

290. Seminar (1)

Seminar—1 hour. Reports and discussions of topics of interest in genetics, nutrition, and physiology as they apply to animal science. (S/U grading only.)—F, W, S. (F, W, S.)

290C. Research Group Conference (1)

Discussion—1 hour. Prerequisite: graduate standing. Weekly conference on research problems, progress and techniques in the animal sciences. May be repeated for credit. (S/U grading only.)—F, W, S. (F, W, S.)

291. Current Research in Animal Science (1)

Seminar—1 hour. Prerequisite: graduate standing. Current research in animal science explored at weekly seminars presented by guest lecturers. Discussion of research presented. May be repeated for credit. (S/U grading only.)—F, W, S. (F, W, S.)

297. Supervised Teaching in Animal Science (2)

Supervised teaching—6 hours. Prerequisite: consent of instructor. Practical experience in teaching Animal Science at the University level; curriculum design and evaluation; preparation and presentation of material. Assistance in laboratories, discussion sections, and evaluation of student work. An evaluation letter sent to the Graduate Adviser with a copy to the student. (S/U grading only.)—F, W, S. (F, W, S.)

298. Group Study (1-5)

Prerequisite: consent of instructor. (Sect. 1, 2, 3—letter grading; from Sect. 4 on—S/U grading only.)

299. Research (1-12)

(S/U grading only.)

Animal Science and Management

(College of Agricultural and Environmental Sciences)

Master Adviser. J.G. Fadel

Advising Center for the major (including peer advising) is located in 1202 Meyer Hall 530-754-7915. Each student will be assigned a faculty adviser through this office upon entering the major. <http://asac.ucdavis.edu>

The Major Program

The Animal Science and Management major combines a thorough education in the basic biology of domestic animal species with a strong background in agricultural economics. Graduates of this interdisciplinary major will be well positioned to adjust to our rapidly changing world and job market.

The Program. The interdisciplinary program in Animal Science and Management combines a fundamental background in the natural sciences (chemistry, biology, physiology, nutrition, genetics, mathematics, and behavior), with an understanding of economics and humanities. After completing preparatory courses, students focus on both the animal species that interest them (horses, cattle, sheep, companion animals, goats, fish, crustaceans or mollusks, among others) and principles of managerial economics (marketing, finance, business organization or systems analysis). Students preparing for medical or veterinary school can meet professional entrance requirements with those of this major if they plan ahead.

Career Alternatives. Job opportunities for successful graduates are plentiful and include positions with banking and financial institutions, agribusiness, Peace Corps, and farms of all scales. Most Animal Science and Management graduates are well prepared for professional study (medical, law, veterinary, and graduate business schools) as well as graduate research programs leading to the M.S. or Ph.D. degrees. Advanced degrees open doors to work as extension specialists, farm advisers, and teachers, and prepare students for international service.

B.S. Major Requirements:

UNITS

Written and Oral Expression..... 8

Select two courses (if not selected for English college requirement) from: Communication 130, 134, 135, 136, 140; Nematology 150; University Writing Program 101, 102A, 102B, 102C, 102D, 102E, 102F, 102G, 104A, 104B, 104C, 104D, 104E, 104F..... 8

Preparatory Subject Matter.....69-75

Animal Science 1 and 2..... 8
 Biological Sciences 2A, 2B, and 2C..... 15
 Chemistry 2A, 2B, 8A, 8B..... 16
 Plant Sciences 21 or Computer Science Engineering 15..... 3-4
 Economics 1A, 1B; Management 11A, 11B..... 16
 Mathematics 16A, 16B, and 16C or 17A-B-C or 21A-B-C..... 9-12
 Plant Sciences 120, Statistics 100 or 103, or other courses in quantitative skills with prior approval of the Master Adviser..... 4

Depth Subject Matter27-30

Biological Sciences 101..... 4
 Nutrition 115..... 4
 Neurobiology, Physiology, and Behavior 101..... 5
 Business Management..... 14-17
 Agricultural and Resource Economics 100A;
 One course from: Agricultural and Resource Economics 113, 130, 136, 138;
 One course from: Agricultural and Resource Economics 120, 132, 140, 145, 157;
 Plus one course from: Animal Science 128 or Agricultural and Resource Economics 155.

Area of Specializations 14-16

Choose one area of specialization below:
 Aquatic Animals..... 16
 Animal Science 18, 118 or 119, 131, and 148.
 Companion Animals..... 16
 Animal Science 42, 140, 142, and 148.
 Dairy..... 15
 Animal Science 41, 41L, 146, 147, and 148.
 Equine..... 15
 Animal Science 15, 115, 141, and 148.
 Livestock..... 16
 Animal Science 41, 41L, 143 or 144, 145, and 148.
 Poultry..... 15
 Avian Sciences 11, Animal Science 143, 145, and 148.
 Individualized..... 14-16
 Students may, with prior approval of their adviser and the Master Adviser, design their own individualized specialization within the major. The specialization will consist of 4 to 6 courses with one of the courses being Animal Science 148. The other courses will include an introduction, care and management, and processing and/or marketing aspects of the animal of interest.

Restricted Electives..... 8-10

At least two additional courses (minimum 8 units; duplicate from Depth courses not counted) selected with approval of adviser from: Agricultural and Resource Economics 18, 112, 113, 118, 120, 130, 132, 136, 138, 140, 142, 143, 144, 145, 150, 155, 157, 171A, 171B, 176; Animal Science 103, 104, 106, 115, 118, 119, 120, 120L, 123, 124, 125, 126, 127, 128, 129, 131, 136, 137, 140, 141, 142, 143, 144, 145, 146, 147, 149, 170, 192, 194, 194H; Avian Sciences 100, 103, 115, 121, 123, 149, 150; Animal Genetics 101, 105, 107, 111; Nutrition 122, 123, 123L, 124; Animal Biology 102 (strongly recommended), 103;

Computer Science Engineering 124; Management 100; Neurobiology, Physiology, and Behavior 117, 121, 121L, 130; Wildlife, Fish, and Conservation Biology 120, 120L, 130.

Total Units for the Major126-139

Anthropology

(College of Letters and Science)

James H. Smith, Ph.D., Chairperson of the Department

Department Office. 328 Young Hall
 530-752-0745;
<http://www.anthropology.ucdavis.edu>

Faculty

Monique Bergerhoff Mulder, Ph.D., Professor
 Timothy K. Choy, Ph.D., Associate Professor
(Science and Technology Studies)
 Damien Caillaud, Ph.D., Assistant Professor
 Margaret C. Crofoot, Ph.D., Assistant Professor
 Christyann M. Darwent, Ph.D., Associate Professor
 Marisol de la Cadena, Ph.D., Professor
 Donald L. Donham, Ph.D., Distinguished Professor
 Joseph Dumit, Ph.D., Professor
(Science and Technology Studies)
 Jelmer W. Eerkens, Ph.D., Professor
 Tarek Elhaik, Ph.D., Assistant Professor
 Cristiana Giordano, Ph.D., Associate Professor
 Lynne A. Isbell, Ph.D., Professor
Academic Senate Distinguished Teaching Award
 Jeffrey S. Kahn, Ph.D., Assistant Professor
 Suad Joseph, Ph.D., Distinguished Professor
(Women and Gender Studies)
 Alan Klima, Ph.D., Professor
 Suzana M. Sawyer, Ph.D., Associate Professor
 James H. Smith, Ph.D., Professor
 Smriti Srinivas, Ph.D., Professor
 Teresa E. Steele, Ph.D., Associate Professor
 Timothy D. Weaver, Ph.D., Associate Professor
 Li Zhang, Ph.D., Professor
 Nicolas Zwyns, Ph.D., Assistant Professor

Emeriti Faculty

Robert L. Bettinger, Ph.D., Professor
 David J. Boyd, Ph.D., Professor Emeritus
 Richard T. Curley, Ph.D., Senior Lecturer Emeritus
 William G. Davis, Ph.D., Professor Emeritus
 Alexander H. Harcourt, Ph.D., Professor Emeritus
 Sarah B. Hrdy, Ph.D., Professor Emerita
Member, National Academy of Sciences
 Henry M. McHenry, Ph.D., Professor Emeritus
UC Davis Prize for Undergraduate Teaching and Scholarly Achievement
 David L. Olmsted, Ph.D., Professor Emeritus
 Peter S. Rodman, Ph.D., Professor Emeritus
 Janet S. Shibamoto-Smith, Ph.D., Professor
 David Glenn Smith, Ph.D., Professor
 Carol A. Smith, Ph.D., Professor Emerita
 Carolyn F. Wall, Ph.D., Senior Lecturer Emerita
 Bruce P. Winterhalder, Ph.D., Professor Emeritus
 Aram A. Yengoyan, Ph.D., Distinguished Professor Emeritus

The Major Program

Anthropology is the systematic study of humans. The student of anthropology learns about human biology, ecology, and social life—past and present—and gains a broad understanding of humans and societies. It is a diverse field, and the courses, faculty, and degree programs at UC Davis are subdivided into two wings—*Evolutionary* and *Sociocultural*.

