Nature and Culture

(Emma and John S. Haas School of Education)

This major was discontinued effective June 30, 2011.

Courses in Nature and Culture (NAC)

Upper Division

192. Internship in Nature and Culture (1-12)
Internship—3-36 hours. Prerequisite: course 1. Internship in natural sciences, social sciences, or humanities on or off campus in which students use and improve their interdisciplinary skills and perspectives gained through the Nature and Culture curriculum. Supervised by a faculty member. May be repeated for credit. [P/NP grading only.]

Nematology

Please see the department of Entomology and Nematology, on page 293, for further information.

(Thaddeus of Agricultural and Environmental Sciences)

Michael Parrilla, Ph.D., Chairperson of the Department

Edwin Lewis, Ph.D., Vice Chairperson of the Department

Department Office, 367 Briggs; 530-752-0300

Faculty

Edward P. Caswell-Chen, Ph.D., Professor
Howard Ferris, Ph.D., Professor
Edwin E. Lewis, Professor
Steven A. Nadler, Ph.D., Professor
Becky B. Westerdahl, Ph.D., Professor

Emeriti Faculty

Bruce A. Jaffe, Ph.D., Professor Emeritus
Harry K. Kaya, Ph.D., Professor (Entomology)

Minor Program Requirements:

UNITS
Nematology ................................. 18-20
Nematology 100, 110, and Soil Science 100 ........................................ 10
Two or three courses from one of the following areas: .............................. 8-10
(a) Plant Science: Microbiology 102; Entomology 100, 153, 155, 156; Evolution and Ecology 112; Plant Pathology 120, 148; Plant Biology 121; Soil Science 111, 112

(b) Entomology: One upper division Entomology course; Evolution and Ecology 112; Microbiology 102; Plant Biology 121; Plant Pathology 120, 148; Soil Science 102, 111, 112

Minor Adviser. S. Lawler

Graduate Study. Graduate degrees specializing in Nematology are offered through the Departments of Entomology, Plant Pathology, and through various Graduate Groups [Biochemistry, Ecology, Genetics, Plant Protection and Pest Management]. Refer also to the Graduate Studies chapter of this catalog.

Courses in Nematology (NEM)

Related Courses. See Entomology and Nematology, on page 293.

10V. General Biology (4)
Web virtual lecture—3 hours; web electronic discussion—1 hour. Concepts and issues in biology. Emphasis on composition and structure of organisms; regulation and signaling; heredity, evolution and the interaction and interdependence among life forms and their environments. Significant writing is required. Designed for students not specializing in biology. Not open for credit to students who have completed courses Biological Sciences 1A, 1B, 2A, 2B, 2C or 10. (Same course as Biological Sciences 10V.) GE credit: SciEng, Wrt [SE, SL, WE, — Ill. (III.) Westerdahl]

Upper Division

100. General Plant Nematology (4)
Lecture—2 hours; laboratory—6 hours. Prerequisite: Biological Sciences 1B or 10. An introduction to the classification, morphology, biology, and control of the nematodes attacking cultivated crops. GE credit: SciEng | SE—(I.) Ferris

110. Introduction to Nematology (2)
Lecture—2 hours. Prerequisite: Biological Sciences 1B or the equivalent or consent of instructor. The relationship of nematodes to human environment. Classification, morphology, ecology, distribution, and importance of nematodes occurring in water and soil as parasites of plants and animals. GE credit: SciEng | SE—(II.) Caswell-Chen, Nadler

199. Special Study for Advanced Undergraduates (1-5)
Prerequisite: consent of instructor. [P/NP grading only.]

Graduate

201. Molecular and Physiological Plant Nematology (2)
Lecture—1 hour; discussion—1 hour. Prerequisite: Biological Sciences 101; Plant Pathology 120, course 100 or 110. Molecular biology and physiology of nematodes using Caenorhabditis elegans as a model, but with emphasis on plant-parasitic species. Plant responses to nematodes. Discussion of current literature emphasized. Offered in alternate years.—II. Williamson

203. Ecology of Parasitic Nematodes (2)
Lecture—1 hour; discussion—1 hour. Prerequisite: course 100 or 110 or Entomology 156; Evolution and Ecology 101 or Plant Biology 117. Major concepts in population and community ecology of animal- and plant-parasitic nematodes. Current advances in techniques, theory, and basic information about nematode host dynamics, and application to management of nematode diseases. Offered in alternate years. —(III.) Caswell-Chen

204. Management of Plant-Parasitic Nematodes (2)
Lecture—1 hour; laboratory—3 hours. Prerequisite: course 100 or 110. Theory, foundation, principles and practices of nematode management. Techniques and equipment used to manage nematodes and methods used to analyze their effectiveness. Offered in alternate years.—II. Westerdahl

290. Seminar (1)
Discussion—1 hour. Prerequisite: graduate standing and consent of instructor. Planning and results of research programs, proposals, and experiments. Discussion and critical evaluation of original research being conducted by the group. Discussion led by individual research instructors for research group. [S/U grading only.]

298. Group Study (1-5)
[S/U grading only.]

299. Research (1-12)
[S/U grading only.]

Neurobiology, Physiology, and Behavior

(Emma and John S. Haas School of Education)

James S. Trimner, Ph.D., Chairperson of the Department

Department Office, 196 Briggs Hall; 530-752-0203; http://www.npb.ucdavis.edu

Faculty

Primary Department Members

Keith Baar, Ph.D., Associate Professor (Physiology & Membrane Biology)
Sue C. Bodine, Ph.D., Professor (Physiology & Membrane Biology)
Kenneth H. Britten, Ph.D., Professor (Pathology & Laboratory Medicine)
Earl E. Carstens, Ph.D., Distinguished Professor (Anesthesiology & Pain Medicine)
Ernest S. Chang, Ph.D., Professor (Animal Science)
Hwai-Jong Cheng, M.D., Ph.D., Professor (Pathology & Laboratory Medicine)
Thomas P. Coombs-Hahn, Ph.D., Professor (Pathology & Membrane Biology)
William DeBello, Ph.D., Associate Professor (Animal Science)
Jochen Ditterich, Ph.D., Associate Professor (Physiology & Membrane Biology)

Quarter Offered: I-Fall, II-Winter, III-Spring, IV-Summer; 2015-2016 offering in parentheses

Pre-Fall 2011 General Education (GE): AH—Arts and Humanities; AC—Arts and Cultural Histories; DD—Diverse Domestic Diversity; WR—Writing Experience; SS—Social Sciences; SE—Science and Engineering; WC—World Cultures

Fall 2011 and on Revised General Education (GE): AH—Arts and Humanities; SS—Social Sciences; SS—Science and Engineering; WC—World Cultures; WR—Writing Experience