

ANTHROPOLOGICAL SCIENCES

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The Department of Anthropological Sciences (ANSI) takes as its subject matter the nature and evolution of our species. The department offers students training in archaeology, cultural anthropology, demography, ecology, environmental anthropology, evolutionary theory, genetics, linguistic anthropology, medical anthropology, paleoanthropology, and primatology. Specialties and interests of individual faculty members include applied anthropology, curing systems in western and non-western societies, ethics, gender, genetic and cultural evolution, historical linguistics and linguistic anthropology, human environments and adaptations, human origins, hunters and gatherers, materialism, molecular anthropology, social and psychological anthropology, and tools and technology. The department is united by a common interest in the interrelations of biology, culture, and environment, and by a commitment to a four-field, scientific approach to anthropology.

The departmental curriculum includes courses at three levels. These courses are designed to: (1) expose undergraduates to the theories, methods, and substance of the anthropological sciences; (2) provide undergraduate majors and minors with a program of work leading to the Bachelor's degree; and (3) prepare candidates for advanced degrees in the discipline. Students are also encouraged to pursue ethnographic area studies building on existing faculty research in Asia, Latin America, and North America.

The department offers an undergraduate Bachelor of Arts degree. Undergraduates may elect to specialize in any one of four concentration tracks: (1) Culture, Social Relations, and Language; (2) Archaeology and Evolutionary Studies; (3) Population and Environment; and (4) Medical Anthropology and Genetics. Within each of these concentration tracks, students work with their faculty adviser to design a course of study that includes at least one course from each of five areas of a "Human Evolution Framework" (described in detail below): human nature and variation; human history and prehistory; human evolutionary processes and their interactions; cultural systems and cultural transmission; and laboratory and field methods. The framework is designed to ensure that students of all specializations receive a solid grounding in evolutionary thinking and analysis.

The department offers three graduate degrees: Master of Science, Master of Arts, and the Doctorate of Philosophy. The graduate curriculum encourages students to pursue individual interests and projects under the supervision of a faculty committee. The backbone of the graduate program is a department-wide Core Seminar devoted to ongoing discussion of issues and approaches in the anthropological sciences. An active Teaching Assistant Training Program, focused on students in the second year of the Ph.D. program, is an integral part of graduate training. The graduate program offers students a wide range of opportunities for training in theoretical and practical skills, including model building, ethnographic methods, archaeological and osteological techniques, data analysis, computer imaging, laboratory methods in genetics, and a vari-

ety of field training options. At both the undergraduate and graduate levels, the curriculum emphasizes the use of scientific methodology.

The department also offers a variety of hands-on research and training opportunities, including research assistantships, internships on- and off-campus, an active undergraduate honors program, and a series of field seminars with scholarships in the Amazon, the Andes, the American Southwest, Middle America, and Galapagos. Undergraduate and graduate students are encouraged to work with various member of the faculty at their field sites each summer. The department maintains teaching and research collections in the Iris & B. Gerald Cantor Center for Visual Arts at Stanford University, featuring materials from the Americas, the Pacific Rim, and Africa. Under the Pritzker Summer Scholars Program and an anonymous program of a similar nature, the department also awards a number of summer grants each year to undergraduates who are planning specialized study in Anthropological Sciences. The grants are of 3 kinds: (1) Training Grants, to help with costs of summer field schools and training programs (applications in Spring Quarter); (2) Mentored Research Grants, to enable students to gain research experience by working on faculty research projects (application in Spring Quarter); and (3) Independent Research Grants, to facilitate summer research projects leading to honors in Anthropological Sciences (application in Winter Quarter). In addition, students have the opportunity to participate in ongoing historical archaeology conducted on campus.

In summer 2002, the department will offer an undergraduate summer field school in Chavín de Huantar, Peru, and an associated field trip in midsummer to archaeological, ethnographic, and natural points of interest in highland and Amazonian Peru. Courses will be offered in several sub-fields of anthropological sciences. It is anticipated that the field school will continue every other year thereafter. For more information, consult the department's web site at <http://www.stanford.edu/dept/anthsci>, the publications of the Summer Session for 2002 as they appear, and the Stanford Alumni Association.

Note—The degree programs in the Department of Anthropological Sciences became available in the Autumn Quarter of 1999-2000. Current students who enrolled in 1998-99 or in any previous year have the option of finishing their degrees under the guidelines and requirements of the former Department of Anthropology (see, for example, *Stanford Bulletin* 1998-99), or they may opt for the new guidelines and requirements outlined here. The choice of these options should be made in writing, with the faculty adviser's approval, and filed with the Student Services Coordinator in the Anthropological Sciences office.

UNDERGRADUATE PROGRAMS

The Department of Anthropological Sciences offers a Bachelor of Arts degree together with an Honors program and a minor. The Anthropological Sciences programs include active undergraduate advising (described below).

BACHELOR OF ARTS

The B.A. degree program in Anthropological Sciences gives students an understanding of the breadth and depth of anthropological knowledge, as well as a series of intellectual and practical tools. Majors choose from one of four concentration tracks: Culture, Social Relations, and Language; Archaeology and Evolutionary Studies; Population and Environment; and Medical Anthropology and Genetics. The B.A. in Anthropological Sciences provides solid preparation for careers in anthropology, business, economic development, education, foreign service, health professions, international relations, law, or public policy.

With the addition of courses from the natural, physical, and mathematical sciences, the B.A. degree also provides preparation for further study in a broad variety of scientific areas, including earth sciences, ecology and evolutionary biology, environmental sciences, human genetics, medicine, and psychology. The department is developing a Bachelor of Science degree; and, currently provides guidance for undergraduate students who want to ensure a strong background in the natural and quantitative sciences as they earn an undergraduate Anthropological Sciences degree (see the Student Services Coordinator for details).

REQUIREMENTS

The department offers considerable flexibility in structuring an Anthropological Sciences major. In consultation with a faculty adviser, students develop a program that reflects their individual interests and needs. Majors in anthropological sciences meet with their advisers at least once every quarter. Each student's progress toward fulfilling the major requirements is recorded in a departmental file. It is the student's responsibility to see that this file is kept up to date.

All B.A. majors in the Department of Anthropological Sciences (ANSI) must fulfill the following requirements:

1. Course work equivalent to 65 units, with at least 45 units in Anthropological Sciences. The remaining 20 units may be taken in any of the related humanities, social science, and science departments and programs. Outside courses must form a coherent program of study and must be approved by the student's adviser. Up to 10 of the 65 units may be in Directed Individual Study.
2. Complete ANSI 2A and 2B (Human Biology 2A and 2B), or three other "Introductory Courses" as listed below.
3. Complete at least one course, not including the introductory courses above, in each of the four traditional subfields of anthropology: archaeological, biological anthropology, linguistic, and sociocultural.
4. A letter grade of 'B' or better in the theory course, Social Theory in the Anthropological Sciences (ANSI 190). This course fulfills the University's Writing in the Major Requirement (WIM) and should be taken no later than the junior year.
5. Declare a concentration track and complete *at least* 25 units in that track.
6. Complete at least one course from each of the five Human Evolution Framework (HEF) areas below. Note that some courses satisfy multiple areas of the HEF.
7. Complete at least one foreign language course at the second-year level with a letter grade of 'B' or better. This requirement may also be met by special examination, presentation of superior foreign language placement scores, or certification in writing from an appropriate department.
8. Complete at least one course in statistics (ANSI 192, Biological Sciences 141, Statistics 60, Psychology 60, or equivalent).

CONCENTRATION TRACKS

Concentration tracks are designed to encourage students to acquire in-depth knowledge and training. Undergraduates in the major program may elect to specialize in one of the four tracks described below. Alternatively, students may design their own specialization(s) with the guidance of a faculty adviser. Each student is required to complete 25 units within the chosen track. With consent of their faculty adviser, students may replace one course with a relevant course offered by another department. The 25 units count towards the total of 65 units required for the major.

Culture, Social Relations, and Language (Track 1)—Emphasizes the unity and diversity of contemporary social, cultural, and linguistic systems. Course offerings include culture and social theory, family, gender, kinship, linguistic anthropology, and political economy. Ethnographic or linguistic area studies are strongly encouraged for students who choose this track.

Archaeology and Evolutionary Studies (Track 2)—Features primate evolution, human origins and prehistory, and the development of human societies from early hunter-gatherers through complex civilizations. Students choose from courses in anthropological genetics, archaeology, evolutionary theory, historical linguistics, paleoanthropology, and primatology.

Population and Environment (Track 3)—Explores mutual relationships between human populations and their environments. Biocultural adaptations of human societies to diverse environments are examined, as are the causes and consequences of human impact upon local and global environments. Students choose from courses in behavioral ecology, demography, ecological and environmental anthropology, and selected area studies.

Medical Anthropology and Genetics (Track 4)—Examines human biological and cultural variation from a variety of perspectives. Within medical anthropology, the focus is on the social, cultural, and genetic correlates of physical and mental health, as well as disease. In anthropological genetics, students explore the extent, origins, and impact of variation among human genomes. Students choose from courses in epidemiology, genetics, and medical anthropology.