Evolutionary. *Evolutionary* anthropologists are united by their common application of science and evolutionary theory to understand the behavior, ecology, history, and evolution of humans and non-human primates, as individuals and as societies. These topics may be approached through archaeology, human behavioral ecology, molecular anthropology, paleoanthropology, primatology, genetics, biogeography, and conservation biology. *Archaeol-*

ogy is the study of the history or prehistory by analysis of a people's artifacts, or their material culture, with the goal of reconstructing culture history and human behavior. *Human behavioral ecology* is the study of how variation in ecology and social organization can help us understand variation in human behavior. *Paleoanthropology* is the study of human evolution through fossil and archaeological records, drawing on relevant studies in biological anthropology, Paleolithic archaeology, genetics, and geology. *Primatology* is the study of behavior, ecology, and morphology of primates to address questions about the evolution and function of behavioral and morphological patterns in nonhuman primates and to test models of the origins of human morphology and behavior. *Geneticists* can use DNA to address anthropological questions about population histories, migrations, mixing, and adaptations to local contexts. *Biogeography* investigates the biology behind the geographic distribution of species and human cultures. *Conservation biology* explores the causes of loss of biological diversity—in this department, it focuses on threatened non-human primates and the conservation of natural resources by a rapidly growing population.

Sociocultural. *Sociocultural anthropologists* study the varied ways in which people around the world organize their lives and interpret the circumstances in which they operate. Their main method is extended field research, which combines attention to global issues with the close study of human relations and culture. Among the themes addressed in the department's undergraduate courses are globalization and transnationalism; human ecology and environmental change; cultures of healing, health and medicine, the global spread of media and technology; migration, multiculturalism and urban life; colonialism and neocolonialism development and post-development; race, class and gender; politics and the political; cultures of everyday life; language use and discourse; and self, identity and family. The track in sociocultural anthropology thus offers a rich set of resources for understanding and engaging pressing issues in a globalizing world characterized by new forms of international culture and community as well as by increasing material inequality and political volatility.

The Program. The Bachelor of Arts program is divided into two tracks, *Sociocultural* and *Evolutionary*, which parallel the two wings described above. Students interested in the study of recent and contemporary human languages and societies should follow the Sociocultural Track. To obtain a B.A. degree in sociocultural anthropology, each student is required to complete courses that provide (1) foundational skills, (2) language and cultural skills, (3) comprehensive skills, and (4) specialized skills. Students interested in the study of archaeology; primate studies; or human biology, ecology or origins should follow the Evolutionary Track. The B.A. degree offered by the Evolutionary Track provides general training in anthropology from an evolutionary perspective. The Evolutionary Track also offers a B.S. degree that requires lower division coursework in math and science and upper division coursework in biological anthropology and closely related disciplines.

Students in both tracks are encouraged to gain practical experience through courses taken while studying abroad (under the administration of the UC Davis Study Abroad) and through undergraduate research or internships performed for credit (under ANT 192, 198, or 199 units provided by the advising office). Students showing exceptional ability are welcome to seek permission from instructors to participate in graduate seminars offered by the department.

Career Opportunities. A Bachelor of Arts degree in Anthropology is suited for students seeking a solid liberal arts education. With its broad goal to facilitate understanding across lines of cultural difference, sociocultural anthropology prepares students for lives that are influenced by increasingly pervasive cultural exchange, as well as cultural conflict,

around the world. The program serves as excellent preparation for careers in which inter-cultural skills are increasingly needed, including social and environmental activism, business, diplomacy and social administration, journalism, law, education and international relations. Students that focus on evolutionary processes will be well prepared to enter fields such as medical or health anthropology, museum studies, cultural resource management and wildlife conservation. A Bachelor of Science degree in Anthropology provides suitable training for a variety of health professions including pre-medical, pre-dental, and pre-veterinary training, and the educational background for further training in the biological/evolutionary sciences and forensic investigation. The A.B. or B.S. degree in anthropology with appropriate courses in education is good preparation for high school teaching in social, biological and natural sciences. An anthropology degree also provides the foundation for advanced study leading to careers in college-level teaching and research.

A.B. Major Requirements:

UNITS

Evolutionary Emphasis:

Preparatory Subject Matter19-21

- Anthropology 1, 2, 3 12
- Anthropology 15, 23, 24, 25, 28, 50, or 54 4-5
- Anthropology 13, Sociology 46B, or Statistics 13, 32, 100 or 102 3-4

Depth Subject Matter42-47

- Two courses from:
 - Anthropology 101, 102, 103, 105, 122A, 128A, 141B, 141C, 154A, 154B, 154C, 154CL, 158, 178 7-9
 - Anthropology 153, 157, or 159 3-5
 - Anthropology 151 or 152 4-5
- One course from:
 - Anthropology 170, 171, 172, 173, 174, 175, 176, 177, 179, 180, 182, 183, 184 or 185 4
- One course from:
 - Anthropology 100, 102, 104N, 109, 110, 117, 120, 121, 122B, 123AN, 124, 125A, 125B, 126A, 126B, 127, 128B, 129, 130A, 131, 132, 134, 136, 137, 138, 139AN, 139BN, 140A, 140B, 141B, 141C, 142, 143A, 144, 145, 146N, 148A, 149A, 149B, 186A 4

Select 20 additional units from any upper division evolutionary track Anthropology courses (see list below) chosen in consultation with an evolutionary track undergraduate adviser 20

Total Units for the Major62-69

Note: Evolutionary track courses at the upper division level are courses 101, 102, 103, 105, 122A, 128A, 141B, 141C, and 151 to 186A

Sociocultural Emphasis:

Preparatory Subject Matter20-22

- Anthropology 2 4
- Two courses from: Anthropology 1, 3, or 4 8
- Select one of the following two options:
 - (1) Two additional quarters of the foreign language used to meet the L&S language requirement 8-10
 - (2) Two additional lower division sociocultural track courses 8-10

Depth Subject Matter42-46

- Anthropology 100 4
- Two upper division area-focus sociocultural track courses from the following:
 - Anthropology 140A, 140B, 141C, 142, 143A, 144, 145, 146N, 148A, 149A, 149B 8
- Select one of the following two options in consultation with sociocultural track undergraduate adviser (see list below identifying upper division sociocultural

courses; see list above identifying evolutionary track courses):

- (1) Eight additional upper division anthropology courses (two courses may be in the evolutionary track; and up to six units can be Anthropology 192 internship units) 30-34
- (2) Eight additional upper division courses that may combine six sociocultural track courses and either 8 units of Study Abroad credit or two related courses in a single academic discipline (including but not limited to: African American and African Studies, American Studies, Art Studio, Art History, Asian American Studies, Chicana/o Studies, Communication, Community and Regional Development, Economics, East Asian Studies, History, Linguistics, Music, Native American Studies, Nature and Culture, Philosophy, Political Science, Psychology, Religious Studies, Sociology, Textiles and Clothing, Theatre and Dance, Women and Gender Studies)..... 30-34

Total Units for the Major..... 62-68

Note: Sociocultural track courses at the upper division level are those with numbers from 100 to 149B, with the exception of 101, 103, 105, 128A, and 141B. Area-focus sociocultural track courses are those that refer in their titles to one or more peoples or regions of the world.

B.S. Major Requirements:

UNITS

Evolutionary Emphasis:

Preparatory Subject Matter 54-60

- Anthropology 1, 2, 3 12
- Biological Sciences 2A, 2B, 2C 14
- Chemistry 2A, 2B, and 8A, 8B, or 118A, 118B 16-18
- Mathematics 16A-16B-16C or 17A-17B-17C or 21A-21B-21C 9-12
- Anthropology 13, Sociology 46B, Statistics 13, 32, 100, or 102 3-4

Depth Subject Matter 45

- Anthropology 151 or 152 4-5
- Anthropology 153, 157, or 159 3-5
- Anthropology 154A or 154B 5
- Three additional courses in anthropology chosen in consultation with evolutionary track undergraduate adviser 8-12
- Biological Sciences 101 4
- Evolution and Ecology 100 4
- Additional units from the list below to achieve a minimum of 45 upper division units 10-14
- Anthropology 101, 102, 103, 105, 122A, 128A, 151, 152, 153, 154A 154B, 154C, ANT 154CL, 156, 157, 157L, 158, 159, 180, 182, 185; Anatomy, Physiology and Cell Biology 100; Biological Sciences 102, 103; Cell Biology and Human Anatomy 101, 101L; Environmental Science and Policy 100; Evolution and Ecology 101, 102, 103, 104, 105, 138, 141, 147, 149, 175; Exercise Science 103, 115; Geology, 107, 107L, 108, 144, 146; History and Philosophy of Science 131; Molecular and Cellular Biology 120L, 121, 150, 150L, 160L, 161, 162, 163, 164; Neurobiology, Physiology, and Behavior 101, 101L, 102, 123, 124, 150, 152; Psychology 101, 113, 121, 122, 123, 124; Statistics 104, 106, 108, 130A, 130B; Wildlife, Fish, and Conservation Biology 141, 154

Total Units for the Major..... 99-105

Recommended

Anthropology 5, 15, 50; Geology 1; Psychology 1

Major Advisers. Consult Department office.

