## Entomology and Nematology

### Course Search

Not all courses are offered every semester. Refer to the schedule of courses for each term’s specific offerings.

More Info

Courses at the University of Florida, with the exception of specific foreign language courses and courses in the online Master of Arts in Mass Communication program, are taught in English.

### Courses

**ALS 2160 Bioterrorism**

Bioterrorism directed against agriculture and human health has scientific (development of the threat agent, its deployment and mitigation), social and legal components. Discusses how threats may be alleviated and future attacks responded to, and how risk is best communicated to affected citizens.

**Prereq:** admission to the honors program

**ALS 2931 Agricultural Honors**

Various courses offered. (WR)

**Prereq:** refer to the department

**WR6**

**ALS 3153 Agricultural Ecology**

Introduces the study of ecology from an agricultural perspective. Emphasizes ecological principles with examples and applications from agriculture.

**ALS 3203 PC Use in Agriculture**

Introduces PC computer skills, file management, software application, hardware, purchasing one’s own PC system. Focus is on the use of computers for preparing documents and presentations.

**ALS 4161 Exotic Species and Biosecurity Issues**

Studies U.S. policies and programs affecting agricultural biosecurity as applied to current agricultural and extension and regulatory programs. Emphasis is on policies and procedures used to detect and report non-indigenous species. Students will develop the analytical capabilities to assess the consequences of agricultural biosecurity threats.

**Prereq:** BSC 2010/2010L and BSC 2011/2011L, or equivalent

**Coreq:** HOS 3020 or ENY 3005/3005L or PLP 3002C

**ALS 4162 Consequences of Biological Invasions**

Non-native species invasions and environmental effects of these invaders. Students will develop analytical capabilities to assess the consequences of biological invasions.

**Prereq:** BSC 2010/2010L and BSC 2011/2011L, or equivalent

**ALS 4163 Challenges in Plant Resource Protection**

Applied training in the regulatory aspects of plant protection, using real-world case studies, scenarios and issues.

**Prereq:** BSC 2010/2010L and BSC 2011/2011L, or equivalent

**Coreq:** HOS 3020 or ENY 3005/3005L or PLP 3002C

**ENY 1001 Bugs and People**

Introduction for lower-division students who want to learn popular information about insects and associated organisms. (B)

**General Education - Biological Science**

**ENY 2040 The Insects**

Introduces insect biology, insect-organism interaction and insect association with man. Features discussion of basic biological principles using insects as examples. (B)

**General Education - Biological Science**

**ENY 2041C Practical Beekeeping**

Establish colonies of European-derived honey bees and manage them to be healthy and productive; a hybrid approach combines online lectures and in-person field experiences.

**ENY 2890 Using Insect Research to Understand the Nature of Scientific Engagement**

A classroom undergraduate research experience (Cure) which bridges the divide between the classroom and the science laboratory and prepares for advanced opportunities in entomological science. Become part of an entomology research team, collecting publishable data on insect evolution, ecology, and systematics.

**ENY 3005 Principles of Entomology**

2 Credits

Introduces principles of insect study, including insect structure, insect development, evolutionary insect history and its ecological significance.

**Coreq:** ENY 3005L

**General Education - Biological Science**

**ENY 3007C Life Science**

The biology, behavior, ID and damage recognition of insect and vertebrate pests.

**ENY 3030C Insect Field Biology**

Field-oriented surveys of invertebrate biodiversity and conservation.

**ENY 3030L Principles of Entomology Laboratory**

Provides practical laboratory experience working with insects, dissecting insects and preparing lab reports. Insect collection is required. (B)

**Coreq:** ENY 3005

**General Education - Biological Science**

**ENY 3070C Life Science**

Introduces insects and their interactions with man and the environment.

**ENY 3080C Experiments in Population Ecology**

Field-oriented surveys of invertebrate biodiversity and conservation.

**ENY 3163 Invertebrate Field Biology**

Field-oriented surveys of invertebrate biodiversity and conservation.

**ENY 3222C Biology and Identification of Urban Pests**

Biology, behavior, ID and damage recognition of insect and vertebrate pests.

**Prereq:** ENY 3005 and ENY 3005L

**ENY 3225C Principles of Urban Pest Management**

Methods of controlling household, structural and occasional pests with emphasis placed on cockroaches, termites and fleas.

**Prereq:** ENY 3005 and ENY 3005L

**ENY 3228 Urban Vertebrate Pest Management**

The biology, ecology, health risks, exclusions and control of vertebrate pests in the urban environment.

**ENY 3451C Insect Behavior**

Provides a theoretical and empirical overview of insect behavior, ranging from physiology underlying behavior to the evolution of behavioral diversity. Focuses on recent and current research on insect behavior, the diversity of approaches for studying it, and how this knowledge can be applied to solve human challenges.

**Prereq:** ENY 1001, ENY 2040, ENY 3005, BSC 2005, BSC 2010, or instructor permission

**ENY 3510C Turf and Ornamental Entomology**

Biology, identification and management of arthropods that infect turfgrass and ornamental plants in urban landscape and in nurseries and greenhouses.
ENY 3541C Tree and Shrub Insects 3 Credits
Emphasizes biology and management options for the control of insect pests associated with woody plants.