HUMAN EVOLUTION FRAMEWORK (HEF)

Crossing-cutting these concentration tracks is an evolutionary framework designed to familiarize students with the tools of analysis in anthropological sciences. The department divides this framework into five essential components (HEF I-V) as outlined below. Regardless of the concentration track, students are required to take at least one course in each of these component areas. Many courses offered by the department satisfy one or more of these requirements as shown by the HEF designations under "Courses" below.

Human Nature and Variation: Past and Present (HEF I)—

Biological nature and variation
Cultural nature and variation
Language capability and linguistic variation
Human universals, human differences

Human History and Prehistory: Inferring Events of the Past (HEF II)—

Population events: movements, splits, admixture, extinctions
Environmental events: changes in climate, resources, disease
Species events: adaptation, speciation, species extinction
Social and cultural events: changes in technology, settlement, language, and social organization

Evolutionary Processes and their Interactions (HEF III)—

Molecular evolution, population genetics, and speciation
Cultural and linguistic evolution, ethnogenesis, social evolution
Causes and consequences of environmental change
Interactions of genetic, cultural, and social evolution

Cultural Systems and Cultural Transmission (HEF IV)—

Systemic properties of culture and language
Transmission of culture in space and time
Cultural ontogeny and socialization
Relationship between individual, society, and culture

Lab and Field Methods: Tools for the Anthropological Sciences (HEF V)—

Laboratory and field methods
Ethnographic methods
Data analysis
Computational models and methods

Declaring a Major—To declare an Anthropological Sciences major, students should first discuss their ideas and plans with one or more department faculty, and with at least one peer adviser. When they have a good working plan on paper (forms are available from the Student Affairs Coordinator) for their course of study, they must then fill out the Declaration of Major form in the Registrar's Office, obtain the signature of their student and faculty advisers, and contact the department's Student Services Coordinator who will review the degree requirements and give general guidance. It may be helpful for students to meet with the chair of the department's Student Affairs Committee for initial academic advising and assistance in choosing an appropriate adviser in the department. Students must complete the declaration process (including the signature of their Anthropological Sciences adviser) no later than the last day of the quarter, two quarters prior to degree conferral (Autumn Quarter if Spring graduation is planned).

Undergraduates are actively encouraged to take advantage of funding opportunities to carry out independent research. Funding for undergraduate research is available from Undergraduate Research Opportunities (URO) grants, affiliated area studies programs (for example, Latin American Studies), and the department's own Pritzker Summer Scholars Program and anonymous summer program described above. Information and applications for the latter are available from the Academic and Student Services Coordinator in the department office.

Advising Program—The department puts high priority on undergraduate advising. Each student works with one or more peer advisers, as well as a faculty adviser, to design and carry out their Anthropological Sciences major or minor. The advising program is built on a faculty mentoring approach, and to help students develop a good working relationship with at least one faculty member. Students are expected to meet regularly, and for at least two hours per quarter, with their faculty adviser to discuss their progress and to review course selection, research opportunities, graduate or professional schools, and career planning. Peer advisers are often the first step in seeking advice; they keep regular hours in the peer advising office in the department.

MINORS

Declaring a Minor—The department offers flexibility in structuring an Anthropological Sciences minor. In consultation with both peer and faculty advisers, students develop a minor that reflects their individual interests and needs. Prospective Anthropological Sciences minors should request an Anthropological Sciences Minor Planning Form and Checklist from the department's Academic and Student Services Coordinator. All minors in the Department of Anthropological Sciences must fulfill the following four requirements:

1. Selection of an Anthropological Sciences faculty adviser and approval of the minor courses by both peer and faculty advisers.
2. Completion of 30 units of course work in Anthropological Sciences with a grade point average (GPA) of 'B-' or better. With the adviser's approval, up to 10 of the required 30 units may be taken in other social science departments at Stanford. No more than 10 of the 30 units may be taken for an instructor-elected Satisfactory/No Credit grade. Student-elected Satisfactory/No Credit units are not allowed.
3. Completion of ANSI 2A and 2B (Human Biology 2A and 2B) or three courses from introductory offerings.
4. Completion of at least one course at the 100 level or higher. Please note: Human Biology majors who minor in ANSI cannot double count Human Biology 2A and 2B, and must then take 30 units of ANSI coursework other than 2A and 2B.

HONORS

The Honors Program in Anthropological Sciences provides students the opportunity to conduct original research under the guidance of a faculty adviser. Candidates of sophomore and junior standing should submit an application to the student program coordinator no later than the end of the fourth week of the Spring Quarter. It must include a brief statement of a proposed honors project, a complete course of study within Anthropological Sciences, a transcript, and written approval of a faculty sponsor. The Student Affairs Committee reviews applications and notifies accepted students.

Candidates whose application to the honors program has been approved by the Student Affairs Committee must complete all of the requirements for their major and submit an acceptable honors thesis no later than three weeks prior to the end of the quarter in which graduation is anticipated. The thesis is read by the candidate's adviser and a second reader chosen by the student from the faculty of the department. An outside reader may be added as a third reader at the student's request. To be considered acceptable, the paper must receive an average grade of 'B+' or better.

Students interested in honors are especially encouraged to apply for summer research funding through the department, through the office of Undergraduate Research Opportunities (URO), and through various of the area studies centers on campus (for example, Latin American Studies, African and Afro-American Studies, and so on). In most cases, honors students apply for such funding no later than Spring Quarter of their junior year.

COTERMINAL DEGREES

The Department of Anthropological Sciences accepts applications from Stanford undergraduate students to work toward coterminal M.A. or M.S. degrees. Undergraduate students with a grade point average (GPA) of 3.0 or higher may apply between their seventh and eleventh quarters, by submitting with their application a statement of purpose, at

least one writing sample (preferably a research paper), and three letters of reference. The GRE is not required. Requirements for coterminal degrees are described under "Graduate Programs" below.

GRADUATE PROGRAMS

University requirements for the degrees of Master of Arts, Master of Science, and Doctor of Philosophy are described in the "Graduate Degrees" section of this bulletin.

The department offers three graduate degrees: Master of Arts, Master of Science, and Doctorate of Philosophy. The graduate curriculum encourages students to pursue individual interests and projects under the supervision of a faculty committee. Specific details of the graduate programs in Anthropological Sciences are outlined in the departmental *Graduate Handbooks* (available in the department office).

MASTER OF ARTS

The Department of Anthropological Sciences offers the M.A. degree to four groups of students: Stanford undergraduates who enroll in the coterminal program; Stanford graduate students taking advanced degrees in other departments or schools at Stanford; Ph.D. students in Anthropological Sciences who fulfill the M.A. requirements in the course of their work toward the Ph.D. degree, and students who apply from outside of Stanford for entry into the terminal M.A. program.

REQUIREMENTS

1. Graduate enrollment at Stanford for at least three quarters of full tuition.
2. At least 45 units of course work for a letter grade (in addition to any pertinent undergraduate courses), with at least 30 units in Anthropological Sciences. The remaining 15 units may be taken from related humanities, social science, and science departments and programs. Outside courses must be approved by the student's adviser and must form a coherent program of study. No more than 10 of the 45 units may be in Directed Individual Study. Students must maintain a grade point average (GPA) of 'B' or better.
3. At least four graduate-level courses, other than "Special Courses," in Anthropological Sciences, all for a letter grade. The remaining units may be made up of courses selected in consultation with the student's faculty adviser.
4. Enroll in the departmental Core Seminar (ANSI 290) each quarter while in residence. First year students are expected to enroll in the Core Seminar for a minimum of 1 unit per term.
5. Complete Data Analysis in the Anthropological Sciences (ANSI 292) for a letter grade. Units earned in this course count toward the 45-unit M.A. requirement.
6. Students must submit a professional-quality field or library research paper to be read and approved by at least two department faculty members. For students in the Ph.D. program, the required first-year paper qualifies for this requirement.

MASTER OF SCIENCE

The Department of Anthropological Sciences offers the M.S. degree to four groups of students: Stanford undergraduate science majors who enroll in the coterminal program; Stanford graduate students taking advanced degrees in other departments or schools at Stanford; Ph.D. students in Anthropological Sciences who fulfill the M.S. requirements in the course of their work toward the Ph.D. degree, and students who apply from outside of Stanford for entry into the terminal M.S. program. Students applying to the M.S. program must have a B.S. degree.

REQUIREMENTS

1. Graduate enrollment at Stanford for at least three quarters of full tuition.
2. At least 45 units of course work for a letter grade (in addition to any pertinent undergraduate courses), with at least 30 units in Anthropological Sciences. The remaining 15 units must be taken from earth or natural science, statistics, computer science, chemistry, engineering,

math, or physics. Outside courses must be approved by the student's adviser and must form a coherent program of study. No more than 10 of the 45 units may be in Directed Individual Study. Students must maintain a GPA in master's work of 'B' or better.