Minor Program Requirements:

UNITS
Anthropology 18-30
General emphasis 19-21

One course from: Anthropology 101, 102, 103, 105, 122A, 128A, 151, 152, 153, 154A, 155, 156, 157, 158, 159..... 3-5
 One course from: Anthropology 170, 171, 172, 173, 174, 176, 177, 179, 180, 182, 183, 184, 185..... 4
 One course from: Anthropology 140A through 149B, 178 or any other sociocultural track course that refers in its title to one or more peoples or regions of the world..... 4
 Two courses from: Anthropology 100 through 139BN, excluding 101, 103, 105, 128A, and 141B..... 8

Archaeology emphasis 20-25

Anthropology 170..... 4
 Two courses from: Anthropology 172, 173, 174, 175, 176, 177, 178, or 179..... 8
 Two courses from: Anthropology 156A, 156B, 171, 180, 181, 182, 183, 184, or 185..... 8-13

Evolutionary emphasis 18-30

Any five upper division Evolutionary Anthropology courses chosen in consultation with an evolutionary track adviser.

Sociocultural emphasis 19-21

Anthropology 100..... 4
 One upper division area-focus sociocultural track course..... 4
 (area-focus sociocultural track courses are those that refer in their titles to one or more peoples or regions of the world)
 Two courses from: Anthropology 102 through 139BN, excluding 103, 105, and 128A..... 8
 One additional upper division Anthropology course chosen in consultation with sociocultural track undergraduate adviser..... 3-5

Minor Advisers. Consult Department office in 1282 Social Sciences & Humanities.

Honors Program. Candidates for high or highest honors in Anthropology must write a senior thesis under the direction of a faculty member. The thesis project will have a minimum duration of two quarters. Honors candidates must take at least six units of Anthropology 194H. Only students who, at the end of their junior year (135 units), have attained a cumulative grade point average of 3.500 in Anthropology courses will be eligible for the honors program. The quality of the thesis work will be the primary determinant for designating high or highest honors at graduation.

Teaching Credential Subject Representative. _____; see the Teaching Credential/M.A. Program on page 124.

Graduate Study. The Department offers a program of study leading to the M.A. and Ph.D. degrees in Anthropology. Further information regarding graduate study may be obtained at the Department office and at Graduate Studies.

Courses in Anthropology (ANT)**Lower Division****1. Human Evolutionary Biology (4)**

Lecture—3 hours; discussion—1 hour. Processes and course of human evolution; primatology; biological and social diversity within *Homo sapiens*; human paleontology. GE credit: SciEng, Div, Wrt | SE, SL, WE.—F, W, S, Su. (F, W, S, Su.)

1Y. Human Evolutionary Biology (4)

Web virtual lecture—2 hours; lecture/discussion—1 hour; laboratory/discussion—1 hour. Evolutionary theory and mechanisms of evolution; basic population and quantitative genetics; primatology; biological and cultural diversity within *Homo sapiens*;

paleoanthropology. Students may not take both course 1 and course 1Y for credit. GE credit: SE, WE.—W. (W.) Weaver

2. Cultural Anthropology (4)

Lecture—3 hours; discussion—1 hour. Introduction to cultural diversity and the methods used by anthropologists to account for it. Family relations, economic activities, politics, gender, and religion in a wide range of societies. Current problems in tribal and peasant societies. GE credit: SocSci, Div, Wrt | ACGH, DD, SS, WC, WE.—F, W, S, Su. (F, W, S, Su.)

3. Introduction to Archaeology (4)

Lecture—3 hours; discussion—1 hour. Development of archaeology as an anthropological study; objectives and methods of modern archaeology. GE credit: SciEng or SocSci, Div | SE or SS, SL.—F, W, S. (F, W, S.)

4. Introduction to Anthropological Linguistics (4)

Lecture—3 hours; discussion—1 hour. Exploration of the role of language in social interaction and world view, minority languages and dialects, bilingualism, literacy, the social motivation of language change. Introduction of analytical techniques of linguistics and demonstration of their relevance to language in sociocultural issues. Offered in alternate years. GE credit: SocSci, Div, Wrt | SS, WC, WE.

5. Proseminar in Biological Anthropology (4)

Seminar—3 hours; term paper. Prerequisite: course 1 or course 1Y recommended; and consent of instructor. Course primarily for majors. Integration of related disciplines in the study of biological anthropology through discussion and research projects. Principal emphasis in human adaptation to the environment. Offered irregularly. GE credit: SciEng, Wrt | SE, OL, WE.—Isbell

13. Scientific Method in Physical Anthropology (4)

Lecture—2 hours; laboratory/discussion—1 hour; fieldwork—1 hour. Skills for scientific thinking; designing, implementing, analyzing, interpreting, presenting, and criticizing research. Collection and analysis of original data. Basic statistical methods. GE credit: SciEng or SocSci, Wrt | OL, SE, VL, WE.

15. Behavioral and Evolutionary Biology of the Human Life Cycle (5)

Lecture—3 hours; discussion—1 hour; term paper. Introduction to the biology of birth, childhood, marriage, the family, old age, and death. Examines comparative characteristics of nonhuman primates and other animals as well as cross-cultural variation in humans by study of selected cases. GE credit: SciEng, Div, Wrt | SE, SL, WE.—Crofoot

20. Comparative Cultures (4)

Lecture—3 hours; discussion—1 hour. Introduction to the anthropological study of cultural diversity. Case studies of eight societies will be presented to illustrate and compare the distinctive features of major cultural regions of the world. Concludes with a discussion of modernization. GE credit: ArtHum or SocSci, Div | ACGH, AH or SS, DD, WC, WE.—Sawyer

23. Introduction to World Prehistory (4)

Lecture—3 hours; discussion—1 hour. Broadly surveys patterns and changes in the human species' physical and cultural evolution from earliest evidence for "humanness" to recent development of large-scale complex societies or "civilizations." Lectures emphasize use of archaeology in reconstructing the past. GE credit: SocSci, Div, Wrt | SS, WC, WE.

24. Ancient Crops and People (4)

Lecture—3 hours; discussion—1 hour. The archaeological evidence for domestication of plants and the origins of agricultural societies. Anthropological context of agriculture and the effects on sexual division of labor, social inequality, wealth accumulation, warfare, human health, and sedentism. Offered in alternate years. GE credit: SocSci, Div, Wrt | SS, WC, WE.—Eerkens

25. Ancient Animals and People (2)

Lecture—2 hours. History of human and animal relationships and how animals have influenced social and economic structures of past societies. Why, when and how humans used animals in the context of hunting, domestication, secondary products, ritual, companionship, and conservation. Offered in alternate years. GE credit: SocSci | SS.—Darwent, Steele

26. Mummies of the Ancient World (2)

Lecture—2 hours. Archaeological approaches for studying mummies and the process of mummification in the ancient world. Analytical techniques used, environmental factors promoting mummification, and archaeological conservation of mummified bodies. Offered in alternate years. GE credit: SS, WC.—F. Eerkens

28. Prehistoric Origins of Art (2)

Lecture/discussion—2 hours. Interdisciplinary look at the earliest evidence for art and symbolic behavior. Method and techniques to investigate Prehistoric art. Interpretative framework and relevance for understanding the role of symbolic activities in traditional societies. Offered in alternate years. GE credit: SocSci | SS.—Zwyns

29. Vikings (2)

Lecture—2 hours. History of the Vikings through the Slavic and Mediterranean regions in the East and across the vast North Atlantic region to the west. Emphasis on archaeology and sagas to understand Viking culture from the 8th to 11th centuries. Offered in alternate years. GE credit: SS, WC.—S. (S.) Darwent

30. Sexualities (4)

Lecture/discussion—4 hours. Introduction to the study of sexuality, particularly to the meanings and social organization of same-sex sexual behavior across cultures and through time. Biological and cultural approaches will be compared, and current North American issues placed in a wider comparative context. GE credit: ArtHum or SocSci, Div | ACGH, AH or SS, DD, WC.—Donham

32. Drugs, Science and Culture (4)

Lecture—3 hours; discussion—1 hour. Drugs, politics, science, society in a cultural perspective: emphasis on roles of science, government and the media in shifting attitudes toward alcohol, marijuana, Prozac and other pharmaceuticals; drug laws, war on drugs and global trade in sugar, opium, cocaine. (Same course as Science and Technology Studies 32.) GE credit: SocSci, Div, Wrt | SS, VL, WE.—Dumit

34. Cultures of Consumerism (4)

Lecture/discussion—4 hours; term paper. Aspects of modern consumer cultures in capitalist and socialist countries. Transformations of material cultures over the past century. Case studies on the intersections of gender, class, and culture in everyday consumption practices. Offered irregularly. GE credit: SocSci, Div, Wrt | SS, WC.

50. Evolution and Human Nature (4)

Lecture—3 hours; discussion—1 hour. Evolutionary analyses of human nature, beginning with Lamarck, Darwin, Spencer and contemporaries, and extending through social Darwinism controversies to contemporary evolutionary anthropology research on human diversity in economic, mating, life-history, and social behavior. Offered in alternate years. GE credit: SciEng or SocSci, Div, Wrt | SE or SS, SL, WE.

