

ANTHROPOLOGICAL SCIENCES

Emeriti: (Professors) Clifford R. Barnett, Harumi Befu, Charles O. Frake, James L. Gibbs, Jr., Benjamin D. Paul, Bernard J. Siegel, G. William Skinner, George D. Spindler, Robert B. Textor

Chair: Arthur P. Wolf

Professors: William H. Durham, Richard G. Klein, Arthur P. Wolf

Associate Professors: James A. Fox, John W. Rick

Assistant Professors: Ronald L. Barrett, Melissa J. Brown, David DeGusta, James H. Jones, Joanna L. Mountain

Lecturers: Katharine S. Barrett, Merritt Ruhlen, James Truncer

Consulting Professor: William L. Rathje

Consulting Associate Professors: Dominique Irvine, Nina G. Jablonski

Affiliated Faculty: William Barnett, Carol Boggs, L. Luca Cavalli-Sforza, David Cox, John Dolph, Joshua Eagle, Marcus W. Feldman, Henry Greely, Carol Hutner Winograd, Barbara Koenig, Amos Nur, Ellen Porzig, Robert Sapolsky, Richard White

Mail Code: 94305-2117

Phone: (650) 736-2674

Web Site: <http://www.stanford.edu/dept/anthsci>

Courses given in Anthropological Sciences have the subject code ANTHSCI. For a complete list of subject codes, see Appendix B.

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 ethnomedicine, infectious diseases, human mortality, demography, ethics, ethnic identity, gender, genetic and cultural evolution, historical linguistics and linguistic anthropology, human environments and adaptations, human origins, hunters and gatherers, resource management, community-based conservation, 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 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 Doctor of Philosophy. The graduate curriculum encourages students to pursue both breadth across the anthropological sciences and 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 Assis-

tant 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 variety 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 the Galapagos. Undergraduate and graduate students are encouraged to work with various members of the faculty at their field sites each summer. The department maintains teaching and research collections in the Iris and 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 the Franz Boas Summer Scholar Program, 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 three kinds: (1) independent research grants, to facilitate summer research projects leading to honors in Anthropological Sciences (application in Winter Quarter); (2) mentored research grants, to enable students to gain research experience by working on faculty research projects (application in Spring Quarter); and (3) training grants, to help with costs of summer field schools and training programs (application in Spring Quarter). The department also selects undergraduate recipients for Stanford's annual "Beagle II Awards," which provide generous funds for a summer expedition of scientific discovery anywhere in the world (application in Winter Quarter). In addition, students have the opportunity to participate in ongoing historical archaeology conducted on campus.

Note—The degree programs in the Department of Anthropological Sciences became available in the Autumn Quarter of 1999-2000. Current students who enrolled in any previous year have the option of finishing their degrees under the guidelines and requirements of the former Department of Anthropology, 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, environmental conservation, 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 undergraduates 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 ANTHSCI 2A and 2B (HUMBIO 2A and 2B), or three other "Introductory Courses" listed below, each in a different Concentration Track.
3. A letter grade of 'B' or better in the theory course, Social Theory in the Anthropological Sciences (ANTHSCI 190). This course fulfills the University's Writing in the Major Requirement (WIM) and should be taken no later than the junior year.
4. Declare a concentration track and complete at least 25 units in that track.
5. 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.
6. 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.
7. Complete at least one course in statistics (ANTHSCI 192, BIOSCI 141, STATS 60, PSYCH 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 the peer adviser. When they have a good working plan on paper (forms are available from the student services 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), the Beagle II Awards, and the department's own Pritzker Summer Scholars Program and Franz Boas Summer Scholars Program described above. Information and applications for the latter are available from the student services coordinator in the department office.

Advising Program—The department puts high priority on undergraduate advising. Each student works with a peer adviser, 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,

in order 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. The peer adviser is often the first step in seeking advice; the peer adviser keeps 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 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 average letter grade 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 ANTHSCI 2A and 2B (HUMBIO 2A and 2B) or three "Introductory Courses" as listed below, each in a different Concentration Track.
4. Completion of at least one course at the 100 level or higher. Please note: Human Biology majors who minor in ANTHSCI may use HUMBIO 2A and 2B to fulfill requirement 3, but may not use it towards requirement 2. That is, students are not required to take an additional 3 introductory courses, but they must take 30 units of ANTHSCI coursework other than 2A and 2B.