3. Students must take ANSI 291, Research Methods in Anthropology, and ANSI 292, Data Analysis in the Anthropological Sciences, both for a letter grade. Units earned in these courses count toward the 45-unit M.S. requirement.
4. Students must take at least four graduate-level courses, other than "Special Courses," in Anthropological Sciences, all for a letter grade. The remaining units may be made up of courses selected in consultation with the student's faculty adviser.
5. Enroll in the departmental Core Seminar (ANSI 290) each quarter while in residence. First year students are expected to enroll in the Core Seminar for a minimum of 1 unit per term.
6. Students must submit a professional-quality field or library research paper to be read and approved by at least two department faculty members. For students in the Ph.D. program, the required first-year paper qualifies for this requirement.

DOCTOR OF PHILOSOPHY

Prospective graduate students should request application materials from Graduate Admissions in the Registrar's office. The deadline for applications is January 1. The Graduate Record Exam (GRE) is required. Successful applicants for the Ph.D. program may enter only in Autumn Quarter.

REQUIREMENTS

Requirements 1-9 must be completed within the first two years:

1. Within the first two years, complete 67 units of course work for a letter grade of 'B+' or better. Of these 67 units, at least 40 units must come from graduate-level courses within the department. The remaining 27 units may include advanced undergraduate courses as well as courses from related humanities, social science, and science departments and programs. Outside courses must form a coherent program of study and be approved by the student's adviser.
2. Enroll in the departmental Core Seminar (ANSI 290) each quarter while in residence (except for students in the second year of the program, who are working as TAs or RAs and thus have a 9-unit course limit). Units for ANSI 290 count toward the unit requirements for the Ph.D. Students in the first year of the Ph.D. program are expected to take ANSI 290 for a letter grade.
3. Complete ANSI 201A or 201B, History of Anthropological Theory, for a letter grade.
4. Complete ANSI 291, Research Methods in Anthropology, and 292, Data Analysis in the Anthropological Sciences, both for a letter grade; on petition to the Student Affairs Committee, one or both of these requirements can be fulfilled by equivalent undergraduate or master's course work.
5. Submit an acceptable, substantial, professional-quality, research paper in the Spring Quarter of the first year. To be considered acceptable, the paper must receive an average grade of 'B+' or better by three readers designated by the instructor of the spring paper course.
6. Serve as a teaching assistant for three undergraduate courses. In preparation for this responsibility, students are expected to take part in the departmental Teaching Assistant Training Program organized each year. (Students can petition to substitute an internship or research assistantship for one quarter as a TA.)
7. For those whose native language is English, pass an examination in a language other than English that will either serve as a field or research language. The language exam is normally given in the third quarter of the second year. For those whose native language is not English, satisfactory command of English must be demonstrated by successful completion of the courses and other requirements of the first two years of graduate study.
8. Recruit the special examination committee and schedule examinations by the end of the second year.

9. Petition for and advance to candidacy by the end of the second year.

After successful completion of the first two years of the program, and after an accepted petition for doctoral candidacy, advanced graduate students are required to complete the following:

1. Pass a special examination (written and oral). This examination fulfills the requirement of the University orals examination and may be scheduled at any time during the third year that is directly following admission to candidacy.
2. Submit the Doctoral Dissertation Reading Committee form before approval of TGR status or before scheduling a University oral examination that is in defense of a dissertation. The reading committee is to be recruited no later than the end of the third year.
3. Take at least one quarter of Proposal Writing (ANSI 294) and prepare a dissertation proposal to be approved by the dissertation reading committee before the end of the Spring Quarter of the third year. If necessary, obtain Human Subjects clearance.
4. Take at least one quarter of Dissertation Writing (ANSI 298) and complete an approved dissertation based on independent research.
5. Give a public presentation of the dissertation in the department.

Financial Support—The department endeavors to provide needed financial support (through fellowships, teaching and research assistantships, and tuition grants) to all students admitted to the Ph.D. program who maintain satisfactory progress. First-year students in the Ph.D. program who have not entered with outside funding are required to apply for such funding during their first quarter. See *Guide to the Ph.D. Program in Anthropological Sciences* and the department web site <http://www.stanford.edu/dept/anthsci> for details.

Ph.D. MINOR

The requirements for a Ph.D. minor in Anthropological Sciences are the following:

1. Enlist a faculty member of Department of Anthropological Sciences who will consent to serve as the adviser for the minor.
2. Submit an application for admission to the Ph.D. minor to the Department of Anthropological Sciences. The completed application must include the written consent of the adviser. The application and any associated instructions should be obtained from the student program coordinator of the Department of Anthropological Sciences.
3. Complete 27 units of courses in the Department of Anthropological Sciences at Stanford, for letter grades (in courses for which letter grades are offered), with a grade average of B or better. The University Ph.D. minor requirements state that 20 of these units must be in courses numbered 200 or above, and that course work for the minor cannot also be used to meet the requirements for a master's degree. Of the additional 7 units, 2 are to be taken in conjunction with the Department's Core Seminar (ANSI 290, see below), and the additional 5 units are not restricted as to course number.
4. In conjunction with the adviser, determine a coherent course of study related to the student's interests. Among the 27 units of required Anthropological Science courses, the student must take either ANSI 190, 201A, or 201B, and must enroll in the department's Core Seminar (ANSI 290), for at least two quarters, at a minimum of 1 unit per quarter. No more than 10 of the 27 units can be Individual Study or Independent Research. No more than 15 of the 27 units can be counted from courses taken before submission of the application for admission to the Ph.D. minor, and these 15 or fewer only with the approval of the adviser.
5. It is expected that the student's adviser will participate as a representative of the Department at the student's University Ph.D. oral examination. The student is responsible for this arrangement with the major department.
6. For graduation, complete all necessary paperwork with the student program coordinator of the Department of Anthropological Sciences.

COURSES

(WIM) indicates that the course meets the Writing in the Major requirements.

Undergraduate Anthropological Sciences courses 130 and above are organized by concentration tracks, 1 to 4 (see above). (HEF) designations indicate the given course satisfies requirement I, II, III, IV, or V of the Human Evolution Framework, also described above. A course may satisfy more than one HEF requirement.

NUMBERING SYSTEM

Anthropological Sciences courses are numbered according to the following scheme:

- 01-99 Introductory Courses
 - 01-19 General Introductory Courses
 - 20-29 SIS Courses (freshmen preference)
 - 30-39 SIS Seminars & Dialogues (sophomore preference)
- 100-129 Culture, Social Relations, and Language
 - 100-109 Culture and Social Relations
 - 110-119 Language
 - 120-124 Area Studies: The Americas
 - 125-129 Area Studies: Asia
- 130-149 Archaeology and Evolutionary Studies
 - 130-139 Evolutionary Studies
 - 140-149 Archaeology
- 150-169 Population and Environment
 - 150-159 Population/Demography
 - 160-169 Environment/Ecology
- 170-189 Medical Anthropology and Genetics
 - 170-179 Medical Anthropology
 - 180-189 Anthropological Genetics
- 190-199 Special Courses
- 200-299 Graduate-level Courses

INTRODUCTORY

Intended to serve as an introduction to the methods, theories, and substance of Anthropological Sciences, introductory courses are for both majors and non-majors. ANSI 2A and 2B (Human Biology 2A and 2B) provide a good introduction to the major; alternatively, a student may take three other introductory courses numbered from 3 to 40.

2A. Genetics, Evolution, and Ecology—(Enroll in Human Biology 2A.)
5 units, Aut (Durham, Mountain)

2B. Culture, Evolution, and Society—(Enroll in Human Biology 2B.)
5 units, Aut (Klein)

3. Introduction to Prehistoric Archaeology—Aims, methods, and data in the study of human society's development from early hunters through late prehistoric civilizations. Archaeological sites and remains characteristic of the stages of cultural development are examined for selected geographic areas, emphasizing methods of data collection and analysis appropriate to each. GER:3b,4a
3-5 units, Aut (Rick)

4. Language and Culture—Language variants (dialects, registers, jargons, writing, and non-verbal systems) and their use. Language classification and human prehistory. Linguistic determinism, relativism, encodability, and the cultural origins of vocabulary and grammar. The structure of discourse, including conversation, narrative, and poetics. Language, gender, and power. Style, strategy, and ideology in language use. Writing and literacy. Emphasis is on the comparative reading of monographic studies of language and culture in particular societies.
4-5 units (Fox) not given 2001-02

5. The Biology and Evolution of Language—(Same as Human Biology 5.) Language as an evolutionary adaptation of humans. Comparison of communicative behavior in humans and animals, and the inference of evolutionary stages. Structure, linguistic functions, and the evolution of the vocal tract, ear, and brain, with associated disorders (stuttering, dyslexia, autism, schizophrenia) and therapies. Controversies over language "centers" in the brain and the innateness of language acquisition. Vision, color terminology, and biological explanation in linguistic theory. GER:2a
4-5 units, Aut (Fox)

6. Human Origins—(Same as Human Biology 6.) The human fossil record from the first non-human primates in the late Cretaceous or early Paleocene, 80-65 million years ago, to the anatomically modern people in the late Pleistocene, between 100,000 to 50,000 B.C. Emphasis is on broad evolutionary trends and on the natural selective forces behind them. GER:2a
5 units, Spr (Klein)