54. Introduction to Primatology (4)

Lecture/discussion—3 hours; term paper. Basic survey of the primates as a separate order of mammals; natural history and evolution of primates; consideration of hypotheses for their origin. GE credit: SciEng | SE, SL, WE.—S. (S.) Isbell

98. Directed Group Study (1-5)

Prerequisite: consent of instructor. (P/NP grading only.)

99. Special Study for Lower Division Students (1-5)

Prerequisite: consent of instructor. (P/NP grading only.)

Upper Division**100. Theory in Social-Cultural Anthropology (4)**

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Discussion of the theoretical and philosophical developments in cultural anthropology from the 19th century to the present. Not open for credit to students who have completed course 137. GE credit: SocSci | SS, WE.—F. (F) Donham

101. Ecology, Nature, and Society (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 1 or 2 or Environmental Science & Policy 30 or Evolution and Ecology 100 or Biological Sciences 101 recommended. Interdisciplinary study of diversity and change in human societies, using frameworks from anthropology, evolutionary ecology, history, archaeology, psychology, and other fields. Topics include population dynamics, subsistence transitions, family organization, disease, economics, warfare, politics, and resource conservation. (Same course as Environmental Science and Policy 101.) Offered in alternate years. GE credit: SocSci, Div, Wrt | SS, WC, WE.—Borgerhoff, Mulder

103. Indigenous Peoples and Natural Resource Conservation (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 or Geology 1 or Environmental Science and Policy 30 recommended. Integration of the interests of resident and indigenous peoples with the conservation of natural resources and ecosystems, using case study examples from both the developing and the developed world. Not open for credit to students who have completed course 121N. (Former course 121N.) Offered in alternate years. GE credit: SocSci | ACGH, DD, OL, SS, WC, WE.—Mulder

104N. Cultural Politics of the Environment (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Relationship between social inequality (based on race, class, and/or gender) and ecological degradation. Articulation of local peoples, national policy, and the international global economy in the contestation over the use of environmental resources. Not open for credit to students who have completed course 134N. (Former course 134N.) GE credit: SocSci, Div | ACGH, DD, SS, WC, WE.—Sawyer

105. Evolution of Societies and Cultures (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 1 or 2 or Environmental Science and Policy 30 or Evolution and Ecology 100 or Biological Sciences 101 recommended. Interdisciplinary study of social and cultural evolution in humans. Culture as a system of inheritance, psychology of cultural learning, culture as an adaptive system, evolution of maladaptations, evolution of technology and institutions, evolutionary transitions in human history, coevolution of genetic and cultural variation. Only two units of credit to students who have completed Environmental Science and Policy 101 or course 101 prior to fall 2004. (Same course as Environmental Science and Policy 105.) Offered irregularly. GE credit: SocSci, Wrt | QL, SS, WC, WE.

109. Visualization in Science: A Critical Introduction (4)

Lecture—3 hours; extensive writing or discussion—1 hour. Prerequisite: course 2 or Science & Technology Studies 1 or Science & Technology Studies 20 recommended. Anthropological approaches to scientific visualization techniques, informatics, simulations. Examination of different visualization techniques toward understanding the work involved in producing them, critical assessment of their power and limits, especially when visualizations are used socially to make claims. (Same course as Science & Technology Studies 109.) Offered in alternate years. GE credit: SocSci, Wrt | SS, VL, WE.—Dumit

110. Language and Sociocultural Anthropology (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. The role of language analysis and linguistic theory in the development of sociocultural anthropology. Language, culture, and thought; the linguistic accomplishment of social action; language ideology; language and social power. Language as cultural mediator of politicoeconomic process. GE credit: SocSci, Div, Wrt | SS, WC, WE.

117. Language and Society (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 4 or Linguistics 1 recommended; course 2 recommended. Consideration of language in its social context. Methods of data collection and analysis; identification of socially significant linguistic variables. Contributions of the study of contextualized speech to linguistic theory. Offered irregularly. GE credit: SocSci, Div, Wrt | SS, WC, WE.

120. Language and Culture (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 4 or Linguistics 1 recommended; course 2 recommended. Culture, cognition, meaning, and interpretation; language and the classification of experience; communication and learning in crosscultural perspective. GE credit: SocSci, Div, Wrt | ACGH, DD, SS, WC, WE.

121. Special Topics in Medical Anthropology (4)

Lecture/discussion—4 hours. Prerequisite: course 2 recommended. Introduction to critical medical anthropology. Topics include anthropological analysis of bio-medicine, psychiatry, systems of knowledge and healing, the body, emotions, and clinical encounters in a cross-cultural perspective. (Same course as Science and Technology Studies 121.) GE credit: SocSci, Div, Wrt | SS, WC, WE.—Giordano

122A. Economic Anthropology (4)

Lecture—3 hours; discussion—1 hour. Varieties of production, exchange, and consumption behavior in precapitalist economies, their interaction with culture and social-political organization, and the theories that account for these phenomena. The effects of capitalism on precapitalist sectors. Not open for credit to students who have completed course 122. (Former course 122.) GE credit: SocSci, Div, Wrt | ACGH, DD, SS, WC, WE.

122B. Anthropology and Political Economy (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Survey of anthropological approaches to the study of political organizations; inter-relationships among political institutions, economic infrastructures and cultural complexity. Not open for credit to students who have completed course 123A. (Former course 123A.) Offered in alternate years. GE credit: SocSci, Div, Wrt | SS, WC, WE.

123AN. Resistance, Rebellion, and Popular Movements (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Analysis of popular protest in Third World and indigenous societies ranging from covert resistance to national revolts. Comparative case studies and theories of peasant rebellions, millenarian movements, social bandits, Indian "wars", ethnic and regional conflicts, gender and class conflicts. Not open for credit to students who have completed course 123B. (Former course 123B.) Offered irregularly. GE credit: SocSci | SS, WC, WE.

124. Religion in Society and Culture (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2. Discussion of anthropological theories of religion with emphasis on non-literate societies. Survey of shamanism, magic and witchcraft, ritual and symbols, and religious movements. Extensive discussion of ethnographic examples and analysis of social functions of religious institutions. GE credit: ArtHum or SocSci, Div, Wrt | AH or SS, WC, WE.

125A. Structuralism and Symbolism (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2. Survey of anthropological approaches to understanding the logic of structuralism and symbolism in cultural analysis. Focus on how structural and symbolic interpretations relate to cultural and linguistic universals and to the philosophical basis of relativism in the social sciences. (Former course 125.) Offered irregularly. GE credit: SocSci, Div | SS, WC, WE.

125B. Postmodernism(s) and Culture (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. The U.S.-European postmodern condition. "Modernity" as an incomplete project for subordinated groups. The economic, social, technological and political conditions leading to postmodern aesthetics, in comparison with postcolonialism, feminism and minority discourse. Offered irregularly. GE credit: SocSci, Div, Wrt | SS, WC, WE.

126A. Anthropology of Development (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Theories of development and current critiques. Colonial legacies and postcolonial realities. Roles of the state and NGOs, population migrations, changing gender identities, cash-earning strategies, and sustainability issues. Stresses importance of cultural understandings in development initiatives. Case studies emphasizing non-industrial societies. Not open for credit to students who have completed course 126. (Former course 126.) GE credit: SocSci, Div, Wrt | SS, WC, WE.—Smith

126B. Women and Development (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Current Third World and Western development issues concerning women in agriculture, industry, international division of labor, political movements, revolutions, politics of health, education, family and reproduction. Impact of colonialism, capitalism, the world system, and international feminism on women and development. Not open for credit to students who have completed course 131. (Former course 131.) GE credit: SocSci, Div, Wrt | SS, WC, WE.—Su. (Su.)

127. Urban Anthropology (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 or consent of instructor. Survey of approaches to urban living: political structures, organization of labor, class relations, world views. The evolution of urban life and its contemporary dilemmas. Cross-cultural comparisons discussed through case studies. GE credit: SocSci, Div, Wrt | SS, WC, WE.—Srinivas, Zhang

128A. Kinship and Social Organization (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Comparative examination of personal kinship, descent, marriage, household and family organizations; the theories that account for variation, and recent advances in the treatment of these data. Not open for credit to students who have completed course 128. (Former course 128.) Offered irregularly. GE credit: SocSci, Div, Wrt | SS, WC, WE.

128B. Self, Identity, and Family (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Exploration of self, identity, and family systems cross-culturally. Impact of class, gender, race, ethnicity, ruralization, urbanization, and globalization on notions of selfhood in different social/cultural systems. Not open for credit to students who have completed course 129. (Former course 129.) Offered in alternate years. GE credit: SocSci, Div, Wrt | SS, WC, WE.

