The Major Program

Native American Studies provides a multi-disciplinary introduction to the indigenous cultures of North, Central, and South America. It challenges students to consider issues of sovereignty, cultural identity, and indigenous knowledge systems in preparation for living in a world of constantly increasing social and cultural complexity.

The Program.

Students electing a major in Native American Studies may complete Plan I, Plan II, or Plan III. Plan I enables students to concentrate chiefly upon the Native experience in North America (north of Mexico). Plan II encourages interested students to focus upon Meso-America, the region encompassing Meso-America with North America and South America. Plan III focuses upon South America with some course work integrating that region with areas to the north.

Career Alternatives.

Native American Studies is excellent preparation for a scholarly career or professional career such as teaching, law, human services, health, tribal administration, social work, and inter-ethnic relations. Graduate schools and agencies in these and related areas are looking for students with broad interdisciplinary preparation and who possess knowledge and sensitivity relating to ethnic issues and cultural diversity.

A.B. Major Requirements:

**Preparatory Subject Matter** .......................... 16-24

Native American Studies 1, 110 or 122 ....... 8

One or two courses from: Native American Studies 5, 12, 32, 33, 34 ......... 4-8

One or two courses from: African American Studies 127, 128, 129, 130, 130A, 130B, 130C, 157, and 180 or 135 .......... 12


If a course is counted for either Plans I, II, or III (below), it cannot also be counted as part of the 24 units of Depth Subject Matter.

**Areas of Specialization (complete one plan)**

**Plan I—North American Emphasis** ............ 20

Native American Studies 107 or 108 ...... 4


Two other upper division Native American Studies course, selected in consultation with advisor ....... 4

**Plan II—Mexico-Central America Emphasis** ............. 20

Native American Studies 107, 133 or 338 .......... 8

Courses in Native American Studies (NAS)

Lower Division

1. Introduction to Native American Studies (4)
   Lecture—3 hours; discussion—1 hour. Introduction to Native American Studies with emphasis on basic concepts relating to Native American historical and political development. GE credit: SocSci, Div | ACGH, DD, SS, WC, WE.—F, W. S. Crider, Mudell

2. Indigenous and Minority Languages (4)
   Lecture—3 hours; discussion—1 hour. Survey of the status of indigenous, immigrant, and other minority languages in the Americas and around the world. Topics include linguistic diversity, language endangerment and revitalization, heritage language maintenance in immigrant communities, and language change due to transnational interactions. GE credit: ArtHum, Div | ArtHum, Div, Wrt | AH or SS, DD, WC, WE.—F, W, S, Su.

Minor Program Requirements:
The Native American Studies minor provides an interdisciplinary introduction to the Native experience in the Americas through coursework in history, literature, art, performance, languages, values, philosophy, religion, current events, political economy, and environment.

Native American Studies Requirements:

One lower division course in Native American Studies

Five upper division courses in Native American Studies

Ethno-History: Native American Studies 130A, 130B, 130C, or 133B


One other upper division course selected in consultation with adviser.

Study Off Campus:
Majors who are selected to spend one to three quarters elsewhere in the Americas or on or near a reservation as part of the fulfillment of the minor can take approved courses for credit. Each student's plan must be approved by the student's adviser and by the chairperson of the minor. At least one course must be taken in consultation with the adviser.

Graduate Study:
The Department offers a program of study leading to the M.A. and Ph.D. degrees in Native American Studies, as well as a designated emphasis in Native American Studies for graduate students in approved programs. Further information regarding graduate study may be obtained at the Department office and at Graduate Studies.

Graduate Advisers: Elisabeth Rose Middleton
115. Native Americans in the Contemporary World (4) Lecture/discussion—4 hours. Prerequisite: upper division standing or consent of instructor. Important issues facing Native Americans in the contemporary world. Focus primarily on the diverse ways of life, historical realities, and political identities of indigenous peoples throughout the Americas as they develop their own cultural and political institutions. GE credit: ArtHum or SocSci, Div | AH or SS, ACGH, DD, OL, WE. — W. Crum.


117. Native American Governmental Decision Making (4) Lecture—4 hours. Prerequisite: course 116, Political Science 2, Anthropology 123 recommended. Native American governmental and community decision making with emphasis on federal and state programs, tribal sovereignty, current political trends and funding for tribal programs. Offered in alternate years. GE credit: SocSci, Div.

