

ENGLISH

992D* **Seminar in Later English Literature 1660 to 1900**
 Fall. 3(3-0) May reenroll for a maximum of 6 credits.
 R: doctoral English permission of department
 British literature 1660-1990: culture and society, periodization, genres
 QA: ENG 982

992E* **Seminar in Twentieth Century English Literature**
 Spring. 3(3-0) May reenroll for a maximum of 6 credits.
 R: doctoral English
 Twentieth Century literature of Great Britain, Ireland, and other Anglophone countries exclusive of USA.
 QA: ENG 984

992F* **Seminar in American Literature to 1900**
 Fall, Spring. 3(3-0) May reenroll for a maximum of 9 credits.
 R: doctoral English permission of department
 Special problems in American literature beginnings to 1900
 QA: ENG 983

992G* **Seminar in Twentieth Century American Literature**
 Fall, Spring. 3(3-0) May reenroll for a maximum of 9 credits.
 R: doctoral permission of department
 A particular problem, topic, theme, genre, issue, or period in twentieth century American literature
 QA: ENG 984

992I* **Seminar in Literary Form and Theory**
 Fall, Spring. 3(3-0) May reenroll for a maximum of 6 credits.
 R: doctoral English permission of department
 Theories of periodization, genre, form, signification, and cultural production which influence the study of literature and language.
 QA: ENG 985

999* **Doctoral Dissertation Research**
 Fall, Spring, Summer. 1 to 30 credits.
 May reenroll for a maximum of 50 credits.
 R: Approval of the Department
 QA: ENG 999

ENTOMOLOGY ENT

205* **Pests, Society and Environment**
 Fall, Spring. 3(3-0)
 Interdepartmental with the Department(s) of Botany and Plant Pathology.
 Nature of pests and their impact on society. Principles of integrated pest management and environmental quality.
 QA: ENT 201 ENT 250

401* **Directed Studies**
 Fall, Spring, Summer. 1 to 3 credits.
 May reenroll for a maximum of 8 credits.
 R: Approval of department.
 Individual field or laboratory research, or review of published literature, on a topic of interest.

404* **General Entomology**
 Fall, Summer of even-numbered years. 4(03-04)
 P: BS 110.
 Biological relationships of insects to the environment. Evolution, behavior, ecology, metamorphosis, classification, importance to humans, and pest management.
 QP: BS 212 QA: ENT 301 ENT 302 ENT 425

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

442* **Concepts of Biological Information Systems**
 Spring. 3(03-00) Interdepartmental with the Department(s) of Computer Science.
 R: Seniors and Graduate Students
 Systems approach toward managing biological information using computer technology.
 QA: SYS 442 SYS 843

460* **Medical and Veterinary Entomology**
 Spring. 3(02-03)
 P: BS 110. R: Open only to juniors and seniors.
 Insects and other organisms related to human and animal health. Ectoparasites, ecology of vector-borne diseases, epidemiology, and management of arthropod vectors.
 QP: ENT 301 ENT 302 QA: ENT 460

470* **General Nematology**
 Spring. 3(02-03)
 P: BS 110 or BS 111.
 Biology of nematodes with special reference to the influence of phytoparasitic, entomopathogenic, animal parasitic, microbiotrophic and marine species on human ecology.
 QP: BS 210 ORBS 211ORBS 212 QA: ENT 470

477* **Pest Management I: Pesticides in Management Systems**
 Fall. 3(03-00) Interdepartmental with the Department(s) of Horticulture, Crop and Soil Sciences, Fisheries and Wildlife.
 P: CEM 143, ENT 404 or ENT 470 or BOT 405 or CSS 402 or FW 328
 Broad overview of pesticide chemistry, efficient use, environmental fate and legislation.
 QP: CEM 143 ANDHRT 402ORENT 425 QA: NSC 445

478* **Pest Management II: Biological Components of Management Systems**
 Spring. 3(02-03) Interdepartmental with the Department(s) of Horticulture, Crop and Soil Sciences, Fisheries and Wildlife, Forestry.
 P: ENT 404 or ENT 470 or BOT 405 or CSS 402 or FW 328
 Principles of host plant resistance and biological control as they might affect design of agroecosystems. Introduction for classification of insect biological control agents.
 QP: ENT 425 ORCSS 402ORENT 470 QA: NSC 446

805* **Design and Management of IPM Systems**
 Fall. 3(02-02)
 R: Graduate Students or Approval of Department
 Exploration of biological, ecological and sociological factors which can be exploited for Integrated Pest Management (IPM). Emphasis placed on design and management of environmental systems for pest prevention and non-chemical control.

812* **Graduate Seminar Topics**
 Fall, Spring. 1(1-0)
 Current research topics. Student presentation required.

815* **Insect Behavior**
 Fall of odd-numbered years. 3(02-03)
 P: ENT 404
 Fundamentals of insect behavior with an emphasis on mechanisms and methods in modern quantitative behavior.
 QP: ENT 301 ENT 302 QA: ENT 415

818* **Systematics, Morphology, Biology: Adults**
 Spring of even-numbered years. 3(01-07)
 P: ENT 404
 Classification, identification, morphology, biology and evolutionary relationships of adult insects. Specimens provided.
 QP: ENT 301 ENT 302 QA: ENT 418

838* **Systematics, Morphology, Biology: Immatures**
 Fall of even-numbered years. 3(01-07)
 P: ENT 404
 Classification, identification, morphology, biology and evolutionary relationships of immature insects, with emphasis on terrestrial holometabola. Collection required.
 QP: ENT 418 QA: ENT 438

844* **Insect Ecology and Evolution**
 Spring of odd-numbered years. 3(03-00)
 P: ENT 404
 Unique characteristics and principles of insect ecology and evolution including trophic relationships, community structure, speciation and coevolution.
 QA: ENT 444

850* **Insect Physiology**
 Spring of odd-numbered years. 4(03-02)
 P: ENT 404, BCH or Organic CEM recommended
 System by system description of insect form and function followed by examples of how physiological systems are coordinated for complex biological functions.
 QP: ENT 301 ENT 302CEMBCH QA: ENT 450

851* **Insect Molecular Biology**
 Fall of odd-numbered years. 3(03-00)
 Interdepartmental with the Department(s) of Genetics.
 R: Graduate students Approval of Department
 Analysis of molecular processes unique to insects, and their potentials for genetic engineering.
 QA: ENT 851

870* **Plant Nematology**
 Spring. 3(02-03) Interdepartmental with the Department(s) of Botany and Plant Pathology.
 P: BOT 405 recommended
 Study of the biology, host parasite relationships and management of 25 selected nematode diseases of economic plants.
 QP: BOT 405 QA: ENT 871

890* **Problems**
 Fall, Spring, Summer. 1 to 3 credits.
 May reenroll for a maximum of 8 credits.
 R: Graduate Students
 Advanced, individual study on a field or laboratory research topic or review of published literature on a topic of interest.