129. Health and Medicine in a Global Context (4)

Lecture/discussion—3 hours; term paper. Prerequisite: course 2 recommended. Recent works in medical anthropology and the science studies of medicine dealing with social and cultural aspects of global health issues such as AIDS, pandemics, clinical trials, cultural differences in illnesses, diabetes, organ trafficking, medical technologies, illness nar-

Fall 2011 and on Revised General Education (GE): AH=Arts and Humanities; SE=Science and Engineering; SS=Social Sciences;

ACGH=American Cultures; DD=Domestic Diversity; OL=Oral Skills; QL=Quantitative; SL=Scientific; VL=Visual; WC=World Cultures; WE=Writing Experience

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

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

ratives, and others. (Same course as Science and Technology Studies 129.) GE credit: SocSci, Div, Wrt | SS, WC, WE.—Dumit

130A. Cultural Dimensions of Globalization (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. The cultural dimensions of recent economic and political developments frequently termed “globalization.” Offered in alternate years. GE credit: SocSci, Wrt | SS, WC, WE.

130BN. Migration and the Politics of Place and Identity (4)

Lecture/discussion—4 hours. Prerequisite: course 2 recommended. Internal and international migration from an anthropological perspective, including causes, processes, and political, economic, and cultural effects of spatial mobility and displacement. Emphasizes the interplay of identity, place, and power in diverse cultural and historical contexts. Not open for credit to students who have completed course 123D. (Former course 123D.) Offered irregularly. GE credit: SocSci, Wrt | SS, WC, WE.

131. Ecology and Politics (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Analysis of the complex interactions between ecological dynamics and political processes employing the emerging approach of political ecology. Case studies of environmental degradation (e.g., desertification, logging, mineral extraction, petroleum, water) from various cultural and geographic regions. Offered in alternate years. GE credit: SocSci, Div | SS.

132. Psychological Anthropology (4)

Lecture—3 hours; extensive writing or discussion—1 hour. Prerequisite: course 2 recommended. History of the relationship between anthropology and psychoanalysis. Exploration of anthropology of emotions, colonial psychology, contemporary ethnopsychiatry, studies on personhood, possession, magic, altered states, subjectivity, and definitions of the normal and the pathological in different contexts and cultures. GE credit: SocSci, Div, Wrt | SS, WC, WE.—Giordano

134. Buddhism in Global Culture (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Class size limited to 50 students. Buddhist meditation and ritual as a cultural system that adapts to global and local forces of change. Anthropological theory and method in understanding global culture transmission, including Buddhist reform movements in Asia and Buddhist practice in the West. GE credit: ArtHum or SocSci, Div, Wrt | AH or SS, WC, WE.—Klima

136. Ethnographic Film (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Overview of the use of film in anthropology and its advantages and limitations in comparison to written ethnographic descriptions. Essential features of ethnographic films. Film production in anthropological research and problems encountered in producing films in the field. Offered irregularly. GE credit: SocSci, Wrt | SS, VL, WC, WE.

137. Meditation and Culture (4)

Lecture/discussion—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Class size limited to 50 students. Study and practice of the relation between meditation and cultural conditioning; comparison of Buddhist practice with other cultural constructions of mind, body, brain, thought, emotion, and self.—Klima

138. Ethnographic Research Methods in Anthropology (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Basic concepts in and approaches to ethnographic field research. Problem formulation, research design, qualitative and quantitative data collection procedures, and techniques for organizing, retrieving, and analyzing information. Ethnographic description and constructed inference. Students will organize and conduct individual research projects. Offered in alternate years. GE credit: SocSci | SS, WC, WE.—de la Cadena

139AN. Race, Class, Gender Systems (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Comparative analysis of class/race/gender inequality, concentrating on the ways in which beliefs about descent, “blood,” and biological difference interact with property and marital systems to affect the distribution of power in society. Not open for credit to students who have completed course 139. (Former course 139.) Offered irregularly. GE credit: SocSci, Div, Wrt | ACGH, DD, SS, WC, WE.—de la Cadena

139BN. Gender and Sexuality (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Gender and sexuality in foraging bands, horticultural and pastoral tribes, agricultural and industrial states. Debates on cultural evolution and distribution of gender hierarchies. Impact of politics, economics, religion, social practices, women's movements on gender and sexuality. Culture, nature, and sexuality. Not open for credit to students who have completed course 130. (Former course 130.) Offered irregularly. GE credit: SocSci, Div, Wrt | ACGH, DD, SS, WC, WE.

140A. Cultures and Societies of West and Central Africa (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Ethnographic survey of West Africa and Congo Basin with analyses of representative societies which illustrate problems of general theoretical concern. Major consideration will be the continuities and discontinuities between periods prior to European contact and the present. Offered irregularly. GE credit: SocSci, Div, Wrt | SS, WC, WE.

140B. Cultures and Societies of East and South Africa (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Ethnographic survey of Eastern and Southern Africa with analyses of selected societies which illustrate problems of interest to anthropologists. Major consideration will be given to continuities and discontinuities between periods prior to European contact and the present. GE credit: SocSci, Div, Wrt | SS, WC, WE.—Donham

141B. Ethnography of California and the Great Basin (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended; consent of instructor. Description and analysis of the native peoples of California and the Great Basin, and their lifeways at the time of European contact. (Former course 141C.) GE credit: SocSci, Div, Wrt | ACGH, DD, SS, WE.—Bettinger

141C. People of the Arctic: Contemporary and Historic Cultures of the Circumpolar Region (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 or 3 recommended. Social, economic, political, and religious lives of Russian, American, Canadian, and Greenlandic Arctic people (Yup'ik, Inupiat, Inuit). Topics include Arctic ecosystems, archaeological record of human occupation, ethnohistorical and ethnographic accounts, arctic people in popular culture, and contemporary issues. Offered in alternate years.—F. Darwent

142. Peoples of the Middle East (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Peoples of the Middle East (including North Africa). Discussions of class relations, kinship organization, sex/gender systems, religious beliefs and behavior, ethnic relations, political systems. Impact of world systems, political and religious movements and social change. (Former course 136.) GE credit: SocSci, Div, Wrt | SS, WC, WE.

143A. Ethnology of Southeast Asia (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Patterns of culture and social organization from prehistory to the present, in the context of historical, ecological, economic, and political settings. Emphasis on the relation of ethnic minorities to national states. Offered irregularly. GE credit: SocSci, Div, Wrt | SS, WC, WE.

144. Contemporary Societies and Cultures of Latin America (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2. Introduction to contemporary social structure of Latin America. Origins, maintenance and changes in inequality: economic responses to poverty, sociocultural responses to discrimination, and political responses to powerlessness. GE credit: SocSci, Div, Wrt | SS, WC, WE.—de la Cadena

145. Performance, Embodiment, and Space in South Asia (4)

Lecture/discussion—4 hours. Prerequisite: course 2 or consent of instructor. South Asian cultures and societies with a focus on performance, embodiment, and space from several disciplinary fields. Topics may include colonialism, nationalism, religious traditions, media, popular culture, cities, social movements, modernity, body-cultures, identity, gender, and diasporas. GE credit: ArtHum or SocSci, Div, Wrt | AH or SS, WC, WE.—Srinivas

146N. Topics in the Anthropology of Europe (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Recent ethnographies of different nation-states and socio-political spaces in Europe. Topics include the question of old and new boundaries, historical and contemporary constructions of Europe, migration and ethnicity, citizenship, belonging, multiculturalism, and post/socialisms. Offered in alternate years. GE credit: SocSci, Div, Wrt | SS, WC, WE.—Giordano

148A. Culture and Political Economy in Contemporary China (4)

Lecture/discussion—4 hours. Prerequisite: course 2 recommended. Examining contemporary Chinese culture and political economy through reading ethnographic studies on recent transformations in rural and urban Chinese society. Special attention is given to state power, popular culture, spatial mobility, city space, and gender. GE credit: SocSci, Div, Wrt | SS, WC, WE.—Zhang

149A. Traditional Japanese Society (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 2 recommended. Patterns of culture and social organization from prehistory to early twentieth-century Japan. Origins, prehistory, and traditional religious and political systems, marriage and kinship, language and culture. Changes and continuities in traditional and contemporary Japanese culture are addressed. Offered irregularly. GE credit: SocSci, Div, Wrt | SS, WC, WE.

149B. Contemporary Japanese Society (4)

Lecture—3 hours; discussion—1 hour. Introduction to contemporary Japanese social structure, social organization, and patterns of culture. Analysis of rural-urban cultural continuities and contrasts, class relations, political and economic systems, kinship, sex/gender systems, contemporary religious beliefs and behavior, conflict, consensus, and cultural stereotypes. Offered irregularly. GE credit: SocSci, Div, Wrt | SS, WC, WE.—Shibamoto-Smith

151. Primate Evolution (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 1 or Biological Sciences 2B or Biological Sciences 2C or Evolution and Ecology 10 recommended. Origin and relationships of the primates, monkeys, and apes. GE credit: SciEng, Wrt | SE, WE.—S. (S.) Isbell

152. Human Evolution (5)

Lecture—3 hours; discussion—1 hour; term paper. Prerequisite: course 1 recommended. Nature and results of the evolutionary processes involved in the formation and differentiation of humankind. GE credit: SciEng, Wrt | SE, WE.—W. (W.) Zwyns

153. Human Biological Variation (5)

Lecture—3 hours; discussion—1 hour; term paper. Prerequisite: course 1 or Biological Sciences 2B recommended. Origin, adaptive significance and methods of analysis of genetic differences among human populations. Special attention given to racial differences such as those in blood groups, plasma pro-

teins, red cell enzymes, physiology, morphology, pigmentation and dermatoglyphics. GE credit: SciEng, Wrt | QL, SE, WE.—D. G. Smith

154A. The Evolution of Primate Behavior (5)

Lecture—3 hours; discussion—1 hour; term paper. Prerequisite: course 1 or 54 or Evolution and Ecology 10 recommended. Examines ecological diversity and evolution of social systems of prosimians, monkeys, and apes, placing the social behavior of the primates in the context of appropriate ecological and evolutionary theory. GE credit: SciEng, Wrt | SE, VL, WE.—F. (F.) Isbell

154B. Primate Evolutionary Ecology (5)

Lecture—3 hours; lecture/discussion—1 hour; term paper. Prerequisite: course 1 or Evolution and Ecology 10 recommended. Examination of the ecology of primates within an evolutionary framework. Theoretical concepts in individual, population, and community ecology, illustrated with primate (and other vertebrate) examples, with additional discussion of primate and rainforest conservation. GE credit: SciEng, Wrt | QL, SE, WE.

