle English Literature
Spring, 3(3-0) P.M: (ENG 210 and ENG 310A) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

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.M: (ENG 210 and ENG 310A) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

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.M: (ENG 411 or ENG 412 or ENG 421 or ENG 455) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

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.M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

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.M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

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.M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

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

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.

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

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

464 Studies in the Literature of Asia and the Asian Diaspora (W)
Spring, 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. Interdepartmental with Department of Linguistics and Germanic, Slavic, Asian and African Languages. P.M: 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.M: Completion of Tier I writing requirement. R: 6 credits of literature. R: Not open to freshmen or sophomores except with approval of department.

Canadian literature in historical and multicultural contexts.

469 Topics in Comparative Literature
Spring, 3(3-0) Interdepartmental with Department of Romance Languages. Administered by Department of Philosophy. P.M: Completion of Tier I writing requirement. R: Not open to freshmen or sophomores.

Relationships among writers, themes, genres, movements, and periods in different national literatures and between literature and other arts.

474 Aesthetic Theory and Modernism
Fall, 4(4-0) Interdepartmental with Philosophy; History of Art; Linguistics and Languages; Music, Romance Languages. Administered by Department of Philosophy. R: Not open to freshmen or sophomores.

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.M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.

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 Oral Tradition
Fall. 3(3-0) P:M: Completion of Tier I writing requirement. RB: 6 credits of literature. R: Not open to freshmen or sophomores except with approval of department.

480 History of Western Literary Criticism
Fall. 3(3-0) P:M: (ENG 210) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.
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.

481 Modern Critical Theory
Spring. 3(3-0) P:M: (ENG 210) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.
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:M: (ENG 353 or ENG 379 or WS 202) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of English or Women's Studies Program or English disciplinary minor.
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. P:M: Completion of Tier I writing requirement. R: Not open to freshmen or sophomores.

485 Development of the British Novel, 1660-1800
Fall. 3(3-0) P:M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores.
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:M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.
Artistic and cultural dynamics of novels by Austen, the Brontes, Dickens, Eliot, Gaskell, Hardy, Meredith, Morris, Thackeray, Trollope, Ward, and Wilde.

487 The 20th Century English Novel
Fall. 3(3-0) P:M: (ENG 210) and (ENG 310A or ENG 310B or ENG 310C or ENG 310D or ENG 310E) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores except with approval of department.
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. A student may earn a maximum of 4 credits in all enrollments for this course. P:M: Completion of Tier I writing requirement. R: Open only to Honors College juniors or seniors in the Department of English or approval of department.
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. P:M: Completion of Tier I writing requirement. R: Open only to juniors or seniors with 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. P:M: Completion of Tier I writing requirement. R: Open only to Honors College juniors or seniors in the Department of English or approval of department.
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. P:M: Completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of English or American Studies major or English disciplinary minor.
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:M: Completion of Tier I writing requirement. RB: Any two of these courses: ENG 310A, ENG 310B, ENG 310C, ENG 310D, ENG 310E. R: Open only to Honors College juniors or seniors in the Department of English or approval of department.
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:M: Completion of Tier I writing requirement. RB: 15 credits of English. R: Open only to juniors or seniors in the Department of English or American Studies major.
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. P:M: Completion of Tier I writing requirement. R: Open only to juniors or seniors with 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.

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 the College of Arts and Letters or approval of department.
Chaucer and the literature of the later middle ages read in Middle English. "Piers Plowman", "Sir Gawain", and others. 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 the College of Arts and Letters or approval of department.
English non-dramatic literature, 1500-1600

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 the College of Arts and Letters 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 graduate students in the College of Arts and Letters or approval of department.
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 the College of Arts and Letters 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; Romance Languages. Administered by Arts and Letters. R: Open only to graduate students in the College of Arts and Letters. 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; Romance Languages. Administered by Arts and Letters. R: Open only to graduate students in the 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; Romance Languages. Administered by Arts and Letters. R: Open only to graduate students in the College of Arts and Letters. 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 the College of Arts and Letters or approval of department. 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; Romance Languages. Administered by Arts and Letters. R: Open only to graduate students in the 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 College of Arts and Letters or approval of department. 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 the College of Arts and Letters 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 the College of Arts and Letters or approval of department. 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. 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.

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 the College of Arts and Letters or College of Education or approval of department. 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 the College of Arts and Letters or College of Education or approval of department. 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 or College of Education or approval of department. 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) R: Open only to graduate students in the College of Arts and Letters or College of Education or approval of department. Linguistic study of English. Basic terms and concepts in phonology, syntax, and discourse. Acquisition and variation. Discourse processes and structures.

848 Analysis of English Discourse
Fall. 3(3-0) R: Open only to graduate students in the College of Arts and Letters or College of Education or approval of department. 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) R: Open only to graduate students in the College of Arts and Letters or approval of department. 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 the College of Arts and Letters 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 Department of Linguistics and Germanic, Slavic, Asian and African Languages. RB: (ENG 481) 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 the College of Arts and Letters or College of Education or approval of department. 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; 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.

871 Introduction to Critical Methodology and Research
Fall. 3(3-0) R: Open only to graduate students in the College of Arts and Letters or approval of department. 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 College of Arts and Letters or College of Education or approval of department. 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 the College of Arts and Letters or College of Education or approval of department. 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 the College of Arts and Letters or College of Education or approval of department.
Integration of the teaching of writing and reading. Application of research to the teaching of writing and composition.