7. Marriage and Kinship—Surveys the variation in human kinship systems, asking whether or not they can be understood as evolutionary products, and considers the contribution to be made by a Marxist perspective. Eurasia and Africa are contrasted with Europe and E. Asia. GER:3b,4c
5 units, Win (Wolf)

8. Introduction to Anthropological Genetics—Anthropological genetics and the extent, origins, and impact of variation among human genomes. A virtual tour through the human genome. Processes that lead to modification of the genome. Genomes in human populations. The effects of culture and disease on genetic variation. Assessing variation among human genomes; reconstructing human history from current and ancient variation. The extent of correspondence between genomic variation and other measures of human diversity. The impact of knowledge of human genetic diversity. The future of human genetic diversity. GER:2a
5 units, Win (Mountain)

9. Human Environments and Adaptations—Analyzes the relationship between diverse human populations and their environments. Theories for how environments influence human behavior and culture, and for how human populations shape their environments. Emphasis is on present-day environmental problems and the human dimensions. How the social and cultural processes can cause environmental problems (e.g. deforestation, soil erosion, habitat degradation), and help to solve them.
3-5 units (Staff) not given 2001-02

10. Plagues and Peoples—Introduction to the principles of medical anthropology through an examination of major human infectious diseases. Focus is on the cultural constructions of health, cultural contexts of disease, and the social implications of medical intervention.
5 units (Staff) not given 2001-02

STANFORD INTRODUCTORY SEMINARS (SIS)

The SIS program within the Department of Anthropological Sciences provides opportunities for first- (N) and second-year (Q) students to work closely with faculty. Units for these courses count towards the Anthropological Sciences major requirements.

20N. Stanford Introductory Seminar: Modern Human Origins—Preference to freshmen. Analysis of the data and theories bearing on the origins of anatomically modern humans between 100,000 and 50,000 years ago. Emphasis is on the two major contending theories: that modern humans originated more or less simultaneously from non-modern humans in many regions of Africa and Eurasia; or that modern humans originated exclusively in Africa and spread from there. How paleoanthropologists test these theories against the empirical data of genetics and the fossil record.
3 units (Klein) not given 2001-02

23N. Stanford Introductory Seminar: Maya Mythology Multimedia Project—Preference to freshmen. Lectures, discussions, and hands-on work in the development of a worldwide web project on the mythology of the ancient and modern Maya, emphasizing the relationships between the Quiche mythological text, *Popol Vuh*, and ancient Maya art and archaeology, hieroglyphic texts, colonial documents, modern ethnography, modern Maya narrative language, and mythological theory.

3 units (Fox) not given 2001-02

31Q. Stanford Introductory Seminar: Earthquakes and Archaeology in the Eastern Mediterranean—Lectures and Field Trip—(Enroll in Geophysics 50Q.)

5 units, Win (Nur)

CULTURE, SOCIAL RELATIONS, AND LANGUAGE

In addition to the courses listed directly below, ANSI courses 121, 165, and 170, listed in other concentration tracks, also count towards the Track 1 concentration.

CULTURE AND SOCIAL RELATIONS

102. Women, Fertility and Work—Is gender culturally or biologically determined or both? The arguments for sociobiological and cultural determinist explanations of the differences between women and men are compared, emphasizing their intersection in work. Case studies: gatherer/hunter, horticultural (Melanesian), southern Chinese, and Anglo-American societies. (HEF I, IV) GER:4c

5 units (Staff) not given 2001-02

103. Theory and Method in Cultural Evolution—(Graduate students register for 203.) The concept of culture as used in anthropology, and the ways in which culture is socially conveyed and manipulated. The capacity for “descent with modification” in cultural systems. Critical examination of transmission forces, direct and indirect bias, epigenetic theory, cultural selection, gene-culture coevolution, and ethnogenesis. (HEF III, IV) GER:3b

5 units (Durham) not given 2001-02

105. Race, Gender, and Biology—Critically evaluates the biological arguments for the explanation of race and gender inequality in human societies. The history of the issues, examining the arguments of proponents (to the effect that race and sex role differences are rooted in our biology) and the arguments of their critics. Recent arguments, including those of sociobiology and its critics, because of their influence on contemporary social thought. (HEF I)

5 units (Durham) not given 2001-02

106. Human Origins in Science and Myth—A comparison of peoples’ accounts of their own and others’ origins, with inferences made from comparative biological, linguistic, and cultural data. Functional, psychological, historical, folkloristic, and literary interpretations of myths and other narratives of origin. The scientific account as narrative. The intellectual accomplishments of supposedly primitive and advanced cultures, asking whether their cognitive models of time, space, and the cosmos justify such differentiation. (HEF IV)

5 units (Fox) not given 2001-02

LANGUAGE

110. Introduction to Language Change—(Enroll in Linguistics 160.) (HEF II, III) GER:3b

4-5 units, Win (Baldi)

111. Language and Prehistory—(Graduate students enroll in 211.) Language classification and its implications for human prehistory. The role of linguistic data in analyzing prehistoric populations, cultures, contact, and migrations. Comparison of linguistic and biological classifications. Semantic reconstruction, proto-vocabularies, and culture. Archaeological decipherment, the origins and evolution of writing, and the relationships between writing, culture, and civilization. (HEF II, III)

5 units, Spr (Fox)

112. Human Diversity: A Linguistic Perspective—(Same as Human Biology 118.) The diversity and distribution of human language and its implications for the origin and evolution of the human species. The origin of existing languages and the people who speak them. Where did the languages that we currently see in the world come from and how can this diversity be used to study human prehistory? Evidence from related fields (archaeology and human genetics). Topics: the origin of the Indo-European languages, the peopling of the Americas, and the evidence that all human languages share a common origin.

3 units, Spr (Ruhlen)

115. Maya Hieroglyphic Writing—(Graduate students register for 215.) Lecture/workshop on the decipherment of the hieroglyphic writing of the Classic Maya. Principles of archaeological decipherment. Analysis of Maya calendrical, astronomical, political, and religious/mythological texts on stone, wood, bone, shell, ceramic vessels, and screenfold books. Ancient Maya scribal practice and literacy. The origins of Maya writing and related Mesoamerican writing systems. The impact of epigraphy on the archaeology and linguistics of the Maya. (HEF II, IV)

5 units, Spr (Fox)

116. Research on Maya Hieroglyphic Writing—(Graduate students register for 216.) Workshop on current issues in the decipherment and analysis of Maya hieroglyphic writing and literacy. Prerequisite: ANSI 115 or consent of instructor.

2 units, Aut (Fox)

119. Linguistic Field Methods—(Graduate students register for 219.) Practical training in the collection and analysis of linguistic data from native speakers. Research goals, ethics, working in the community, technical equipment, and analytical strategies. Emphasis is on the use of computers in the collection, analysis, and preparation of materials useful to the subject community. Prerequisite: introductory linguistics. (HEF II, V)

3-5 units (Fox) not given 2001-02

AREA STUDIES: THE AMERICAS

120. Native American Cultures of North America—Introduction to the diverse cultures of indigenous peoples in N. America before the European conquest. Lectures, readings, and films on the precontact situation, postcontact changes (including government policies), influences of Indian culture on American society and culture, and the contemporary situation of native peoples. An antidote to TV and western movie stereotypes. (HEF IV) GER:4b

5 units (Staff) not given 2001-02

121. Indigenous Languages of the Americas—Lecture course surveying the classification, history, structural variation, and sociocultural aspects of the indigenous languages of North and South America, with attention to linguistic evidence for the settlement of the Americas, the effects of European contact, indigenous writing systems and literacy, and the relationship between these languages and the development of anthropological and linguistic theory. (HEF I, IV)

4-5 units, Spr (Fox)

122. The Ancient Maya—Introduction to the archaeology and culture of the ancient Maya of Mesoamerica. The natural world of the Maya. The Mayan languages and Maya writing. Origins of Maya culture. Archaeological and historical dating and classification of periods and variation. The life cycle and daily life. Food, agriculture, technology, and medicine. Power, social structure, gender, and the origins of the state. Mythology, time, astronomy, art, and religion. Consideration of Maya sites, their relations with each other and with other Mesoamerican states and peoples. The classic Maya collapse, the Spanish conquest, and the Maya today. Changes of archaeological focus and issues as exemplified in the study of the Maya. Lectures, discussions, and optional spring break field trip to Maya country (at extra expense, limited capacity). No prerequisites. (HEF II, IV)

2-5 units, Win (Fox)

123. Environmental Issues in the Americas—Focus is on the local impacts of major environmental problems in the Americas. Case studies: deforestation of tropical rainforest in the Amazon; co-management of marine fauna in the Arctic; forestry management in Mexico and N. America; and pollution, toxic waste, and environmental justice in the U.S. (HEF III)

5 units (Staff) not given 2001-02

124. Perspectives on Sustainable Development in Latin America—(Graduate students register for 224A; same as Latin American Studies 195.) Cross-disciplinary examination of perspectives for “sustainable development” in rural areas of Latin America. Interactions between poverty, development, environmental degradation, and approaches to growth and stability in agroecology, agroforestry, small farm development, and conservation biology. Limited enrollment. (HEF III)

5 units, Win (Nicholls)

AREA STUDIES: ASIA (see also ANSI 165)