154C. Behavior and Ecology of Primates (2)

Lecture/discussion—2 hours. Prerequisite: course 54, 154A, or 154BN; Statistics 13 or its equivalent. Scientific methods of studying, describing and analyzing the behavior and ecology of primates. (P/NP grading only.) Offered in alternate years. GE credit: SE.—S. (S.) Crofoot

154CL. Laboratory in Primate Behavior (4)

Laboratory—6 hours; term paper. Prerequisite: course 54, 154A, or 154BN; Statistics 13 or its equivalent. Design and conduct of scientific “field studies” of the behavior of group-living primates at the California National Primate Research Center. Offered in alternate years. GE credit: SciEng | OL, SE, WE.—S. (S.) Crofoot

156A. Human Osteology (4)

Lecture—2 hours; laboratory—4 hours. Prerequisite: course 1 or course 1Y recommended. Not open to students who have previously completed course 156. Human skeleton from archaeological, forensic, and paleontological perspectives, including anatomical nomenclature, variation with sex and age, function, evolution, growth, and development of bones and teeth. Hands-on study and identification of human skeletal remains. GE credit: SciEng | SE.—F. (F.) Weaver

156B. Advanced Human Osteology (4)

Lecture—2 hours; laboratory—4 hours. Prerequisite: course 156A or equivalent. Not open to students who have previously completed course 156. Human skeletons from archaeological, forensic, and paleontological contexts. Bone and tooth structure, growth, and development; measurement, statistics, and biomechanics; assessment of age, sex, weight, height, and ancestry; and indicators of illness, injuries, diet, and activities. Offered in alternate years. GE credit: SciEng | SE.—S. (S.) Weaver

157. Anthropological Genetics (3)

Lecture—3 hours. Prerequisite: course 1 or Biological Sciences 2C recommended. Method and theory of genetic and genomic analysis of molecular evolution of human and non-human primate populations. Special attention to the molecular evolutionary transition to humans and genetic differences among extant human populations and their adaptive significance. Offered in alternate years. GE credit: SciEng | QL, SE.—D. G. Smith

157L. Laboratory in Anthropological Genetics (2)

Lecture—1 hour; laboratory—3 hours. Prerequisite: course 1 or Biological Sciences 2C recommended; enrolled in course 157 concurrently or following. Methods for identifying genetic variation in human blood group antigens, serum proteins and red cell enzymes (hemagglutination), general electrophoresis on starch, cellulose acetate and polyacrylamide, immunodiffusion and immunoelectrophoresis on agarose. (P/NP grading only.) Offered irregularly. GE credit: QL, SE.—D. G. Smith

158. The Evolution of Females and Males: Biological Perspective (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 1 recommended. Current theoretical frameworks for explaining the evolution of sex differences and for understanding the interrelationship between biological processes and cultural construction of gender roles. GE credit: SciEng, Div, Wrt | OL, WE.

159. Molecular Anthropology of Native America (4)

Seminar—3 hours; term paper. Prerequisite: course 1 or Biological Sciences 2B; or consent of instructor. Use of DNA and other genetic polymorphisms to test hypotheses regarding genetic relationships among different Native American tribal groups and about prehistoric population replacements and migrations to and within the Americas. Integration with cranio-metric, archaeological, paleoenvironmental, linguistic and ethnohistorical evidence. Offered irregularly. GE credit: SciEng | QL, SE.

160. Neanderthals and Modern Human Origins (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 1Y or course 1Y or equivalent recommended. Origins, evolution, and disappearance of Neanderthals. Emergence of humans like us in both anatomy and behavior. Interpretation of the fossil and archaeological records of Europe and Africa. Genetics of living and fossil humans. Offered in alternate years. GE credit: SciEng | SE.—Weaver

170. Archeological Theory and Method (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 3 recommended. Introduction to history and development of archeological theory and method, with particular emphasis on the basic dependence of the latter on the former. Stress is on historical development of archaeology in the New World. GE credit: SocSci, Div, Wrt | SS, WE.—W. (W.)

172. New World Prehistory: The First Arrivals (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 3 recommended. Survey of data relating to the peopling of the New World. Cultural adaptation and development of early inhabitants of North and South America. Offered in alternate years. GE credit: SocSci, Div, Wrt | SS, WC, WE.—Darwent

173. New World Prehistory: Archaic Adaptations (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 3 recommended; consent of instructor. Introduction to and survey of prehistoric hunting and gathering adaptations across North America with particular emphasis on the East, Southeast, Midwest, Plains, Southwest, and Northwest. Offered irregularly. GE credit: SocSci, Div, Wrt | SS, WE.

174. European Prehistory (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 3 recommended. Survey of the prehistory of Europe from its earliest human inhabitants, to the Neanderthals and first modern humans, and through early agricultural and complex societies. Analysis and interpretation of the European archaeological record for understanding human dispersals into Europe. Offered in alternate years. GE credit: SocSci | SS, WC, WE.—Steele

175. Andean Prehistory: Archaeology of the Incas and their Ancestors (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 3 recommended. Prehistory of the Andean region, especially Peru, from the earliest hunting and gathering societies through the Inca. Focus on the use of archaeological data to reconstruct ancient human adaptations to the varied Andean environments. Offered in alternate years. GE credit: SocSci | SS, WC, WE.—Eerkens

176. Prehistory of California and the Great Basin (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 3 recommended; consent of instructor. Description and analysis of the prehistoric peoples of California and the Great Basin from earliest times

to European contact. Offered in alternate years. GE credit: SocSci, Div, Wrt | ACGH, DD, SS, WE.—Eerkens

177. African Prehistory (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 3 recommended. Survey of prehistory of Africa from early human ancestors, through modern human origins, and into early agricultural and complex societies and the Bantu expansion. Analysis and interpretation of the African archaeological record, incorporating human paleontology and genetics. Offered in alternate years. GE credit: SocSci | SS, WC, WE.—Steele

178. Hunter-Gatherers (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 3 recommended. Study and interpretation of the ancient and modern lifeway in which peoples support themselves with primitive technologies and without benefit of domesticated plants and animals. Offered in alternate years. GE credit: SocSci, Div, Wrt | SS, WC, WE.—Bettinger

179. Asian Prehistory (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 3 recommended. Survey of the prehistory of Asia from the earliest human occupations to the rise of complex societies. Special focus on fossil and archeological records. Offered in alternate years. GE credit: SocSci.—Zwyns

180. Zooarcheology (4)

Lecture—2 hours; discussion/laboratory—3 hours. Prerequisite: course 1 or course 3 recommended. Restricted to junior or senior standing. Theories and methods for studying animal skeletal remains from archaeological sites. Identification and quantification of zooarchaeological material, cultural and natural processes affecting animal bones pre- and postburial, and use of faunal remains for determining past human diets and past environments. Offered in alternate years. GE credit: SciEng | SE.—W. (W.) Darwent, Steele

181. Field Course in Archeological Method (9)

Lecture—6 hours; daily field investigation. Prerequisite: course 3. On-site course in archeological methods and techniques held at a field location in the western United States, generally California or Nevada. Introduces basic methods of archeological survey, mapping, and excavation. GE credit: SciEng | SE.—Su. (Su.)

182. Archaeometry (4)

Lecture—3 hours; discussion/laboratory—1 hour. Prerequisite: course 3 recommended. Scientific techniques used to study the chemical and physical properties of archaeological materials. Types of anthropological questions that can be addressed with different methods. Preparation and analysis of archaeological materials. Offered in alternate years. GE credit: SciEng | QL, SE, VL, WE.—Eerkens

183. Laboratory in Archeological Analysis (4)

Lecture—2 hours; laboratory—6 hours. Prerequisite: course 3 recommended; consent of instructor. Limited enrollment. Museum preparation, advanced field investigation, and guidance in preparation of museum material for publication. May be repeated for credit with consent of instructor. Offered irregularly. GE credit: SciEng, Wrt | OL, QL, SE, WE.

