Native American Studies

(Office of Letters and Science)

Department Office: 2407 Hart Hall
http://nas.ucdavis.edu

Faculty
Steven J. Crum, Ph.D., Chairperson of the Department
Inés Hernandez-Avila, Ph.D., Professor
Zoellen D. Johnson, Ph.D., Professor
Elisabeth Rose Middleton, Ph.D., Assistant Professor
Jessica B. Perea, Ph.D., Assistant Professor
Justin D. Spence, Ph.D., Assistant Professor
Hulluah Tsihnahjinnie, M.F.A., Associate Professor

Emeriti Faculty
George C. Longfish, M.F.A., Professor Emeritus
Martha J. Macri, Ph.D., Professor Emeritus
Victor D. Montejo, Ph.D., Professor Emeritus
Stefano Varese, Ph.D., Professor Emeritus

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 cultural diversity, sovereignty, 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, with some coursework integrating Meso-America with North America and South America. Plan III focuses upon South America with some coursework integrating that region with areas to the north.

Career Alternatives. Native American Studies is excellent preparation for a career in the field of Meso-American or South American Studies or for graduate study in approved programs. Further graduate study in approved programs is required for a student's plan to be focused upon indigenous peoples or indigenous cultures and the institution of study shall be approved by the student's adviser and by the chairperson and may fulfill from the M.A. and Ph.D. program of study leading to the M.A. and Ph.D.

The department strongly encourages students to participate in the UC Education Abroad Program or Short-Term Abroad Programs Abroad.

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

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 upon basic concepts relating to Native American cultural and political development. GE credit: SocSci, Div | ACGH, DD, SS, WC, WE—, I, II, III, Crum, Middleton

5. Introduction to Native American Literature (4)
Lecture—discussion—4 hours. Prerequisite: completion of Subject A requirement. Intensive focus on analysis of Native American literary texts, with fre-
10. Native American Experience (4)
Lecture—3 hours; discussion—1 hour. Introduction to the diverse cultures of Native American peoples from North, Central, and South America; emphasis on Native American voices in the expression of cultural views and in the experience of conflicting values. GE credit: ArtHum or SocSci, Div, Wrt | AH or SS, DD, WC, WE.—II, I, IV. Hernandez-Avila, Mendoza

11. Native American/Indigenous Film (4)
Lecture—5 hours; viewing; discussion—1 hour. Survey and analysis of the visual colonization of Native American peoples and the contemporary responses by Native American/Indigenous filmmakers claiming visual sovereignty; examines a range of filmic genres including documentary, features, shorts, festivals, tv and internet screening. GE credit: ArtHum or SocSci | ACGH, AH or SS, DD, VL, WC, WE.—Tsinhnahjinnie

32. Native American Music and Dance (4)
Lecture/discussion—4 hours. Introduction to the music and dance of the native peoples of the Americas. Students will study secular native music and dance from a cross-section of regions and tribes. GE credit: Div.—I.

33. Introduction to Native American Art (4)
Lecture—4 hours. Introduction to Native American Art from throughout North America, inclusive of traditional and contemporary Native American arts. Examples of designs and media presented in lectures will be of indigenous origin. Introduction and familiarization with various materials and techniques. GE credit: ArtHum | ACGH, AH, DD, OL, VL, WE.—I (Tsinhnahjinnie)

34. Native American Art Studio (4)
Lecture—2 hours; studio—6 hours. Prerequisite: consent of instructor; course 33 recommended. Limited enrollment. Studio projects to be influenced by contemporary and traditional Native American arts. GE credit: ArtHum or SocSci | ACGH, AH or SS, DD, OL, WE.—I. Tsinhnahjinnie

46. Orientation to Research in Native American Studies (4)
Lecture/discussion—3 hours; term paper. Prerequisite: consent of instructor; course 33 recommended. Limited enrollment. Study projects to be influenced by contemporary and traditional Native American arts. GE credit: ArtHum | ACGH, AH, DD, OL, VL, WE.—Tsinhnahjinnie

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

101. Contemporary Native American Art (4)
Lecture—3 hours; extensive writing. Examination of contemporary artworks by selected Native American and Indigenous Master artists, in a wide range of media, including ceramics, metal arts, photography, video, painting, installation and performance within a context of political and social histories. Offered in alternate years. GE credit: ArtHum, Div | ACGH, AH or SS, DD, OL, W, WE.—Tsinhnahjinnie