125A. 20th-Century Chinese Societies—Nationalist China, the Peoples’ Republic of China, Taiwan, and the loosely knit networks of the overseas Chinese are examined through the anthropological methods used in exploring complex societies. Emphasis is on political-economic, demographic, social organizational, gender/kinship, ideological, and transformative aspects of Chinese populations after the 1949 revolution. (HEF IV) GER:4a

5 units, Spr (Brown)

125B. Late Imperial China—Chinese civilization in the late imperial era (960-1911) in its spatial, temporal, structural, institutional, and ideational complexity. Thematic foci: frontiers and empire building, the making of Han Chinese and “barbarians,” migrations, colonization, urban and rural living, imperial state and local government, commerce and petty capitalism, kinship and family, gender and marriage, food, money, population, and popular religion. (HEF IV) GER:4a

5 units (Brown) not given 2001-02

125C. Traditional Chinese Society

3-5 units (Brown) not given 2001-02

126. Formosa: An Introduction to Taiwanese History, Culture, and Society—Introduce the history, cultures, and society of Taiwan behind and beyond the headlines, from the Dutch period through the Japanese colonial era until the present day; and 2) present social scientific, especially anthropological, scholarship done on Taiwan in the past few decades. Topics include migration, trade, colonization, Han Chinese and the Taiwanese aborigines, social movements, nationalism, political culture, family and kinship.

3-5 units (Staff) not given 2001-02

ARCHAEOLOGY AND EVOLUTIONARY STUDIES

In addition to the courses listed directly below, ANSI courses 110, 111, 112, 115, 116, 122, 180, and 181, listed in other concentration tracks, also count towards the Track 2 concentration.

EVOLUTIONARY STUDIES

130. Modern Human Origins—Analysis of the data and theories bearing on the origins of anatomically modern humans between 100,000 and 50,000 years ago. Emphasis is on the two major competing theories: that modern humans originated more or less simultaneously from non-modern humans in many regions of Africa and Eurasia; or that modern humans originated exclusively in Africa and spread from there, largely replacing non-modern humans elsewhere. (HEF I, II)

5 units (Klein) not given 2001-02

131A. Primate Evolution—(Same as Human Biology 162.) The fossil, molecular, and anatomical data on primate origins, from their mammalian ancestors to the origin of the hominids. The adaptive radiations of lemurs, lorises, tarsiers, new world monkeys, old world monkeys, lesser apes, and great apes. The functional anatomy of primates in relation to habitat and social ecology. (HEF II)

5 units, Win (Jablonski)

131B. Primate Societies—Introduction to primatology. Survey of the living primates, primate evolution, distribution, and taxonomy. Life history patterns, dominance hierarchies, reproductive strategies, and social structures. Focus is on cultural behaviors, including tool manufacture and use, language and communication, hunting and warfare, and political behavior. Analysis of current conservation issues. (HEF II)

5 units, Spr (Maggioncalda)

131C. Evolution of Primate Intelligence—(Same as Human Biology 166.) Upper level seminar on evolution of cognitive abilities in primates. Analysis of selective forces increasing intelligence: from ecological factors impacting early prosimian primates to social and cultural factors affecting hominid evolution. Critical evaluation of hypotheses about relationships between brain morphology and intelligence in humans, nonhuman primates, and hominid ancestors. Prerequisite: 131B or consent of instructor. (HEF V)

5 units (Maggioncalda) not given 2001-02

12. Hormones and Behavior—(Same as Human Biology 112.) Seminar on primate socioendocrinology. The endocrine correlates of behavior and the behavioral correlates of changes in hormone levels. In-depth analysis of pheromones and other socioendocrine signals and their role in suppression of growth, development and/or reproduction. Investigation of the relationship between social rank and endocrine physiology. The evolutionary significance of interactions between social behavior and hormones. Prerequisites: 2A, 2B, 102, or Biological Sciences 150. (HEF I)

5 units (Maggioncalda) not given 2001-02

133A. Beginning Osteology—(Graduate students register for 233A; same as Human Biology 180.) Introduction to the study of human skeletal remains. The course will focus on basic bone nomenclature, biology and anatomy, growth and development, and methods for assessing age and sex. Hands-on study and identification of human skeletal material will be emphasized. (HEF I, V) GER:2A

5 units, Aut (Maggioncalda, Weaver)

133B. Advanced Osteology—(Graduate students register for 233B.) Analysis of human skeletal remains from archaeological and paleontological contexts. This course will cover advanced topics in human osteology including: bone microstructure, growth, and mechanical adaptation; assessment of age, sex, weight, stature, and biological affinity; pathology and trauma; standard and geometric morphometric analysis. (HEF II, V)

5 units, Spr (Weaver)

134. Human Behavioral Biology—(Enroll in Biological Sciences 150/250.)

6 units, Spr (Sapolsky) alternate years, not given 2002-03

135. Human Nature in Evolutionary Perspective—Examines selected examples of human behavior (incest avoidance, aggression, attachment, color symbolism, interpretation of facial expressions, etc.), considering the extent to which they are products of our evolutionary heritage. Prerequisites: 2A, 2B, upper-division standing. (HEF I)

5 units (Wolf) not given 2001-02

137. Darwin, Evolution, and Galapagos—Seminar on Darwinian theory as applied to the evolution of flora and fauna on the Galapagos Islands. Darwin's observations in Galapagos, and their role in the formulation of his theory of evolution; recent research in Galapagos and its implications for our understanding of evolution today. The impact of human activity in Galapagos and emerging conservation issues. Lectures, discussions, and optional field trip to Galapagos (at extra expense, limited capacity). Enrollment limited to 20. (HEF III)
5 units (Durham) not given 2001-02

139A. An Undergraduate Course in Anatomy—(Enroll in Surgery 101.)
7 units, Win (Dolph, Glasgow)

ARCHAEOLOGY

140. Stone Tools in Prehistory—(Graduate students register for 240.) Archaeologists rely on an understanding of stone tools to trace much of what we know about prehistoric societies. How to make, illustrate, and analyze stone tools, revealing the method and theory intrinsic to these artifacts. Prerequisites: 3 or 6 or other instructor-approved, previous archaeology course work. (HEF II)

5 units (Rick) not given in 2001-02

141. Hunter-Gatherers in Archaeological Perspective—(Graduate students register for 241.) The organization and subsistence of band-level hunter-gatherers as approached through archaeological investigations. Modern hunter-gatherers provide background for prehistoric groups. The archaeological record of Africa, Europe, and the New World provides examples of how archaeological data reconstructs the cultural systems of extinct hunter-gatherers. (HEF II)

5 units (Rick) not given 2001-02

142. Incas and their Ancestors: Peruvian Archaeology—The development of high civilizations in Andean S. America from hunter-gatherer origins to the powerful, expansive Inca empire. The contrasting ecologies of coast, sierra, and jungle areas of early Peruvian societies from 12,000 to 2,000 B.C. The domestication of indigenous plants, which provided the economic foundation for monumental cities and beautiful ceramics and textiles. Cultural evolution, and why and how major transformations occurred. (HEF II, III) GER:4a

5 units, Win (Rick)

144. Archaeology of North America—The development of the archaeological record in North America: why and how people of North America developed as they did, when they did. Issues and processes that dominate or shape developments during particular periods, considering both the effects of history and interactions with physical and social environment. Topics include the peopling of the New World, explaining subsequent diversity in substance and settlement adaptations, the development of social complexity, and the impact of European contact. (HEF II, III)

5 units, Win (Truncer)

145. Evolutionary Theory in Archaeology—The ability of scientific evolutionary theory to explain human behavior as represented in the archaeological record. Past attempts to apply evolutionary theory in archaeology are reviewed and compared to more recent Darwinian efforts, as are current evolutionary approaches to human behavior in related fields. The ontological underpinnings and methodological requirements of a Darwinian archaeology and its potential contribution to archaeology as an explanatory system. (HEF I)

5 units, Spr (Truncer)

146. Archaeological Ceramics—Introduces treatment of archaeological ceramics, with an emphasis on practical applications, guided by the question of what these objects can tell us about the lives of ancient peoples and about the larger scale systems within which they lived. After a brief consideration of ceramic technology, discussion of methodological (chronology, seriation), economic (production, exchange, consumption), and social (style, signaling) aspects of ceramic analysis. (HEF V)

4 units, Aut (Bandy)

147. The Archaeology of Contemporary Issues—Archaeological theory, method, and data are used to arrive at a better understanding of an issue of contemporary public concern. Issues include resource and energy management strategies such as the electricity situation in California, biodegradation and solid waste management, "they don't make 'em like they used to," the relationship between humans and dogs, ethnic wars in the Balkans and elsewhere, and Bill Gates' strategies in the rise of Microsoft.