184. Prehistoric Technology: The Material Aspects of Prehistoric Adaptation (4)

Lecture—3 hours; discussion—1 hour. Prerequisite: course 3 recommended. Examination of the role of lithic, ceramic, textile and wooden implements as elements in prehistoric survival and development. Emphasis is descriptive, but the significance of material resources as factors in prehistoric adaptation, settlement patterns, and culture change are discussed. Offered in alternate years. GE credit: SocSci | SS, WE.—Eerkens

185. Lithic Analysis (4)

Lecture/Laboratory—4 hours. Prerequisite: course 3 recommended. Basic concepts of lithic analysis. General introduction on the place of stone tool tech-

nology in the archeological record. Physics, terminology and methodological concepts behind the study of stone tools. Review of the development of stone tool technology from its emergence. Offered in alternate years. GE credit: SocSci | SS.—Zwyns

186A. Museum Studies: Analysis of Native American Basketry (4)

Lecture/laboratory—3 hours; discussion/laboratory—1 hour. Class size limited to 25 students. Study of ethnographic and prehistoric basketry from North America, especially California and Oregon, in a multidisciplinary anthropological context. Techniques for basketry attribution and textile analysis. GE credit: ArtHum or SocSci | ACGH, AH or SS, DD, OL, VL, WE.—F. (F.) Bettinger

191. Topics in Anthropology (4)

Lecture/discussion—3 hours; term paper. Prerequisite: junior or senior standing in anthropology. Intensive treatment of a special anthropological topic or problem. May be repeated one time for credit when topic differs.

192. Internship in Anthropology (1-12)

Internship—3-36 hours. Prerequisite: Upper division standing; consent of instructor. Work experience off and on campus in all subject areas offered in the Department of Anthropology under the supervision of a member of the faculty. Limited to Anthropology majors. May be repeated for a total of 12 units including 192 courses taken in other departments. (P/NP grading only.)

194H. Special Study for Honors Students (1-5)

Prerequisite: open only to majors of senior standing who qualify for honors program. Independent study of an anthropological problem involving the writing of an honors thesis. May be repeated for a total of 12 units. (P/NP grading only.) GE credit: WCL.

197T. Tutoring in Anthropology (1-5)

Tutorial—1.5 hours. Prerequisite: upper division standing with major in Anthropology and consent of Department Chairperson. Leading of small voluntary discussion groups affiliated with one of the department's regular courses. May be repeated for credit. (P/NP grading only.)

198. Directed Group Study (1-5)

(P/NP grading only.)

199. Special Study for Advanced Undergraduates (1-5)

(P/NP grading only.)

Graduate

200. History of Anthropology (4)

Lecture/discussion—2 hours; term paper. Historical development of socio-cultural theory within anthropology, from mid-19th to mid-20th Centuries. Focus on original theory texts in context of historical developments in the field as a whole. Offered in alternate years.

201. Critical Readings in Ethnography (4)

Seminar—3 hours; term paper. Prerequisite: graduate student in Anthropology or consent of instructor. Critical readings of selected ethnographies that examine a wide range of important topics and analytical issues in social and cultural anthropology. Emphasis on how and why ethnographic writing has changed over time and its relationship with contemporary theoretical explorations.—F. (F.) Zhang

202. History and Theory of Biological Anthropology (4)

Seminar—3 hours; term paper. History of thought in biological anthropology and analysis of major theoretical problems in the field. Suggested for all first-year graduate students lacking intensive preparation in biological anthropology.—Weaver

203. History and Theory of Archaeology (4)

Seminar—3 hours; term paper. Generally restricted to graduate students; outstanding undergraduates with extensive training in archaeology with consent of instructor. History of archaeology and archaeological theory and analysis of archaeological research methodology.—F. (F.) Bettinger

204. Contemporary Issues in Anthropological Theory (4)

Seminar—3 hours; term paper. Prerequisite: course 2, 137 or consent of instructor. Advanced consideration of fundamental issues in anthropological theory. Emphasis on critical examination of major contemporary debates between proponents of competing theories.

205. History and Theory in Anthropological Linguistics (4)

Seminar—3 hours; term paper. History of thought in anthropological linguistics. Consideration of the historical development of fundamental ideas in anthropological linguistics, of major theoretical issues, and of research methodology.

206. Research Design and Method in Social Anthropology (5)

Seminar—4 hours. Prerequisite: consent of instructor. Limited enrollment. Formulation of research problems and preparation of research proposals; relationships between theory and method, funding, pre-fieldwork preparations, entering the community, field research techniques, and problems of ethics; intensive work on proposal writing. May be repeated one time for credit.—S. (S.)

207. Ethnographic Writing (4)

Seminar—3 hours; term paper. Prerequisite: courses 137, 201, or the equivalent. Relationship between conducting participant observation of others and writing it up, emphasizing the processual rift between the reality of fieldwork and its written representation. Study of various literary genres and textual strategies used in cultural anthropology. May be repeated for credit.

210. Aspects of Culture Structure (4)

Seminar—3 hours; term paper. Analysis of various phases of culture, such as religion, economics, law, and folklore. May be repeated for credit when topic differs.—F, W, S. (F, W, S.)

211. Advanced Topics in Cultural Ecology (4)

Lecture/discussion—3 hours; term paper. Prerequisite: Environmental Science and Policy/Anthropology 133, graduate standing in Anthropology or Ecology. Topics of current analytical and methodological importance in cultural ecology. Examination of general issues in cultural ecology through study of human response to and influence on climate. (Same course as Ecology 211.)

212. Political Ecology (4)

Lecture/discussion—3 hours; term paper. Prerequisite: graduate standing or consent of instructor. Interdisciplinary seminar evaluating contributions from ecological anthropology, political economy, cultural constructivism, postmodernism, and feminism towards development of theories of political ecology. Historical relationships between local/global power structures, environmental degradation, and resistance movements. Case studies of desertification, deforestation, mining, conservation, development.

216. Problems in Archeological Method (4)

Seminar—3 hours; term paper. Techniques for analyzing archeological data; application to various prehistoric cultures. May be repeated for credit with consent of instructor.—Darwent, Steele

217. Quantitative Modeling in Archaeology (4)

Lecture/discussion—3 hours; term paper. Examination of the nature of archaeological data with a focus on the quantitative and statistical techniques available to model, analyze, display, and make sense of such data. Offered irregularly.—Eerkens

218. Topics in New World Prehistory (4)

Seminar—3 hours; term paper. Advanced study on current problems in New World Prehistory and archaeology. May be repeated for credit only if material is unique for that student and with consent of instructor. May be repeated for credit. Offered irregularly.—Darwent, Eerkens

219. Topics in Old World Prehistory (4)

Seminar—3 hours; term paper. Advanced study on current problems in Old World prehistory and archaeology. May be repeated for credit only if material is unique for that student and with consent of instructor. May be repeated for credit. Offered irregularly.—Steele, Zwyns

220. Field Course in Linguistics (4)

Seminar—2 hours; laboratory—2 hours. Prerequisite: courses 110, 111. Techniques of eliciting, recording, and analyzing; work with a native speaker.

221. Rural Transformation in Postcolonial Societies (4)

Seminar—3 hours; term paper. Prerequisite: courses 223, 265, or consent of instructor. Problems of rural transformation arising out of political and economic interaction between national elites and rural regional and local populations under varying conditions of induced change in postcolonial societies. Attention will be given to the implications of this interaction for rapid economic growth. May be repeated for credit.

222. Cities and Citizenship (4)

Seminar—3 hours; term paper. Prerequisite: graduate standing; consent of instructor. Explores the nature of modern cities, urban socioeconomic life, and urban culture and politics from an anthropological perspective.—F. (F.) Zhang

223. Economic Anthropology (4)

Seminar—3 hours; term paper. Prerequisite: course 122 or consent of instructor. Selected current methodological and theoretical problems in the analysis of nonindustrial economic systems.

224. Problems in Comparative Religion (4)

Seminar—3 hours; term paper. Advanced study of current problems in the anthropological study of religion.

225. State and Nation in the Modern World (4)

Seminar—3 hours; term paper. A presentation of current anthropological theories of the origins and nature of the modern nation-state in both the First and Third Worlds, with special reference to state ideology (nationalism) and forms of control.

226. Consciousness and Resistance (4)

Seminar—3 hours; term paper. Prerequisite: completion of first-year graduate work or consent of instructor. Consideration of approaches to the study of social inequality, and responses of subordinated groups. Emphasis on situating approaches to contemporary social theory, concrete research problems, and political strategies. Topics: formation of consciousness and identity; collective action, accommodation to frontal resistance.

228. Culture and Power (4)

Seminar—3 hours; extensive writing. Prerequisite: graduate standing or consent of instructor. Exploration of one of the core paradigms within contemporary anthropological inquiry, "culture and power." Focus on how distinct theoretical perspectives—Marxism, post-Marxism, structuralism, post-structuralism, and feminism—have examined the mutually constitutive nature of culture and power.—W. (W.) Sawyer

229. Gender, Identity, and Self (4)

Seminar—3 hours; term paper. Intersections of gender, identity, and selfhood cross-culturally and historically. How the self is feminized and masculinized, and interfaces with sexual, race, class, work, national, minority, and majority identities under different historical, cultural, and social structural conditions. May be repeated for credit when topic differs.—W. (W.) Joseph

230. Family Systems and Reproduction: Theory and Comparisons (4)

Lecture—1.5 hours; seminar—1.5 hours; term paper. Prerequisite: graduate standing in one of the social sciences including History. Comparative examination of family systems in historical context and of reproductive behaviors and strategizing. A major theme is how family-system norms specify the

relative desirability of differently configured offspring sets. Cases are drawn from Western Europe and South and East Asia.