108. Indigenous Languages of California (4)
Lecture/discussion—3 hours; term paper. Prerequisite: a course in Native American Studies, or Linguistics 1, or anthropology 4. Survey of the indigenous languages of the California region; linguistic prehistsory, languages of early European contact, subsequent language loss, current efforts at language and cultural revitalization, and languages of recent immigrants to California. GE credit: ArtHum or SocSci | ACGH, AH or SS, DD, WC, WE.—II. Spence

110A. Quechua Language and Society, Beginning Level 1 (4)
Lecture/discussion—4 hours. Introduction to Quechua language and society emphasizing the practical use of the language. Provides the student with some basic Quechua communication skills and with an initial knowledge of Andean society and the status of Quechua language today. Not available for students who took NAS 107 in the Fall quarter of 2007. GE credit: SocSci | SS.—Men ozda

110B. Quechua Language and Society, Beginning Level 2 (4)
Lecture/discussion—4 hours. Prerequisite: course 110A. Second level of the teaching of Quechua language and society. Emphasis on development of conversational and reading skills. Continuation of the study of aspects of contemporary Andean society and the status of Quechua language today. Offered in alternate years. GE credit: SocSci | SS.—II. Men ozda

110C. Quechua Language and Society, Intermediate Level 1 (4)
Lecture/discussion—4 hours. Prerequisite: courses 110A and B. Third level of the teaching of Quechua language and society. Emphasis on development of conversational and reading skills. Introduction to more complex grammatical structures. Continuing the study of contemporary Andean society and the status of Quechua language today. Offered in alternate years. GE credit: SocSci | SS.—II. Mendoza

110D. Quechua Language and Society, Intermediate Level 2 (4)
Lecture/discussion—4 hours. Prerequisite: course 110A, B and C. Fourth level of the teaching of Quechua language and society. Emphasis on complex structural patterns while emphasizing conversational skills and improving reading competencies. Study of different sociopolitical processes that have affected Andean identity and the status of Quechua language. Offered in alternate years. GE credit: SocSci | SS.—III. Mendoza

115. Native Americans in the Contemporary World (4)
Lecture/discussion—4 hours. Prerequisite: course 1, 10. Important issues facing Native Americans in the contemporary world, and the interaction of the diverse ways of life, histories and realities of indigenous people 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.—II.

116. Native American Traditional Governments (4)
Lecture—4 hours. Prerequisite: course 1; Anthropology 2. Study of selected Native American Tribal Tribes, Governments, confederations, leagues, and alliance systems. Offered in alternate years. GE credit: SocSci, Div

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 tribal state programs, tribal sovereignty, current political trends and funding for tribal services. Offered in alternate years. GE credit: SocSci, Div.

118. Native American Politics (4)
Lecture—3 hours; discussion—1 hour. Prerequisite: course 117. Examination of the various interest groups and movements found among Native people and how they relate to the determination of Indian affairs. Study of political action available to Native groups, and local communities, along with relevant theories relating to underdevelopment. Offered in alternate years. GE credit: SocSci | ACGH, DD, SS, WC, WE.—Crum

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

120. Ethnopolitics of South American Indians (4)
Lecture/discussion—4 hours. Prerequisite: course 1, 10 or 55. 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, Euroamericans. Sociohistoriographic analysis of main indigenous areas and the development of national societies. GE credit: SocSci, Div, Wrt.

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. (Former course 161.) GE credit: ACGH, DD, OL, SS, WE.

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 sciences or consent of instructor. 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 their 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, WC, WE.—Mendoza

130A. Native American Ethno-Historical Development (4)
Lecture—4 hours. Prerequisite: course 1 or 10; History 17A recommended. Study of Native American ethno-history in North America before 1770s. GE credit: SocSci, Div, Wrt | ACGH, DD, SS, WC, WE.—I. Crum

130B. Native American Ethno-Historical Development (4)
Lecture/discussion—4 hours. Prerequisite: course 1; History 17A-17B recommended. Study of Native American ethno-history in North America, 1770-1980. GE credit: SocSci, Div, Wrt | ACGH, DD, SS, WE.—II. Crum

130C. Native American Ethno-Historical Development (4)
Lecture/discussion—4 hours. Prerequisite: course 1; History 17A-17B recommended. Study of Native American ethno-history in North America after 1890. GE credit: SocSci, Div, Wrt | ACGH, DD, SS, WE.—III. Crum

133. Ethnohistory of Native People of Mexico and Central America (4)
Lecture/discussion—4 hours. Prerequisite: course 1, 10 or 55. 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.
133A. Ethnography of Native Peoples of Mexico and Central America to 1500 (4)
Lecture/discussion—4 hours; term paper. Prerequisite: course 1 or consent of instructor. Ethnographic study of the indigenous peoples of Mexico and Central America from 1500 to the conquest. Focus is on indigenous written records of the Maya, Mixtec, Nahua peoples, and their interactions with Europeans. May be repeated one time for credit.