5 units, Win (Rathje)

148. Introduction to Skills in Archaeology—The skills used in archaeology to interpret the material traces of the past. The methods range from those used in the natural sciences to those used in the humanities. The integration of methods solve, e.g.: how old is this site? who were these people? what did they eat? who was dominant? what beliefs did they have? Training in archaeological skills, e.g., research design, dating, methods, faunal analysis, botanical analysis, ceramic analysis, geology, geophysics, earth science, soil chemistry, osteology, genetics, statistics, geography, cartography, and geographic information systems. (HEF V)

5 units, Spr (Hunt)

149. Archaeological Field Methods—Hands-on archaeological field research in the local area. The practical working methodology of the archaeologist through excavation and site survey, with training in registration, preservation, and analysis of archaeological data. (HEF V)

5 units, Spr (Rick)

POPULATION AND ENVIRONMENT

In addition to the courses listed directly below, ANSI courses 123, 124, 133B, and 141, listed in other concentration tracks, also count towards the Track 3 concentration.

POPULATION/DEMOGRAPHY

150. Population and Society—The relationship between social structure (marriage, kinship, and political organization) and population dynamics (fertility, mortality, and migration) in a range of societies. The differences between hunter/gatherers and agriculturalists, and between peoples of Europe and Asia. (HEF II, IV)

5 units (Wolf) not given 2001-02

151. Demography in Anthropology—The study of vital rates in human populations and their social and cultural contexts. Analysis of population dynamics in small, non-state societies as contrasted with population dynamics in large industrial states. Emphasis is on the cause of high rates of fertility, mortality, and migration. Introduces demographic methods. (HEF II, V)

5 units (Staff) not given 2001-02

153. The Population Question: From Malthus to Rio—The relationship between the vital rates of human populations (fertility, mortality, and migration) and the social and ecological problems of poverty, hunger, and environmental degradation. To what extent is population growth (and attendant vital rates) the cause of these social ills? To what extent is population growth their consequence? What are the main interactions among social, cultural, ecological, and demographic variables? (HEF II)

3-5 units (Durham) not given 2001-02

154. The Limits to Growth—The past, present, and future of human population growth. Critically evaluates estimates of global and regional carrying capacity and their assumptions, including estimates based upon food, water, energy, and security considerations. Issues raised by inequity, over-consumption, and the role of culture in the history of human populations. The major choices humanity faces in the decades ahead. (HEF II)

3-5 units (Staff) not given 2001-02

156. Colloquium on Population Studies—(Enroll in Biological Sciences 146.)

1 unit, Win (Feldman)

158. Theories in Demography—The main theories that shape demography as an intellectual discipline today. Demographic transition: from theory to policy. Influential fertility transition theories. Perspectives from anthropology, culture, and political economy. Post-transitional fertility; Malthus and Boserup; homeostasis and the interplay of individual vs. group interests; cultural evolution and genetics; evolutionary theory; carrying capacity and optimum population size; population and environment; Epidemiological transition and health transition; famine; migration; urbanization and development. Prerequisite: 2A or 2B

4 units (Staff) not given 2001-02

ENVIRONMENT/ECOLOGY

160. Development and Environment—The cultural and environmental impacts of development projects, focusing on the local impact of government initiatives to encourage economic development. The role of NGOs in negotiating development priorities and environmental protections. (HEF II)

5 units (Staff) not given 2001-02

161A. Conservation and Development Issues in the Amazon—The prospects for achieving the dual goals of biodiversity conservation and community development in Amazonia. Case studies of recent efforts at biodiversity conservation, including national parks, biosphere reserves, pharmaceutical prospecting, ecotourism, extractive reserves, and agroforestry projects. The costs and benefits of conservation. To whom do these costs and benefits accrue? Critically evaluates Integrated Conservation-Development Projects (ICDPs) in the Amazon today. Optional field trip over Spring Break (at added expense, limited capacity) to selected ICDPs in the Peruvian Amazon. (HEF II)

5 units (Staff) not given 2001-02

161B. Human Ecology of the Amazon—Introduces the various ecosystems of the Amazon and their human inhabitants. The biotic and antibiotic factors shaping human adaptation to the region. Ethnographic literature is used to explore subsistence patterns and the resource use of Native Amazonians. Current changes in these economies and lifeways due to acculturation and market forces, and the implications for conservation. (HEF IV)

5 units (Lu-Holt) not given 2001-02

162. Indigenous Peoples and Environmental Problems—The social and cultural consequences of contemporary environmental problems. The impact of market economies, development efforts, and conservation projects on indigenous peoples, emphasizing the Amazon, E. Africa, Alaska, and Central America. The role of indigenous grass roots organizations in combating environmental destruction and degradation of homeland areas. (HEF II, IV) GER:3b

3-5 units, Aut (Durham, Irvine)

163. Community-Based Conservation—Community-based participatory models for conservation that represent alternatives to conventional top-down approaches. Case studies: pollution control in the U.S., wildlife conservation in Africa, and protection of tropical rainforests in Latin America. The strengths and weaknesses of alternative approaches to conservation, and the potential for community-based models to make a difference. (HEF II)

5 units (Staff) not given 2001-02

164. Ecological Anthropology—(Same as Human Biology 134.) The relationships between human social systems and their environments. How do environments influence the nature and form of human social systems found within them? How do human social systems influence the properties and dynamics of their environments? How can we best conceptualize and understand human social systems, environment, and the links between them? Case studies of human societies in the Arctic, Amazon, E. Africa, the Alps, and Papua New Guinea. (HEF III)

5 units, Win (Lu-Holt, Stronza)

165. South Asia: Environment, Development, and Security—Explores parallel movements and activities in environmental protection, economic development and security in India and Pakistan since 1947, with special focus on this decade. Environmental issues include air, water, and land pollution, population growth, equity issues and the Narmada dam controversy. Development issues include new programs for economic and energy growth and their environmental consequences.

5 units, Spr (Rosencranz)

166A. Indigenous Forest Management—(Enroll in Human Biology 172.) (HEF IV)

5 units (Irvine) not given 2001-02

166B. Fishing for Solutions: Issues in Marine Conservation—(Graduate students register for 266B; same as Human Biology 158.) The stories behind communities and their fisheries help us relate to a resource we cannot see. The history of our exploitation of cod, salmon, tuna, and grouper are instructive of the wider challenges facing marine resource management. Course will examine the complex of cultural, biological, and economic facets that shape a fishery.

3-5 units, Win (Novy-Hildesley)

166C. Ocean Policy: Marine Stewardship and the Law—(Same as Earth Sciences 167/267.) Introduction to the formulation and implementation of ocean policy with regard to a wide variety of issues, and across a range of spatial scales. The course will cover U.S., foreign, and international efforts to regulate ocean uses such as fishing, mineral extraction, and pollution. There will be a special emphasis on problem solving. Using case studies, we will encourage creative thinking about new tools to improve ocean use management, including both economic and regulatory options. Emphasis on a multidisciplinary approach to thinking about ocean policy, with readings in science, economics, anthropology, and law.

4 units, Aut (Eagle, Novy-Hildesley)

167. Social Policy for Sustainable Resource Use—(Graduate students register for 267.)

5 units, Aut (Irvine)

167A. Anthropology of Tourism and Ecotourism—(Same as Human Biology 188.) Tourism as a focus of anthropological inquiry. Tourism and ecotourism as a lens through which to explore issues of travel and migration between peoples of different cultures. Questions related to tourism (i.e., what motivates tourists to travel?), but the bulk of course readings and discussions focus on the impacts of tourism and host societies. Both symbolic and materialist perspectives emphasized in analyses.

5 units, Spr (Stronza)

168A. Ecology and Equity—Comparative, cross-cultural perspective on the global environmental debate. The origins, articulations, and resolutions of environmental conflicts, drawing on cases and movements from a wide variety of societies. Strategies and limits of deep ecology, ecofeminism, alternative technology, Gandhism, and other approaches. (HEF II)

5 units (Staff) not given 2001-02

168B. Environmental Justice—The social movement uniting environmentalism and social justice into one framework. People of color, and people who are socially, economically, and politically disenfranchised often bear the burden of environmental problems. Examples from across the U.S., S. America, and Africa to examine hazardous waste landfills, petroleum exploitation, and exposure to pesticides and toxic chemicals in the workplace. History of environmental justice movement, evidence for its claims, its challenges and contributions.

5 units, Spr (Lu-Holt)

168C. Environmental Politics in Latin America

5 units, Win (Lu-Holt)

MEDICAL ANTHROPOLOGY AND GENETICS

In addition to the courses listed directly below, ANSI courses 133B and 151, listed in other concentration tracks, also count towards the Track 4 concentration.