118. Native American Politics (4) Lecture—3 hours; discussion—1 hour. Prerequisite: upper division standing or consent of instructor. Examination of the various interest groups and movements found among Native peoples and how they relate to the determination of Indian affairs. Study of political action available to Native groups, and local communities, along with relevant theory relating to underdevelopment. Offered in alternate years. GE credit: SocSci | ACGH, DD, SS, WC. — W. Crum.

119. Introduction to Federal Indian Law (4) Lecture—3 hours; term paper. Introduction to the foundational cases and statutes of federal Indian law, from European Contact through the 20th century. GE credit: SocSci | ACGH, SS, WE. — S. Mitchell.

120. Ethnopolitics of South American Indians (4) Lecture/discussion—4 hours. Prerequisite: course 1, 10 or SS. Social, political, cultural movements of indigenous South Americans in response to establishment expansion of European colonialism, post-colonial nation-states. Ethnopolitical processes developed through interactions between Indians, Euro-Americans. Sociolinguistic analysis of main indigenous areas and tribes and relationship to national societies. GE credit: SocSci, Div. Wrt.

121. Corporate Colonialism (4) Lecture/discussion—4 hours. Prerequisite: course 1, 10 or 12 encouraged, but not required. Price of property and trade, white and Native relationships of power. History of the corporation and neoliberalism, military and intelligence agencies, debt, Taylorism, education institutions, media, and law. Discussion of alternatives advocated by contemporary and indigenous social movements. GE credit: SocSci | ACGH, DD, SS, WC, WE. — W (W) Granida.

122. Native American Community Development (4) Lecture—4 hours. Prerequisite: course 1 or 10. Application of community development theory and techniques to the development problems of Native American communities. Offered in alternate years. GE credit: ACGH, DD, OL, SS, WE.

123. Native Foods and Farming of the Americas (4) Lecture/discussion—2 hours. Prerequisite: course 7A concurrently; completion of course 16C or demonstrate required proficiency level on diagnostic exam. Crop domestication, agronomy, and cuisines of the Americas. Cultural and social history of native American foods like maize, potatoes, quinoa, chocolate, peppers, beans, avocados, etc. Discussion of socio-economic, environmental, legal challenges fac- ing indigenous and peasant farmers today. Offered in alternate years. GE credit: SciEng or SocSci, Wrt | DD, OL, SS, WE, S, SS, WC. — S. Granida.

125. Performance and Culture Among Native Americans (4) Lecture—3 hours; film viewing—3 hours. Prerequisite: upper division standing in division of humanities or social science major. Interdisciplinary study of public expressive forms among Native Americans. Comparison and analysis of music, dances, rituals, and dramas from throughout North, Central, and South America in social and cultural contexts. Not open for credit to students who have completed Music 125. Offered in alternate years. GE credit: ArtHum or SocSci | AH or SS, ACGH, DD, SS, WE. — F. Crum.


133A. Ethnoshistory of Native Peoples of Mexico and Central America (4) Lecture/discussion—4 hours. Prerequisite: course 1, 10 or SS. Ethnohistorical development of pre-colonial, colonial, post-colonial Mexican and Central American indigenous peoples; the impact of economic and political factors on the process of cultural adaptation. Attention is given to the questions of nation-building, forced assimilation, indigenous resistance, organized political responses. GE credit: SocSci, Div.

133B. Ethnohistory of Native Peoples of Mexico and Central America to 1500 (4) Lecture/discussion—4 hours; term paper. Prerequisite: course 1 or course 10 or consent of instructor. Ethnohistorical development of indigenous peoples of Mexico and Central America up to and including the earliest period of European contact. Focus is on indigenous written historical records of the Maya, Mixtec, and Zapotec peoples. May be repeated one time for credit. This course can be repeated provided the student chooses a new topic for the term paper/project and for the PowerPoint presentation. Prerequisite: upper division standing or consent of instructor. GE credit: ArtHum or SocSci, Div | AH or SS, ACGH, DD, WE. — W (W) Granida.

133C. Ethnohistory of Native Peoples of Mexico and Central America to 1500 (4) Lecture/discussion—4 hours; term paper. Prerequisite: course 1 or course 10 or consent of instructor. Ethnohistorical development of indigenous peoples of Mexico and Central America up to and including the earliest period of European contact. Focus is on indigenous written historical records of the Maya, Mixtec, and Zapotec peoples. May be repeated one time for credit. This course can be repeated provided the student chooses a new topic for the term paper/project and for the PowerPoint presentation. Prerequisite: upper division standing or consent of instructor. GE credit: ArtHum or SocSci, Div | AH or SS, ACGH, DD, WE. — W (W) Granida.