Lecture/discussion—4 hours; term paper. Prerequisite: course 1, 10, or consent of instructor. Ethnographic history of indigenous peoples of Mexico and Central America from 1500 to the conquest. Focus is on social and cultural dynamics, particularly the role of indigenous people in the process of nation-state building in Mexico and Central America. Offered in alternate years. GE credit: ArtHum or SocSci, Div | AH or SS, VL, WC, WE.—III.

134. Race and Sex: Race Mixture and Mixed Peoples (4)
Lecture—4 hours. Prerequisite: one course chosen from Anthropology 1 or 2; Native American Studies 10; Chicano Studies 110; African American and African Studies 100 or Asian American Studies 110. The phenomena of racial, ethnic and inter-religious intermingling in the context of contact with non-indigenous peoples. Emphasizes the Americas and upon the sociocultural effects of intermixtures and on the lives of bicultural and multiracial peoples. (Same course as Anthropology 134.) GE credit: SocSci, Div, Wtr | AH, OL, SS.—I, II.

135. Gender Construction in Native Societies (4)
Lecture—4 hours. Prerequisite: one course from course 1, 10, Anthropology 30, Chicano/Chicana Studies 111, African American and African Studies 17, Asian American Studies 112 or 113, or Women's Studies 50 or 70. Historical and traditional Native American conceptions of gender and masculinity as well as third, fourth, and fifth genders. Examines gender roles and statuses. Addresses the problems with contemporary terminologies and the impact of colonizers on contemporary conceptions 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: Native American Studies major or minor, or consent of instructor. Limited enrollment. Introduction to basic research resources available to Native American students and the requirements of Native American subjects available within the region. Includes libraries, archives, museums, etc. Emphasis on learning to use documentary resources or other collections of data and carrying out individual projects. GE credit: SocSci | ACCH, DD, SS, WE.—II. Crum

157. Native American Religion and Philosophy (4)
Lecture/discussion—4 hours. Prerequisite: upper division standing; course 1, 10, or 15. Religious and philosophical traditions of Native American/indigenous peoples of the Americas. Offered in alternate years. GE credit: ArtHum, Div | AH, OL, WE.—Hernández-Avila

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

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

180. Native American Women (4)
Lecture/discussion—4 hours. Prerequisite: course 1, 10, or Women's Studies 50. Native American women's lives and works, with consideration of gender roles, and Native women's contemporary feminist thought. Utilizes texts from literature, social science, and autobiography/biography. GE credit: ArtHum or SocSci | AH or SS, DD, OL, WE.—I, II.

181A. Native American Literature (4)
Lecture/discussion—4 hours. Prerequisite: one course 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, Wtr | AHCH, DD, OL, WE.—Hernández-Avila

181B. Native American Literature (4)
Lecture/discussion—4 hours. Prerequisite: one course from course 5, English 3, Comparative Literature 1, 2, 3. Works by or about Native Americans including non-fiction novels, biographies and autobiographies. Explores Native American creations and recontextualize their culture through the creative process in literature. Examine from a critical perspective autobiographies and testimonial literature. Offered in alternate years. GE credit: ArtHum, Div, Wtr | AH, DD, OL, WE.—Hernández-Avila

181C. Contemporary Native American Poetry (4)
Lecture—4 hours. Prerequisite: one of the following: course 5, English 3, Comparative Literature 1, 2, 3. Works of poetry by contemporary Native American/indigenous poets, with some attention to traditional cultural poetic expressions. GE credit: ArtHum, Div, Wtr | AH, DD, OL, WE.—I, II, III. 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 (poetry, fiction, drama, essay); analysis of cultural, historical, and spiritual themes, imagery, styles and perspectives. GE credit: ArtHum or SocSci | AH or SS, OL, WC.—IV. Hernández-Avila

185. Native American Literature in Performance (4)
Lecture—2 hours. Prerequisite: consent of instructor. Performance of contemporary literature by Native American actors, with an emphasis on the Native writers themselves. Offered irregularly. GE credit: ArtHum or SocSci | AH or SS, OL, WC.—IV. 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/NP 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 perspectives of stories, oral traditions, 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.—I, II, III. Hernández-Avila