ENY 3563 Introduction to Tropical Entomology 3 Credits
Natural history, ecology and behavior of tropical insects in natural and agroecosystems. Designed for students without previous experience in tropics.
Prereq: ENY 3005 and ENY 3005L

ENY 3564L Tropical Entomology Field Laboratory 2 Credits
A 10-day trip to a tropical country to study the insect faunas of natural and agroecosystems. Each student is assigned a field project.
Prereq: ENY 3563

ENY 4161 Insect Classification 3 Credits
Classification of major families of adult insects with emphasis on their identification, habitat and niche. A properly curated collection is required.
Prereq: ENY 3005 and ENY 3005L
General Education - Biological Science

ENY 4202 Ecology of Vector-Borne Disease 2 Credits
Introduces critical components of vector-borne disease systems and basic concepts inherent to disease ecology. Focuses on vector-borne diseases of humans and wildlife and how aspects of the environment and host/vector biology influence disease transmission. Topics include epidemiology, transmission models, and emerging diseases.
Prereq: BSC 2010 or equivalent

ENY 4210 Insects and Wildlife 3 Credits
Introduces insects and other arthropods and their relationships with wild vertebrate animals.
Prereq: ENY 3005L or equivalent entomology laboratory

ENY 4221 Termite Biology and Control 2 Credits
Taxonomy, identification, behavior, ecology and methods of control for the economically important termites in the New World.

ENY 4230 Urban Pesticide Application 1-6 Credits
Practical work experience in urban pesticide application; study pest management problems on campus and in residences.
Prereq: ENY 3005 and ENY 3005L

ENY 4453 Behavioral Ecology and Systematics 3 Credits
Introduces behavioral ecology and systematics of insects. (B)
Prereq: ENY 3005 and ENY 3005L
General Education - Biological Science

ENY 4455C Social Insects 3 Credits
Introduces social wasps, bees, ants and termites: their natural history; social behavior; division of labor, caste differentiation, evolution, identification and rearing. Laboratory involves live insects.

ENY 4573 Beekeeping 3 Credits
The biology of honey bees and the craft of apiculture. Course examines the natural history, biogeography and ecology of honey bees. Topics of discussion include honey bee anatomy, physiology, colony social structure, pests/diseases, pollination ecology, management and current topics in beekeeping.
Prereq: junior standing

ENY 4592 Mosquito Biology 3 Credits
This modular course covers six critical areas of mosquito biology; classification, natural history and ecology, physiology, population dynamics, mosquito-borne diseases and control of mosquitoes. Students will understand the fundamental processes governing mosquitoes and mosquito-borne diseases.
Prereq: junior standing

ENY 4660 Medical and Veterinary Entomology 2 Credits
Prereq: ENY 3005 and ENY 3005L
General Education - Biological Science

ENY 4660L Medical and Veterinary Entomology Laboratory 1 Credit
Prereq: ENY 4660
General Education - Biological Science

ENY 4701 Forensic Entomology 3 Credits
The role of arthropods in decomposition, in criminal and civil investigations and the increasing importance of science on society. Material and discussions deal with death and some may consider course images and concepts disturbing.

ENY 4900 Supervised Extension Experience in Entomology and Nematology 3 Credits
Firsthand, authentic extension experiences in entomology and nematology under the supervision of a faculty member. Projects may involve program planning, development, implementation, and evaluation. (S-U)

ENY 4905 Problems in Entomology 1-5 Credits
Problems in any field of specialization in entomology and nematology.
Prereq: ENY 3005 and the basic course in selected specialization

ENY 4911 Supervised Research in Entomology 3 Credits
Firsthand, authentic research in entomology under the supervision of a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application.

ENY 4915 Honors Thesis Research in Entomology 3 Credits
Independent research in entomology leading to an honors thesis. Student will be mentored by a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application. (S-U)
Prereq: junior standing, upper division GPA of 3.75 or higher and completed honors thesis proposal on file

ENY 4932 Special Topics in Entomology and Nematology 1-3 Credits
Special topics in Entomology and Nematology.
Prereq: Sophomore standing

IPM 3022 Fundamentals of Pest Management 3 Credits

IPM 4254 Landscape Integrated Pest Management: Ornamentals and Turf 3 Credits
Landscape pest pressure is influenced by many factors. The development of sound integrated pest management plans for landscapes focuses on identification of abiotic factors, weeds, insects, mites, pathogens and nematodes that occur on Florida landscape ornamentals, turfgrass and palms.
Prereq: ENY 3005 or NEM 3002 or PLP 3002C
NEM 3002 Principles of Nematology 3 Credits
Introduces nematology, including studies of morphology, life histories and control of the major nematode parasites of plants. Also includes studies of the bionomics of certain soil nematodes and nematode parasites of vertebrates and arthropods. (B)
General Education - Biological Science

NEM 4905 Problems in Nematology 1-4 Credits
Selected problems for study, research or discussion in nematology.

NEM 4911 Supervised Research in Nematology 3 Credits
Firsthand, authentic research in nematology under the supervision of a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application. (S-U)

NEM 4915 Honors Thesis Research in Nematology 3 Credits
Independent research in nematology leading to an honors thesis. Student will be mentored by a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application. (S-U)
Prereq: junior standing, upper division GPA of 3.75 or higher and completed honors thesis proposal on file

PMA 4570C Field Techniques in IPM 2 Credits
Prereq: IPM 3022