MEDICAL ANTHROPOLOGY

170. Medical Anthropology—(Graduate students register for 270.) For students with interests in health care. Introduction to curing systems in Western and in non-Western cultures; problems of adapting modern medicine to diverse cultures; explication of the social and cultural correlates of physical and mental health and disease (social epidemiology). (HEF IV) GER:3b,4a

5 units (Staff) not given 2001-02

171. Aging: From Biology to Social Policy—What can we expect when we join the ranks of the elderly? What are the biological processes that contribute to aging and are they the same across all populations and cultures? What are the cultural, social, and economic consequences of a large portion of the elderly? What implications do they have for social policy? Readings, lectures, and films. Students are assisted in research and working with the elderly. (HEF I) GER:3b

5 units (Staff) not given 2001-02

172. Evolutionary Medicine—(Graduate students register for 272; same as Human Biology 186.) Seminar on understanding human health and disease from an evolutionary perspective. Topics: Darwinian medicine, genes and disease, aging, infectious diseases, mental illness, and cancer. Prerequisites: 2A, 2B, upper division standing; or consent of the instructor. (HEF III)

5 units, Aut (Cronin)

173. Disease, Health, and Culture Change—Humans buffer themselves against the consequences of ill health through their capacities for storing and transmitting knowledge, and for dividing the labor of subsistence in flexible ways. Class, ethnic, and sex/gender differences are examined to access the significance of disease and health as factors in cultural evolution. Prerequisites: 2A, 2B; or consent of the instructor. (HEF III)

5 units (Staff) not given 2001-02

174. Bioethics and Anthropology—(Graduate students register for 274; same as Human Biology 105.) The relevance of moral and ethical issues in health and illness, the development of scientific knowledge, and applications of biomedical technology from an anthropological perspective. The ways moral problems in science and technology are culturally situated, defined, and resolved in specific historical, political, social and economic contexts. Research ethics for anthropologists studying health and illness. Focus is on cultural production of moral dilemmas in biomedicine and healing practices in diverse cultures.

5 units (Koenig) not given 2001-02

176. HIV/AIDS and Medical Anthropology—(Same as Human Biology 187.) The history and the epidemiology of the HIV/AIDS pandemic, including a focus on the epidemic in sub-Saharan Africa. A multidisciplinary examination of issues concerning access to anti-retroviral therapy and treatment in N. America and Europe, theories concerning the origins of HIV, and initiatives surrounding vaccine development. The role of medical anthropology in the contemporary study of HIV/AIDS, including the implementation of intervention and prevention efforts. Recommended: an introductory course in biology. (HEF III)

5 units, Win (Wojcicki)

ANTHROPOLOGICAL GENETICS

180. Human Evolutionary Genetics—(Graduate students register for 280.) The evolution of modern humans as inferred from available genetic data. Quantitative methods used to analyze mitochondrial DNA and allele frequencies. Inference of human migrations and expansion. Genetic support for models of the evolution of modern humans. Comparison

of genetic data with archaeological and linguistic data. Emphasis is on critical reading of the literature. Prerequisite: 2A, 2B; or equivalents. Recommended: introductory statistics. (HEF II, III)

4-5 units (Mountain) not given 2001-02

181. Genes and Culture through Time and Space—Exploration, through the use of computer modeling, of the parallels and interactions between human history, genes, and culture. When do we observe similarities between genetic and cultural patterns? What are the uses of models? Does greater complexity always improve a model? What are the advantages and disadvantages of simulation? Is it easier to predict genetic or cultural patterns? When do they influence one another? Students generate hypotheses, run simulations necessary to test these hypotheses, and analyze the output of the simulations. Prerequisites: 2A, 2B; or consent of instructor. (HEF III, V)

5 units (Mountain) not given 2001-02

189. Research Methods in Anthropological Genetics—(Graduate students register for 289.) Practical training and experience in the molecular biology and data analysis techniques currently applied in anthropological genetics. Collection of samples; DNA extractions; polymerase chain reaction (PCR); gel electrophoresis; DNA sequencing. Basic techniques in the analysis of population genetic data. Prerequisites: 2A, 2B; or consent of instructor. (HEF V)

5 units, Aut (Mountain)

SPECIAL COURSES

190. Social Theory in the Anthropological Sciences—Required of all majors. Seminar on foundational texts in anthropology, from Darwin and Marx to Geertz and Sahlins. Emphasis is on the materialist and evolutionary theories of culture. Presentations by members of the faculty. (WIM) GER:3b

5 units, Aut (Brown)

192. Data Analysis in the Anthropological Sciences—(Graduate students register for 292.) The univariate, multivariate, and graphical methods used for analyzing quantitative data in anthropological research. Archaeological and paleobiological examples illustrate various methods. Recommended: knowledge of algebra. (HEF V) GER:2c

5 units, Win (Klein)

193. Prefield Research Seminar—Prepares for field or laboratory research. Students develop testable hypotheses and realistic data collection procedures, reviewing common data collection techniques including participant observation, interviewing, surveys, and sampling procedures as appropriate. Emphasizes theory guided empirical work. Prerequisites: 2A, 2B, or equivalents; and declared concentration track. (HEF V)

5 units, Spr (Staff)

194. Postfield Research Seminar—Undergraduates analyze and write about material gathered during summer fieldwork. Emphasizes writing and revising as key steps in analysis and composition. Students critique classmates' work and revise their own writing in light of others' comments. (HEF V)

5 units, Aut (Lu-Holt)

195. Research Project—Independent research conducted under faculty supervision, normally taken junior or senior year in pursuit of an honors project. May be taken for more than one quarter for credit. Prerequisite: completed application to the honors program.

1-10 units, any quarter (Staff)

196. Honors/Masters Writing Workshop—For students in the process of writing honors or masters' papers. Techniques for interpreting data, organizing bibliographic material, writing, editing, and revising. Preparation of papers for conferences and publications in anthropology.

2-6 units, any quarter (Staff)

197. Internship in Anthropological Sciences—Provides undergraduates with the opportunity to pursue their area of specialization in an institutional setting (e.g., a laboratory, a clinic, a research institute, or a government agency, etc.).

4-5 units, any quarter (Staff)

198. Museum Methods—Individually directed work on anthropology collections. Introduction to the computerized storage and retrieval system, cataloging, exhibit techniques. Can be taken for one or two quarters by arrangement with instructors. (HEF V)

1-4 units, any quarter (Rick)

199. Directed Individual Study—(Graduate students register for 299.) Opportunity for advanced students to explore special areas of interest.

1-10 units, any quarter (Staff)

GRADUATE

These courses are intended for graduate students. However, advanced undergraduates may be admitted with consent of the instructor.

201A. History of Anthropological Theory, 18th and 19th Centuries—Comparative analysis of the major 18th- and 19th-century social theorists (Boas, Darwin, Freud, Marx, Morgan, Tylor, Weber) and a historical examination of their contributions to the rise of anthropology.

5 units, Win (Brown)

201B. History of Anthropological Theory, 20th Century—Continuation of 201A, focusing on institutionalization of the discipline and the emergence of the four field boundaries. Comparison of the development of anthropology in N. America, Germany, England, and France.

5 units (Wolf) not given 2001-02

202. Political Economy and Gender Theory—Evolutionary theory as it relates to the emergence of varied political economies. Readings: Marx, Sahlins, Geertz, and Bloch. Recommended: working knowledge of Darwinian theory.

5 units (Staff) not given 2001-02

203. Theory and Method in Cultural Evolution—(Graduate section; see 103.)

5 units (Durham) not given 2001-02

204. Culture and Politics in South Asia—Seminar on the ethnographies of S. Asia, a region unparalleled in its ecological and cultural diversity, in its range and intensity of social conflict, and in its cultural expressions. Themes: nationalism, religious violence, class conflict, and the fate of indigenous peoples. A close look at S. Asia ethnographies and exemplary models, to guide future student research.

5 units (Staff) not given 2001-02

205. Applied Anthropology—Anthropologists apply their knowledge and skills to a variety of problems: developing and evaluating medical care delivery systems and educational programs at home and abroad; assisting in the transfer of technological innovations and predicting and measuring their impact; serving as planners, administrators, and advisers for developing programs. The substance of such programs, the utility of anthropological theory and research approaches in solving contemporary problems, and the ethics of professional practice.

5 units (Staff) not given 2001-02

208. Models and Imaging in Anthropological Computing—Develops skills in working with digital imagery relevant to anthropology, using ANSI microcomputers. Hands-on seminar in which some specific background information and methodology is made available, and a sharing of skills goes on between participants and instructor.

3 units (Rick) not given 2001-02

209. Research Methods in Cultural Anthropology—Introduction to basic cultural field methods: interviewing; observation; taking and using field notes; linguistic elicitation; mapping; film, video, digital, and tape recording; archival documents and historical materials; questionnaires, surveys, and statistics. The ethics of field research (prefield, field, and postfield); the relationship of methods to research problems and data analysis; and procedures for maintaining physical and mental health in the field.

5 units (Staff) not given 2001-02

210. Examining Ethnographies—Detailed examination of eight or nine important ethnographies, including their construction, their impact, and their faults and virtues.

5 units, Aut (Wolf)

211. Language and Prehistory—(Graduate section; see 111.)

5 units, Spr (Fox)

212. Linguistic Anthropology—Seminar on language in its cultural contexts. Topics similar to those in ANSI 4, but reading emphasis is on journal articles rather than monographs.

5 units (Fox) not given 2001-02

215. Maya Hieroglyphic Writing—(Graduate section; see 115.)

5 units (Fox) not given 2001-02

216. Research on Maya Hieroglyphic Writing—(Graduate section; see 116.)

2 units, Aut (Fox)

219. Linguistic Field Methods—(Graduate section; see 119.)

5 units (Fox) not given 2001-02

224A. Perspective on Sustainable Development in Latin America—(Graduate section; see 124.)