885 History of Literary Criticism
Fall, 3(3-0) R: Open only to graduate students in the College of Arts and Letters or approval of department.
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 the College of Arts and Letters 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. 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 6 credits in all enrollments for this course. R: Open only to graduate students in the College of Arts and Letters 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 6 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. 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. Approval of department.
Directed research leading to a master's thesis, used in partial fulfillment of Plan A master's degree requirements.

901A Topics in English Language Studies
Fall, Spring, Summer. 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 the College of Arts and Letters or 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.

901B Topics in Comparative Literature
Fall, Spring, Summer. 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 the Department of English. Approval of department.
Critical approaches to genre, periodization, and influence in English and other literatures.

902 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 the College of Arts and Letters or approval of department.
American literature in the context of popular and fine arts, the history of ideas, or the history of social movements.

902A Seminar in English Education
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 the College of Arts and Letters or approval of department.
The teaching of English language, literature, and composition.

902C 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 the College of Arts and Letters or approval of department.
Special problems in English literature, beginning to 1660.

902D Seminar in Later 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 doctoral students in the College of Arts and Letters or approval of department.
British literature 1660-1900. Culture and society, periodization and genres.

902E 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 the College of Arts and Letters or approval of department.
Literature of Great Britain, Ireland, and other Anglophone countries, exclusive of the United States.

902F 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 the College of Arts and Letters or approval of department.
A particular problem, topic, theme, genre, issue, or period in twentieth century American literature.

902G Seminar in 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 doctoral students in the College of Arts and Letters or approval of department.
A particular problem, topic, theme, genre, issue, or period in twentieth century American literature.

902H 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 the College of Arts and Letters or 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 99 credits in all enrollments for this course. R: Open only to doctoral students in the English major.
Doctoral dissertation research.

ENGLISH AS A SECOND LANGUAGE ESL

Department of Linguistics and Germanic, Slavic, Asian and African Languages

College of Arts and Letters

090A Intensive English for Non-Native Speakers
Fall, Spring. 0(20-0) R: Approval of English Language Center. SA: ENG 090A
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(20-0) R: Approval of English Language Center. SA: ENG 090B
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(20-0) R: Approval of English Language Center. SA: ENG 090C
Explanation and intensive practice of English skills. Focus on advanced grammar, speaking, listening, reading, and writing.

ENTOMOLOGY

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

110 Applied Entomology for Ornamentals and Turf
Fall of odd years. 3(2-2) RB: Interest or experience in ornamentals and turf production systems. R: Open only to students in the Institute of Agricultural Technology. Not open to students with credit in ENT 111. Arthropod pests of woody ornamentals and turf grasses. Groups and species of importance to northern Michigan.

111 Basics of Applied Entomology
Spring 2(2-1) R: Open only to students in the Institute of Agricultural Technology. SA: AT 057 Not open to students with credit in ENT 110 or AT 057. Basic insect biology, principles of integrated pest management, and the major pests of field crops, woody ornamentals, other perennials, turf, and commercial greenhouses. Offered first ten weeks of semester.

205 Pests, Society and Environment

222 New Horizons in Biotechnology
Fall (2-0) Interdepartmental with Crop and Soil Sciences. Administered by Department of 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 Plant Biology; Geological Sciences; Zoology; Sociology. RB: 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; Plant Pathology. Administered by Department of Crop and Soil Sciences. P.M.: (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, 4(3-4) P.M.: (BS 110) or (BOT 105 and 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 Plant Pathology; Plant Biology. Administered by Department of Plant Pathology. P.M.: (PLB 105 or BS 110 or LBS 144 or LBS 148H) and (PLB 218 or FOR 204 or HRT 211) and completion of Tier I writing requirement. SA: BOT 407 Diseases, insects, and environmental problems affecting trees in forests, parks, suburbs, and nurseries. Methods of control.

410 Apiiculture 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 Plant Biology; Geology; Oceanography; Sciences; Zoology; Sociology. P.M.: (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.

422 Aquatic Entomology
Fall of odd years. 3(2-3) Interdepartmental with Fisheries and Wildlife; Zoology. P.M.: (BS 110) SA: ENT 420 Biology, ecology and systematics of aquatic insects in streams, rivers and lakes. Field trips and aquatic insect collection required.

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

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

469 Biomonitroing of Streams and Rivers
Summer of even years. 3(2-3) Given only at W.K. Kellogg Biological Station. Interdepartmental with Fisheries and Wildlife. P.M.: (BS 110) Practical field and lab rapid bioassessment methodologies used to sample and assess the biota of streams and rivers. Sampling and identification of fish, macroinvertebrates and other biota will be emphasized.

470 General Nematology (W)
Spring of odd years. 3(2-3) P.M.: (BS 110) or (BS 111 and BS 111L) and 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 Crop and Soil Sciences; Fisheries and Wildlife; Horticulture. RB: (CEM 143 or CEM 251) and (BOT 405 and CSS 402) and (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 even years. 3(2-3) Interdepartmental with Crop and Soil Sciences; Forestry; Fisheries and Wildlife; Horticulture. P.M.: (ENT 404 or ENT 470 or PLP 405 or CSS 402 or FW 328) and 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; Plant Biology. Administered by Department of Zoology. P.M.: (ZOL 355) R: Open only to juniors or seniors. Tropical biota emphasizing evolutionary and ecological principles compared across tropical ecosystems.