138. Race, Culture, and Nation (4) Lecture—4 hours or discussion. Prerequisite: upper division standing or consent of instructor. Exploration of complexities of Native American racial, cultural and national identities and alliances. Study of tribal and federal citizenship, mixed descent and diasporic peoples, claims to resources, ethnic fraud and contemporary movements of cultural resurgence and political sovereignty and self-determination. Offered in alternate years. GE credit: SocSci | ACGH, DD, SS, WE. — W (W) Perea.

135. Gender Construction in Native Societies (4) Lecture/discussion—4 hours. Prerequisite: upper division standing or consent of instructor. Historical and traditional Native American constructions of femininity and masculinity, genders and other sexualities. Address the problems with contemporary terminologies and impacts of colonization on contemporary constructions of gender identities. Offered in alternate years. GE credit: ArtHum or SocSci | AH or SS, DD, OL, WE. — Perea.

146. Orientation to Research in Native American Studies (4) Lecture/discussion—4 hours; term paper. Prerequisite: course 1; Anthropology 2 recommended or minor, or consent of instructor. Limited enrollment. Introduction to basic research resources pertinent to Native American subjects available in the region, including libraries, archives, museums, etc. Emphasis on learning to use documentary resources or other collections of data. Students will carry out individual projects. GE credit: SocSci | ACGH, DD, SS, WE. — W. Crum.


161. California Indian Environmental Policy I (4) Lecture/discussion—4 hours; term paper. Prerequisite: course 1 or course 10 or consent of instructor. Contemporary California Indian environmental policy issues, with a focus on water, minerals, contamination, and alliance-building. Issues will be placed within historical and political context, drawing on theories of Native environmental ethics, environmental justice, and Federal Indian law. Offered in alternate years. GE credit: ACGH, DD, SS, WE. — Middleton.

162. California Indian Environmental Policy II (4) Lecture/discussion—4 hours; term paper. Contemporary California Indian environmental policy issues, with a focus on planning, site protection, and collaborative structures. Issues will be placed within historical and political context, drawing on theories of Native environmental ethics, environmental justice, and Federal Indian law. Offered in alternate years. GE credit: SocSci | ACGH, DD, SS, WE. — Middleton.

180. Native American Women (4) Lecture—4 hours. Prerequisite: course 1, 10, or Women’s Studies 50. Native American women’s life experiences, cross-cultural comparisons of gender roles, and Native women’s contemporary feminism. Utilizes texts from literature, social science, and autobiography/biography. GE credit: ArtHum or SocSci | AH or SS, DD, OL, WE. — W.

181A. Native American Literature (4) Lecture/discussion—4 hours. Prerequisite: one from course 5, English 3, Comparative Literature 1, 2, 3. Works of fiction (short story, novel) by contemporary Native American authors with an emphasis on writers from the United States. Offered in alternate years. GE credit: ArtHum, Div | Wrt | ACGH, AH, DD, OL, WE. — Hernández-Avila.

181B. Native American Literature (4) Lecture/discussion—4 hours. Prerequisite: one from course 5, English 3, Comparative Literature 1, 2, 3. Works by or about Native Americans including non-fiction novels, biographies and autobiographies. Explore ways Native Americans create and recreate their culture through the creative process in literature. Examine from a critical perspective autobiographies...
181C. Contemporary Native American Poetry (4)
Lecture—4 hours. Works of poetry by contemporary Native American/indigenous poets, with some attention to traditional; cultural poetic expressions. GE credit: ArtHum, Div Wrt | AH, DD, OL, WE.—F, W, S. Hernández-Avila

184. Contemporary Indigenous Literature of Mexico (4)
Lecture/discussion—4 hours. Prerequisite: course 1 or 10; course 181A or 181C recommended; reading knowledge of Spanish required. Contemporary indigenous literature of Mexico, with a focus on the genres of native报送, essays, analysis of historical, cultural, and spiritual themes, imagery, styles and performances; biographies of and influences on the Native writers themselves. Offered irregularly. GE credit: ArtHum or SocSci | AH or SS, OL, WC.—Su. Hernández-Avila

185. Native American Literature in Performance (4)
Performance instruction—4 hours. Prerequisite: consent of instructor. Topics include: indigenous American literature on stage and on film, as well as the creation of original pieces. May be repeated up to four units for credit. GE credit: ArtHum or Wrt | AH, DD, OL, WE.—P/N grading only.—F, W, S.