5 units, Win (Staff)

230. Genetics and Modern Human Origins—Graduate seminar focusing on when and where modern humans originated. Did the most recent common ancestors of modern humans exist 1 million or 50,000 years ago? Where did they live, and what other hominid groups existed? Does the available genetic data enable us to distinguish between the competing theories of the origin of modern humans? What kinds of data are necessary for testing these hypotheses? How much can genetic data tell us about our origins? What is the impact of conclusions regarding our origins? Emphasis is on critical reading and discussion of recent literature.

5 units (Mountain) not given 2001-02

232. Human Evolutionary Anatomy—Focus is on the basis for reconstructing the form, adaptation, and life style of prehistoric humans: the interpretation of their skeletal remains. Integrating features: musculature, body size, stance, brain size, organization, activity patterns, sexual dimorphism, and speech potentiality. GER:2a

5 units (Staff) not given 2001-02

233A. Beginning Osteology—(Graduate section; see 133A.)

5 units, Aut (Maggioncalda, Weaver)

233B. Advanced Osteology—(Graduate section; see 133B.)

5 units, Spr (Weaver)

235. Human Evolutionary Systematics—Recent development and debates in the application of evolutionary systematics specifically to the human fossil record; the utility of cladistic vs. phenetic methods, especially at the species and subspecies level; trait definition and conceptualization; and the utility of heterochronic and functional information in phylogenetic reconstruction.

4-5 units (Staff) not given 2001-02

236. Evolution and Aggression—Seminar on aggression in human and non-human primates. Topics: primate and early hominid origins of aggression, the place of aggression in the evolution of complex societies, and critiques of theories of aggression.

5 units (Maggioncalda) not given 2001-02

237. Climate and Human Evolution—Patterns of human morphological diversity and adaptive response to climate has played a pivotal role in human evolution. The role of technology and cultural buffering in climatic adaptation, especially in the later phases of human evolution and its impact on our understanding of modern human emergence.

5 units (Staff) not given 2001-02

239. Evolutionary Anthropology: Theory and Methods—The history of evolutionary theory from the 19th century to present, emphasizing anthropological applications. The theory and methods behind classical evolutionary anthropology, unilinear and multilinear evolution, functionalism and neoevolutionism, sociobiology, evolutionary psychology, and dual inheritance theory. Prerequisite: graduate standing or consent of the instructor.

5 units, Win (Durham)

240. Stone Tools in Prehistory—(Graduate section; see 140.)

5 units (Rick) not given 2001-02

241. Hunter-Gatherers in Archaeological Perspective—(Graduate section; see 141.)

5 units (Rick) not given 2001-02

242. Beginnings of Social Complexity—Models and examples of the social evolution of stratification and political centralization in prehistoric human societies. Inferences from the archeological record concerning the forces and mechanisms behind the rise and fall of complex societies, particularly in S. America.

5 units, Spr (Rick)

247. Animal Bones for the Archaeologist (Faunal Analysis)—Seminar focuses on the vertebrate skeleton and methods for reconstructing past environments and ecology from assemblages of fossil bones. Emphasis is on how bones from ancient archaeological sites are used to reconstruct their human environments and ecology. Enrollment limited.

5 units, Win (Steele)

248. Dating Methods in Archaeology and Paleoanthropology—Seminar on the primary geochronological methods used to date archeological and human fossil sites and to calibrate major transitions in human evolution. The fundamental principles of radiometric, paleomagnetic, and thermoluminescence techniques; extensive use of real archaeological samples. Field trips to U.S. Geological Survey and Lawrence Livermore Laboratory. Prerequisite: knowledge of algebra. Recommended: basic chemistry.

5 units (Klein, Bischoff) not given 2001-02

250. Advanced Ecological Anthropology—Seminar on the role of ecological models in the analysis of culture and social systems. Early efforts linking environments and social systems, such as cultural ecology, neofunctionalism, systems ecology. Current research trends, including evolutionary ecology, indigenous resource management, and historical ecology. Case studies: agricultural involution in Java, ritual regulation in New Guinea, demographic change in the Swiss Alps, peasant ecology in Central America, and indigenous resource management in Amazonia.

5 units (Durham) not given 2001-02

251. Anthropological Solutions to Environmental Problems—The actual and potential role of anthropology in helping solve major environmental problems. Case studies: anthropologists and human rights in Central America; anthropologists and indigenous peoples in Brazilian

rainforests; anthropologists and development interests in Indonesia, Australia, and sub-Saharan Africa. Emphasis is on the role of culture and social variables in the design of successful solutions to environmental problems.

5 units (Staff) not given 2001-02

252. Political Ecology—Seminar on the causes and consequences of environmental degradation in diverse social and ecological settings. Emphasis is on the role of political and economic forces in ecological change, including forces that promote differential access to resources within and between local populations. Case studies: tropical deforestation, rangeland degradation, soil erosion, drought, and famine.

5 units (Durham) not given 2001-02

266. Human Evolutionary Ecology—How theories and models from evolutionary ecology can elucidate patterns of human adaptation and behavior. Review of various models from optimal foraging theory; analysis of prey and patch choice, mobility, group size, and subsistence risk. Case studies on human populations living in arctic, tropical, and arid environments.

5 units (Lu-Holt) not given 2001-02

266B. Fishing for Solutions: Issues in Marine Conservation—(Graduate section; see 166B.)

3-5 units, Win (Novy-Hildesley)

267. Social Policy for Sustainable Resource Use—(Graduate section; see 167.)

5 units, Aut (Irvine)

269. Research Methods in Ecological Anthropology—The methods utilized in ecological and environmental anthropology. Topics survey techniques for agricultural and demographic data, mapping and field measurement, energy flow, time allocation, and transect and quadrant sampling.

5 units (Staff) not given 2001-02

270. Advanced Medical Anthropology—Students work on a predetermined research problem of their choice in medical anthropology and as it progresses, present their work for supportive discussion and assistance. Prerequisite: 140 or consent of instructor.

5 units (Staff) not given 2001-02

272. Evolutionary Medicine—(Graduate section; see 172.)

5 units, Aut (Cronin)

274. Bioethics and Anthropology—(Graduate section; see 174.)

5 units (Koenig) not given 2001-02

280. Human Evolutionary Genetics—(Graduate section; see 180.)

4-5 units (Mountain) not given 2001-02

281. Genes and Human Behavior—Graduate seminar focusing on the extent to which genes have been linked to human behavior. The methods used for inferring a genetic basis of human behavior: primate studies; twin studies; medical research. Emphasis is on critical evaluation of research in this area.

5 units (Mountain) not given 2001-02

285. Advanced Issues in Health Law and Policy: Genetics and Law—(Enroll in Law 649.)

2 term units (Greely)

289. Research Methods in Anthropological Genetics—(Graduate section; see 189.)

5 units, Aut (Mountain)

SPECIAL COURSES

290. Graduate Core Seminar—Required of all graduates students in residence. Year-long seminar on topics and issues in anthropological sciences. First quarter emphasis is on the current and future research efforts of departmental faculty. Topics for subsequent quarters include: aggression; race, gender, and inequality; anthropology and evolutionary theory; disease; and demography.

*1-5 units, Aut (Diamond, Rick)
Win, Spr (Staff)*

291. Research Methods in Anthropology—Graduate seminar on the use of the scientific method in anthropological research. Published papers from various subfields illustrate effective research design, the formulation and testing of hypotheses, and the comparative methods. Field exercises in interviewing, observation, and the taking and use of field notes. The ethics of field research and procedures for maintaining physical and mental health in the field.

5 units (Staff) not given 2001-02

292. Data Analysis in the Anthropological Sciences—(Graduate section; see 192.)

5 units, Win (Klein)

293. First-Year Paper/M.A. Paper Writing Seminar—Provides students with assistance and guidance with first-year paper and masters' thesis.

2-3 units, Win, Spr (Mountain)

294. Proposal Writing Seminar—Required of all ANSI Ph.D. students. Hands-on practical training in grant writing methods. Students draft a research prospectus based on their own interests and proposed projects, and work closely with their advisers and other faculty.

5 units, any quarter (Staff)

295. Research in Anthropological Sciences—Supervised work with an individual faculty member on the student research project. May be taken for more than one quarter.

5 units, any quarter (Staff)

296. Graduate Internship—Provides graduates with the opportunity to pursue their area of specialization in an institutional setting (e.g., laboratory, clinic, research institute, government agency, etc.).

4-5 units, any quarter (Staff)

297. Teaching Assistantship—Supervised experience as assistant in one undergraduate course.

5 units, any quarter (Staff)

298. Dissertation Writing Seminar—Required of all ANSI Ph.D. students. Students work closely with their advisers and committee members to write a draft of their dissertation.

5 units, any quarter (Staff)

299. Directed Individual Study—(Graduate section; see 199.) Opportunity for advanced students to explore special areas of interest.

5 units, any quarter (Staff)

This file has been excerpted from the *Stanford Bulletin*, 2001-02, pages 221-233. Every effort has been made to ensure accuracy; late changes (after print publication of the bulletin) may have been made here. Contact the editor of the *Stanford Bulletin* via email at arod@stanford.edu with changes, corrections, updates, etc.