232. Political Movements (4)

Seminar—3 hours; term paper. Prerequisite: completion of first-year graduate work recommended. An interdisciplinary approach to political movements of protest, reform, and revolution emphasizing historical comparison and evaluation of major theoretical approaches including world systems, resource mobilization, state and culture, rational choice, moral economy, social class and gender.

239. Problems in African Society and Culture (4)

Seminar—3 hours; term paper. Diachronic analyses of traditional institutions in sub-Saharan Africa.

241. Topics in North American Ethnology (4)

Seminar—3 hours; term paper. Advanced study on current problems in North American ethnography and culture history. May be repeated for credit with consent of instructor.

245. Ethnology of Northern and Central Asia (4)

Seminar—3 hours; term paper. Prerequisite: a reading knowledge of German, Russian, Chinese, or Japanese. Lectures on the culture aboriginally found north of the Caucasus-Korea line. Supervised study of the primary and secondary sources. Work with informants when available.

246. Ethnology of Europe (4)

Seminar—3 hours; term paper. Prerequisite: reading knowledge of a European language other than English. Supervised study of the primary and secondary sources dealing with the ethnography and ethnology of the peoples of Europe. Emphasis upon folk, peasant, and minority groups.

248. Topics in Chinese Culture and Society (4)

Seminar—3 hours; term paper. Prerequisite: graduate standing in the social sciences, history, or the humanities. Selected topics in the anthropology of Chinese society. Focus on one or more of the following topics: state-society dynamics, family and gender, city formation and urban life, social movement, labor politics, and religion and ideology in Chinese society. May be repeated for credit when topic differs.

250. Behavioral Ecology of Primates (4)

Seminar—3 hours; term paper. Prerequisite: course 154A (may be taken concurrently) or the equivalent, graduate standing. Concepts, issues, and hypotheses in primate behavioral ecology, with emphasis on the social and ecological determinants and consequences of variation in social organization for individuals. Offered in alternate years.—Isbell

252. Human Evolution Seminar (4)

Seminar—3 hours; term paper. Prerequisite: course 152 or the equivalent; consent of instructor. Study of selected topics in human evolutionary studies. Each year course will focus on one or more of the following: molecular evolution, primate evolutionary biology, Tertiary hominoids, Australopithecus, Homo erectus, archaic Homo sapiens, brain evolution. May be repeated for credit.—S. (S.) Weaver, Zwyns

253. Seminar in Human Biology (4)

Seminar—3 hours; term paper. Prerequisite: course 153, 157, or consent of instructor. Study of selected topics in human biology. May be repeated for credit when topics vary. Offered irregularly.—W. (W.) D. G. Smith

254. Current Issues in Primate Sociobiology (4)

Seminar—3 hours; term paper. Prerequisite: course 154B or the equivalent. Analysis of primate behavior, with particular emphasis on preparation for field studies. May be repeated for credit when topic differs.—Crofoot, Isbell

256. Primate Conservation Biology (4)

Seminar—3 hours; term paper. Prerequisite: course 154, graduate standing or upper division undergraduate with consent of instructor. Class size limited

to 10 students. Application of understanding of primate biology to conservation of primates and their habitat. Topics include evolutionary anthropology, behavioral ecology, biogeography, macroecology, population biology, and socio-ecology of primates. May be repeated one time for credit if term paper differs. (S/U grading only.) Offered irregularly.

261. Modeling the Evolution of Social Behavior (4)

Lecture—3 hours; extensive problem solving. Prerequisite: Mathematics 16C or the equivalent or consent of instructor. Tools and topics in modeling the evolution of social behavior in humans and other animals. Game theory, basic population genetics, animal conflict, altruism, reciprocity, signaling, and group selection.

262. Evolution and Human Behavior (4)

Discussion—3 hours; term paper. Prerequisite: graduate standing or consent of instructor. Exploration of the links between behavioral ecological theory and human cultural variation, focusing on reproduction, marriage, parental investment and family structure; implications of evolutionary theory for social organization in human communities, historical and contemporary. Offered in alternate years.—Borgerhoff, Mulder

263. Human Applications of Foraging Theory (4)

Discussion—3 hours; laboratory—3 hours. Foraging theory models and their use in ethnographic and archaeological analyses of human behavior, with a focus on hunter-gathers and resource selection, patch use, population and habitat, central places, sharing, stochastic processes, population dynamics, and conservation behavior. Not open for credit to students who have completed course 258. Offered irregularly.

265. Language, Performance, and Power (4)

Seminar—3 hours; term paper. Restricted to graduate standing or consent of instructor. Exploration of the intersection between linguistic and social theories in the language-state relation and the performance of identity. Ideological sources of language differentiation; nation-building and linguistic difference. Political economic, sociolinguistic, and ethnographic approaches to understanding linguistic inequality. (Same course as Linguistics 265.) Offered in alternate years.—Shibamoto-Smith

270. Anthropology Colloquium Seminar (1)

Seminar—1 hour. Reports and discussions of recent advances in the four subfields of anthropology. To be presented by guest speakers. May be repeated two times for credit. (S/U grading only.)—F, W, S. (F, W, S.)

280. Current Anthropology Journal Editorial Workshop (4)

Workshop—1 hour; independent study—3 hours. Prerequisite: consent of instructor. Students must enroll for all three quarters. Reading and offering workshop critiques of manuscripts submitted for publication, and reading and discussion of other relevant work in anthropology and human ecology. Track and edit published comments and authors' replies that accompany major features. Participation in the development of new sections for the electronic edition of the journal, including a "news and views" section and a debate section. (Same course as Ecology 280.) May be repeated up to 12 units for credit with consent of instructor.

291. Advanced Topics in Human Behavioral Ecology (4)

Discussion—3 hours; term paper. Prerequisite: course 261, 262, or 263, or comparable experience in anthropology or related disciplines and consent of instructor. Topically focused, critical discussion of current and emerging research in the field of human behavioral ecology, giving special attention to theory, concepts, models, and methods for the evolutionary analysis of ethnographic and archaeological evidence. May be repeated one time for credit if topic differs.

292. Seminar in Linguistic Anthropology (4)
Seminar—3 hours; term paper. Selected topics in linguistic anthropology. May be repeated for credit when topic differs.

298. Group Study (1-4)
(S/U grading only.)

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

299D. Dissertation Research (1-12)
(S/U grading only.)

Professional

390. Teaching Anthropology (4)

Seminar—3 hours; practice—1 hour. Prerequisite: graduate standing in Anthropology or closely related discipline. Intellectual and practical elements of college teaching in the field of Anthropology, from curriculum design and the syllabus through grading and course evaluations, including classroom and information technology methods, and problems and rewards of teaching in higher education. Offered in alternate years.

396. Teaching Assistant Training Practicum (1-4)

Prerequisite: graduate standing. May be repeated for credit. (S/U grading only.)—F, W, S.

Applied Behavioral Sciences

See [Community and Regional Development](#), on page 221.

Applied Biological Systems Technology

(College of Agricultural and Environmental Sciences)

Faculty. See under Department of [Engineering: Biological and Agricultural](#), on page 266.

Courses in Applied Biological Systems Technology (ABT)

Lower Division

15. Wood Properties and Fabrication (2)

Lecture/discussion—1 hour; laboratory—3 hours. Study of wood properties and techniques for fabrication with wood. Gain experience working with various woods and woodworking tools for specific applications. (P/NP grading only.) GE credit: OL, QL, SE, VL.—W. (W.) Shafii

16. Metal Properties and Fabrication (2)

Lecture—1 hour; laboratory—3 hours. Study of metal properties and of techniques for fabricating in metal. Physical principles, design considerations, effects of techniques on quality and appearance, and evaluation procedures. Experience in working with metal. (P/NP grading only.) GE credit: QL, SE, VL.—F. (F.) Shafii

17. Plastic Properties and Fabrication (2)

Lecture—1 hour; laboratory—3 hours. Study of the properties of plastic materials and the fundamentals of fabrication techniques. Experience in working with common plastics, with applications to biological systems. (P/NP grading only.) GE credit: QL, SE, VL.—S. (S.)

49. Field Equipment Operation (2)

Lecture—1 hour; laboratory—3 hours. Operation, adjustment, and troubleshooting of farm tractors and field equipment. Principles of operation, equipment terminology and uses of tilling, cultivating, thinning, and planting equipment. Typical sequences in cropping practices. (P/NP grading only.) GE credit: QL, SE, VL.—S. (S.) Shafii

Fall 2011 and on Revised General Education (GE): AH=Arts and Humanities; SE=Science and Engineering; SS=Social Sciences;

ACGH=American Cultures; DD=Domestic Diversity; OL=Oral Skills; QL=Quantitative; SL=Scientific; VL=Visual; WC=World Cultures; WE=Writing Experience

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

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