188. Special Topics in Native American Literary Studies (4)
Lecture/discussion—4 hours; term paper. Prerequisite: upper division status and one of the following recommended: course 5, 10, 181A, 181C. Special topics drawn from Native American literature. May be repeated for credit when topics differ. Offered irregularly. GE credit: ArtHum, Div Wrt | AH, DD, OL, WE.—S. Su. Hernández-Avila

190. Seminar in Native American Studies (2)
Discussion—2 hours. Prerequisite: senior standing. Seminar of critical issues faced by Native American people. (P/N grading only.)

191. Topics in Native American Studies (4)
Lecture/discussion—4 hours. Prerequisite: upper division standing. Selected topics in Native American Studies related to indigenous knowledge and worldviews from a historical, cultural, hemispheric perspective. May be repeated for credit when topic differs and/or when offered by a different instructor. Offered irregularly. GE credit: ArtHum or SocSci, Div | AH or SS, DD, OL, WE.—F, W, S. Hernández-Avila

192. Internship (1-12)
Internship—1 hour. Prerequisite: enrollment dependent on availability of internship in Native American Studies or the CN Garman Museum, with priority to Native American Studies minors/majors; consent of instructor. Restricted to upper division standing. Supervised participation in the CN Garman Museum, community, and institutional settings related to Native American concerns. May be repeated up to 12 units for credit including 192 and other internships taken in other departments and institutions. (P/N grading only.) GE credit: ArtHum | AH.—F, W, S, Su. Tsinhnahjinnie

194HA. Special Studies for Honors Students (4)
Independent study—12 hours. Prerequisite: senior qualifying for honors. Directed reading, research and writing culminating in the completion of a senior honors thesis or project under direction of faculty adviser. ( Deferred grading only, pending completion of sequence.)

194HB. Special Studies for Honors Students (4)
Independent study—12 hours. Prerequisite: senior qualifying for honors. Directed reading, research and writing culminating in the completion of a senior honors thesis or project under direction of faculty adviser. (Deferred grading only, pending completion of sequence.)

195. Field Experience in Native American Studies (12)
Field work—36 hours. Prerequisite: senior standing and major in Native American Studies, completion of lower division coursework in course 161. Field work with governmental and community groups, under supervision of faculty adviser and sponsor. Knowledge acquired in other courses to be applied in field work. (P/N grading only.)—F, W, S.

196. Senior Project in Native American Studies (4)
Discussion—1 hour; independent study—3 hours. Prerequisite: upper division standing and major in course 195 (may be taken concurrently, and consent of instructor. Guided research project that enables student to apply the theory and practice of major related work. Final product is to be a major senior project or thesis. (P/N grading only.)—F, W, S.

197C. Community Tutoring in Native American Studies (1-5)
Tutorial—1-15 hours; term paper. Prerequisite: consent of major committee; upper division standing major in Native American Studies. Supervise tutoring in community. (P/N grading only.)—F, W, S.

198. Directed Group Study (1-5)
Prerequisite: upper division standing; consent of instructor. (P/N grading only.)

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

Graduate

200. Basic Concepts in Native American Studies (4)
Seminar—4 hours. Prerequisite: graduate standing and consent of instructor. Analysis of the characteristics of the discipline of Native American Studies. Concentration is on both traditional and contemporary native scholarship and thought as well as the theoretical and methodological consequences derived from application of these ideas. Offered in alternate years.—Crum, Hernández-Avila, Middle-ton

202. Advanced Topics in Native American Studies (4)
Seminar—4 hours. Prerequisite: graduate standing. Advanced study of selected topics or themes relevant to the field of Native American studies. Topics will be announced at the time of offering. May be repeated for credit when topic differs.—W. S. Hernández-Avila, Perea

207. Leadership Skills and Strategies in California Language Documentation & Revitalization (4)
Seminar—3 hours; term paper. Introduction to the indigenous languages of the Americas, with a focus on California; an examination of how contemporary Native communities document and revitalize their heritage languages. Learn to assist and administer language programs.—S. Crum

212. Community Development for Sovereignty and Autonomy (4)
Seminar—4 hours. Prerequisite: graduate standing and consent of instructor. Examines a sample of contemporary indigenous communities from South, central and north America with the goal of understanding and evaluating the strategies adopted by Native American communities to develop and implement forms of sovereignty or autonomous self-management. Offered in alternate years.—Granda

213. Native Criminality and Deviance (4)
Seminar—4 hours. Prerequisite: graduate standing. Examination of “deviance” in Native communities with focus on Native criminality in North America. Analysis of the concept of deviance from several different world views. Readings from a range of theories to incorporate varying theoretical perspective on criminality and deviance.