192. Internship (1-12)
Internship—1 hour. Supervised internship in the Community Tutoring in Native American Studies (1-5)
Internship—1 hour. Supervised internship in the field. (P/NP grading only)–I, II, III

193. Senior Project in Native American Studies (4)
Discussion—1 hour; independent study—3 hours. Prerequisite: senior standing and major in Native American Studies, completion of upper division major course requirement, and 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/NP grading only)—I, II, III

197TC. Community Tutoring in Native American Studies (1-5)
Tutorial—3-15 hours. Prerequisite: consent of major committee; upper division standing with major in Native American Studies. Supervise tutoring in community. (P/NP grading only)—I, II, III

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

199. Special Study for Advanced Undergraduates (1-5)
Prerequisite: consent of instructor. (P/NP 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 scholarly thought as well as the theoretical and methodological consequences derived from application of these ideas. Offered in alternate years.—II. Crum, Hernández-Avila, Middleton

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

Quarter Offered: I-III, Summer; II-IV, Winter

Pre-Fall 2011 General Education (GE): ArtHum, Arts and Humanities; SciEng, Science and Engineering; SocSci, Social Sciences; DD, DD-Domain Diversity; Wrt, Writing Experience

Fall 2011 and on Revised General Education (GE): AH, Arts and Humanities; SE, Science and Engineering; SS, Social Sciences; ACGH, American Cultures; DD, DD-Domain Diversity; OL, Oral Skills; OL-Quantitative, SL, Scientific; VL, Visual; WC, World Cultures; WE, Writing Experience

Native American Studies 441

ACGH, American Cultures; DD, DD-Domain Diversity; OL, Oral Skills; OL-Quantitative, SL, Scientific; VL, Visual; WC, World Cultures; WE, Writing Experience
be announced at the time of offering. May be repeated for credit when topic differs.—II, Ill. Hernández-Ávila, 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 American communities document and revitalize their heritage languages. Learn to assist and administer language programs. Offered in alternate years.—Granda

212. Community Development for Sovereignty and Autonomy (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 perspectives on criminality and deviance. 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 perspectives on criminality and deviance. Offered in alternate years.—Grandia

217. Public Law 83-280: Colonial Termination (4) Seminar—4 hours. Prerequisite: graduate standing, including school of law students. Examination of the signature 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.—I, II, III. Crum

220. Colonialism/Racism and Self-Determination (4) Seminar—3 hours; term paper. Prerequisite: graduate standing. Study of imperial/colonial systems and their psychosocial impacts upon oppressors and oppressed, of racism as the outgrowth of colonialism, and of nationalism, ethnic conflict and self-determination. Focus on indigenous peoples, but other groups will also be considered. Offered in alternate years.—Grandia

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 “popular culture.” Not open for credit to students who have completed Music 224. (Former course Music 224.)—Mendoza

233. Visual Sovereignty (4) Seminar—3 hours; film viewing—2 hours; term paper. Extensive examination of the field of contemporary Native American and Indigenous photography, film and performance through research of artworks, writings by artists, theorists, and material in museum collections. May be repeated two times 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 art 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 causative factors (e.g., 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.—II. Middle- ton

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 social/archaeological critiques of modern ethnographers. Offered in alternate years.

280. Ethnohistorical Theory and Method (4) Seminar—3 hours; term paper. Discussion of the ethnohistorical method; the utilization of diverse types of data, especially documentary sources, to reconstruct socio-cultural history. Particular attention to the applied area of ethnohistory in the solution of contemporary social problems. Offered in alternate years.—II. Middle- ton

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: graduate standing. May be repeated for credit. (S/U grading only)—I, II, III.

Natural Sciences

[College of Letters and Science]

Advising Center, 104 Everson Hall

http://naturalsciences.ucdavis.edu/

Committee in Charge

Howard W. Day, Ph.D., Chair
[Earth and Planetary Sciences]

Tessa Hill, Ph.D. [Earth and Planetary Sciences]

Susan Keen, Ph.D. [Evolution and Ecology]

J. Richard Pomerenke [Evolution and Ecology]

Neil Schore, Ph.D. [Chemistry]

David Webb, Ph.D. [Physics]

The Major Program

Natural Sciences is an interdisciplinary major that provides significant breadth in biology, chemistry, earth sciences, physics and mathematics while offering additional depth in two of the natural sciences. It is especially designed to meet the needs of prospective science teachers, but will also serve students who wish to acquire training in more than one science. The major is sponsored by the Department of Earth and Planetary Sciences.

The Program. The Natural Sciences curriculum offers an unusually broad training in science and mathematics. All students must complete a one-year sequence in calculus, a course in statistics and one year sequence in biology, earth science, life science and physics. Each student will complete depth courses in two of these sciences. Prospective teachers may use these depth courses as preparation for primary and supplementary teaching credentials in science. Students who wish to prepare for a teaching credential program should consult an advisor at their first opportunity. To combine the prerequisites with General Education requirements.

Career Alternatives. Students whose goals include business, journalism, law, or medicine may acquire a broad background in science through this curriculum. The study of natural sciences also prepares a student to meet the subject matter require-ments for primary and supplementary science teaching credentials in California. Students who might wish to become a teacher should consult an advisor in the Mathematics and Science Teaching Program [MAST, http://mast.ucdavis.edu] at their first opportunity. MAST advisors can help students combine the prerequisites for a credential program with General Education requirements. The program also offers seminars that give participants experience in elementary, middle school, and high school classrooms.

B.S. Major Requirements:

Preparatory Subject Matter.......................... 68-74

Chemistry 2A, 2B, 2C, 3A, 3B, 4A, 4B ............ 15

Biological Sciences 2A, 2B, 2C ..................... 15

Geology 2, 3, 3L, 50L, 60 ......................... 13

Mathematics 1A, 16A, 16C or 17A, 17B, 17C or 21A, 21B, 21C ............... 9-12

Physics 7A, 7B, 7C or 9A, 9B, 9C .................. 12-15

Statistics 100 ........................................... 4

Depth Subject Matter.................................. 42

Concentration (chosen from among the four fields of concentration listed below) ........ 27

Supplementary Field; chosen from among the four fields listed below. May not include the same field as the concentration. The same course may not be used to fulfill the requirements for both a Concentration and a Supplementary Field. ........... 15

Total Units for the Major ..............110-116

Fields of Concentration:

Chemistry .................................................. 27-36

Chemistry 105 ........................................ 4

Chemistry 107A-107B or 110A-110B .......... 110C ....................................................... 6-12

Chemistry 118A-118B or 128A-128B .......... 129A-129B ........................................ 8-10

Chemistry 124A ........................................ 3

One course from Chemistry 100, 104, 118C, 128C ................. 3-4

Three units from Chemistry 199, 199 or Education/Geology 181, 183 ........... 3

Earth Science .................................................. 27

Geology 62, 101, 101L, 105, 109, 109L, 116N, 163 ....... 31-21

One course from Geology 107, 108, 131 ...................... 3

Three units from Geology 199 or Education/Geology 181, 183 ........... 3

Life Science .................................................. 27-33

Chemistry 8A, 8B or 118A, 118B, 118C ...................... 6-12

Biological Sciences 101 .................................. 4

Evolution and Ecology 100 or approved electives and Biological Sciences 105 ................. 8

Neurobiology, Physiology, and Behavior 101, 102, 102L ............... 5

Four units from Biological Sciences 199, Evolution and Ecology 199, Molecular and Cellular Biology 199, or Neurobiology, Physiology, and Behavior 199 or Education/Geology 181, 183 ........... 4

Supplementary Fields:

Chemistry .................................................. 15-17

Chemistry 100 ........................................ 3

Chemistry 104 or 105 .................................... 3

Chemistry 107A ........................................ 3

Chemistry 118A or 128A .................................... 3-4

Chemistry, 124A ........................................ 3

Other Chemistry or related science courses may be substituted with the prior approval of the major adviser.

Earth Science .................................................. 15

Geology 108, 109, 109L, 116N ...................... 10

Geology 138 or 140 ...................................... 4

Approved elective ........................................ 1

Other Geology or related science courses may be substituted with the prior approval of the major adviser.

Life Science .................................................. 15

Biological Sciences 101* .................. 4

Quarter Offered: T-Fall, W-Winter, S-Spring, V-Summer; 2015-2016 offering in parentheses

Pre-Fall 2011 General Education (GE): ArtHum—Arts and Humanities; SciEng—Science and Engineering; SocSci—Social Sciences; DivD—Domestic Diversity; Wrt—Writing Experience

Fall 2011 and on Revised General Education (GE): AH—Arts and Humanities; SE—Science and Engineering; SS—Social Sciences; AGCM—American Cultures; DD—Domestic Diversity, OL—Oral Skills, GL—Quantitative, SL—Scientific, VL—Visual, WC—World Cultures, WE—Writing Experience

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