217. Public Law 83-280: Colonial Termination (4)
Seminar—4 hours. Prerequisite: graduate standing, including school of law students. Examination of the significance of the law of the Termination Era. Public Law 83-280. Discussions to include termination, societal conformity, political consent, jurisdiction, self-determination & decolonization, and colonial relationship between Native Peoples and the United States.—F, W, S. Crum

220. Colonialism, Neoliberalism, and Indigenous Self-Determination (4)
Seminar—3 hours; term paper. Prerequisite: graduate standing. History, political economy and legacies of imperial/colonial systems. Continuities and discontinuities with corporate globalization and neoliberalism. Focus on resistance and self-determination, but with comparison to other groups. Offered in alternate years.—Granda

224. Performance in the Americas (4)
Seminar—3 hours; term paper. Prerequisite: graduate standing. Ethnomusicalological and anthropological approaches to study of public performance in the Americas. New ways of looking at music, dance, rituals and other forms of public expressive forms normally called “folklore” or “popular culture.” Not approved for credit to students with credit in ArtMus 254. ( Former course Music 224.)—Mendoza

233. Visual Sovereignty (4)
Seminar—3 hours; film viewing—2 hours; term paper. Extensively examines the field of contemporaneous Native American and indigenous photography and film and performance through research of artworks, writings by artists, theorists, and material in museum collections. May be repeated twice for credit when topic differs. Offered in alternate years.—Tsinhnahjinnie

237. Native American Art Collections and Museums (4)
Seminar—3 hours; term paper. Research and examination of regional Native American works held in museums and other public institutions, as well as privately-held collections. Includes onsite viewing and research of museum collections and archives. Offered in alternate years.—Tsinhnahjinnie

240. Native American Public Health: Topics and Issues (4)
Seminar—3 hours; term paper. Introduction to Native American public health issues and contributing causal factors (including environmental justice and historical trauma); the dimensions of cultural competency in diagnosis and service provision; the structure of Native health care institutions; and debates in Native treatment modalities.—W. Middle-ton

246. Native American/Indigenous Research Methodologies (4)
Seminar—3 hours; term paper. Introduction to advanced methodologies currently influencing research in Native American Studies and amongst Indigenous communities. Students will develop an original project and course assignments will guide them through the process of research design and implementation. Offered in alternate years.—W. (W) Perea

250. Indigenous Critique of Classic Maya Ethnographies (4)
Seminar—4 hours. Prerequisite: graduate standing or consent of instructor. Construction of the Maya world through ethnographic writing during the present century. Deconstruction of ethnographies about the Mayans considering the modern theories and anthropological critiques of modern ethnographies. Offered in alternate years.

280. Ethnohistorical Theory and Method (4)
Seminar—3 hours; term paper. Discussion of the ethnographical method; the utilization of diverse types of data, especially documentary sources, but also construct socio-cultural history. Particular attention to the
applied area of ethnography in the solution of contemporary social problems. Offered in alternate years. —F, W. S.

298. Group Study for Graduate Students (1-5) 
Prerequisite: graduate standing, consent of instructor. (S/U grading only.)

299. Special Study for Graduate Students (1-12) 
Prerequisite: graduate standing, consent of instructor. (S/U grading only.)

Professional 

396. Teaching Assistant Training Practicum (1-4) 
Prerequisite: teaching assistant. May be repeated for credit. (S/U grading only.) —F, W, S.

Natural Sciences

See Earth and Planetary Sciences, on page 237.

Nematology

Please see the department of Entomology and Nematology, on page 320, for further information. (College of Agricultural and Environmental Sciences)

Steve Nadler, Ph.D., Chairperson of the Department

Joanna Chiu, Ph.D., Vice Chairperson of the Department

Department Office. 367 Briggs; 530-752-0300

Faculty

Edward P. Caswell-Chen, Ph.D., Professor

Edwin E. Lewis, Professor

Steven A. Nadler, Ph.D., Professor

Becky B. Westerdahl, Ph.D., Professor

Emeriti Faculty

Howard Ferris, Ph.D., Professor Emeritus

Bruce A. Jaffe, Ph.D., Professor Emeritus

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

Minor Program Requirements:

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<tr>
<th>UNITS</th>
<th>Nematology</th>
<th>18-20</th>
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<tr>
<td>Two or three courses from one of the following areas:</td>
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<tr>
<td>(a) Plant Science: Microbiology 102; Entomology 100, 135, 153, 156, 156L; Evolution and Ecology 112; Plant Pathology 120, 148; Plant Biology 121; Soil Science 111, 112</td>
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<tr>
<td>(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</td>
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Minor Adviser. S. Nadler

Graduate Study. Graduate degrees specializing in Nematology are offered through the Departments of Entomology and 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 320.

Lower Division

10V. General Biology (4) 

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. —F, W.

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. —W. (W) Caswell-Chen, Nadler

150. Revising Scientific Prose (4) 
Lecture/discussion—3 hours; term paper; Prerequisite: one course in English composition; understanding of English grammar and parts of speech; upper division standing in a science major; or consent of the instructor. Class size limited to 15 students. Principles of effectively using a model, but with emphasis on plant-parasitic species. Plant responses to nematodes. Discussion of current literature emphasized. Offered in alternate years. —W.

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. —W.

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. —S. Westerdahl

205. Insect Nematology and Biological Control (2) 
Lecture—1 hour; discussion—1 hour. Prerequisite: courses 100 and 110, Entomology 100 or 110. The biology of insect-parasitic nematodes, their effect on the host, and their potential as biological control agents of insect and other invertebrate pests. Application of ecological theory in classical and augmentative biological control. Offered in alternate years. —F (J) Lewis

206. Nematode Systematics and Evolution (2) 
Lecture—1 hour; laboratory—3 hours. Prerequisite: course 100 or 110 or Entomology 156; Evolution and Ecology 100 recommended. Nematode diversity as revealed by morphological and molecular evidence. Laboratory experience focuses on structural features used in taxonomy. Phylogenetic relationships based on morphological and molecular data used to consider patterns of character change among taxa. Offered in alternate years. —F (J) Nadler

210. Molecular Phylogenetic Analysis (3) 
Lecture—2 hours; laboratory—3 hours. Theory and practice of inferring phylogenetic trees using molecular sequence data. Practical techniques for obtaining sequence data, advantages and disadvantages of common approaches for inferring trees, statistical methods for comparing alternative hypotheses. (Same course as Evolution and Ecology 210.) Offered in alternate years. —F (J) Nadler

245. Field Nematology (1) 
Fieldwork—6 days. Prerequisite: course 100. Six-day demonstration and field study in applied nematology including diagnosis and prediction of nematode field problem strategies for control field plot design, and establishment in association with diverse California crops. (S/U grading only.) —F (J).

290. Seminar (1) 
Seminar—1 hour. (S/U grading only.) —F, S. (F, S.)

290C. Advanced Research Conference (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

(College of Biological Sciences) 

W. Martin Usrey, Ph.D., Chairperson of the Department 

Department Office. 196 Briggs Hall; 530-752-0203; http://www.nbp.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)

Rebecca M. Calisi, Ph.D., Assistant Professor (Pathology & Laboratory Medicine)

M. Jaffee, Ph.D., Professor (Writing Experience)

Natalia Caporale, Ph.D., Lecturer with Potential for Security of Employment

Earl A. Carstens, Ph.D., Distinguished Professor (Anesthesiology & Pain Medicine)

Hewi-Jong Cheng, M.D., Ph.D., Professor (Pathology & Laboratory Medicine)

Stacey Cantor, Ph.D., Assistant Professor (Pathology & Laboratory Medicine)

Thomas P. Combs-Hahn, Ph.D., Professor (Pathology & Laboratory Medicine)

Charles A. Fuller, Ph.D., Professor (Medicine & Pathology)

Jochen Ditterich, Ph.D., Professor (Ophthalmology & Vision Science)

Mark S. Goldman, Ph.D., Professor (Ophthalmology & Vision Science)

Fall 2011 and on Revised General Education (GE) 

AH=Arts and Humanities; SE=Science and Engineering; SS=Social Sciences; 

AGCH=American Cultures; DD=Dominic Diversity; OL=Oral Skills; QL=Quantitative; SL=Scientific; V=Visual; WC=World Cultures; WE=Writing Experience

Pre-Fall 2011 General Education (GE): AH=Arts and Humanities; SE=Science and Engineering; SL=Social Sciences; DD=Dominic Diversity; WC=Writing Experience

Quarter Offered: F=Fall, W=Winter, S=Spring, Su=Summer; 2017-2018 offering in parentheses

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