HONORS

The honors program in Anthropological Sciences provides students with an opportunity to conduct original research under the guidance of a faculty adviser. Declared Anthropological Sciences majors of sophomore or junior standing may apply for admission to the honors program by submitting an application form (available from the student services coordinator), a transcript, a copy of their planned course of study in the major, a proposal of their honors research project and paper, and a formal letter of recommendation from the professor who will supervise the student's honors project. A minimum average letter grade of 'B+' in Anthropological Sciences course work is required for students to enroll in the honors program. For students doing fieldwork as part of their thesis project, all application materials must be completed and turned in no later than March 1 of the candidate's junior year so that they can take ANTHSCI 193 in Spring Quarter. For students doing lab- or library-based research projects, applications must be submitted by the third week of Spring Quarter in the candidate's junior year. Applications are reviewed by the department's Student Affairs Committee which selects the students who become candidates for honors. Honors projects typically involve field research, but applications for lab or library-based research will be considered.

Throughout honors work, students work closely with their advisers to plan the honors proposal, conduct the research, and write the honors paper. Honors students are strongly encouraged to take ANTHSCI 190 and 192 no later than their junior years and are typically required to take ANTHSCI 193, Prefield Research Seminar, ANTHSCI 194, Post Field Seminar, and ANTHSCI 196, Honors and Master's Writing Workshop, to prepare and write up their research projects. Additionally, an honors candidate may enroll in ANTHSCI 199, Directed Individual Study, for as many as 15 units but may not count more than five of these units toward fulfilling the 65-unit requirement for the major. In Winter Quarter, students present oral reports on the progress of their research to the honors workshop (ANTHSCI 196) and receive constructive feedback. The

honors paper is to be completed and two copies are to be handed in to the student services coordinator no later than May 1 of the student's senior year. The paper is read and evaluated by the adviser and by one other faculty member. Candidates submitting a paper that is judged to be of honors quality (letter grade of 'A-' or better, from both readers) are awarded honors.

Students interested in the honors program are especially encouraged to apply for summer research funding through the department, through Undergraduate Research Programs (URP), and through various of the area studies centers on campus (e.g., Latin American Studies or African and African American Studies). In most cases, honors students apply for such funding in the Winter and Spring quarters of their junior year.

COTERMINAL BACHELOR'S AND MASTER'S DEGREES

The Department of Anthropological Sciences accepts applications from Stanford undergraduates to work toward coterminal M.A. or M.S. degrees. Undergraduates may apply between their eighth and eleventh quarters of study; all application materials are due by the third week of the quarter. Students doing field work are encouraged to apply by March 1 so that they may take ANTHSCI 193. Students apply by submitting application forms (available from the student services coordinator), a proposal of their master's research project and paper, a plan for their master's course of study, at least one writing sample (preferably a research paper), a university transcript, and a letter of recommendation from the faculty member who will supervise their master's work in the department. 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 Doctor 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 average letter grade of 'B' or better.
3. The three graduate fundamentals courses (ANTHSCI 290A, 290B, and 292), each for a letter grade, plus any two 200-level courses other than "Special Courses." Units earned in these courses count toward the 45-unit M.A. requirement.
4. Enroll in the departmental Core Seminar (ANTHSCI 291) while in residence, for at least 1 unit each quarter.
5. Submit a master's-level 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 meets 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 Stanford for entry into the terminal M.S. 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 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 an average letter grade in master's work of 'B' or better.
3. The three graduate fundamentals courses (ANTHSCI 290A, 290B, and 292), each for a letter grade, plus any two 200-level courses other than "Special Courses." Units earned in these courses count toward the 45-unit M.S. requirement.
4. Enroll in the departmental Core Seminar (ANTHSCI 291) while in residence, for at least 1 unit each quarter.
5. Submit a master's-level 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 meets 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 6. 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 ANTHSCI 200 during Autumn Quarter of the first year. This course must be taken for a letter grade.
3. Enroll in the departmental Core Seminar (ANTHSCI 291) 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 9-10 unit course limit). Units for ANTHSCI 291 count toward the unit requirements for the Ph.D.
4. Complete 3 fundamentals courses, each for a letter grade: ANTHSCI 290A, Advanced Social Theory in Anthropological Sciences; ANTHSCI 290B, Evolutionary Theory in Anthropological Sciences; and ANTHSCI 292, Data Analysis in the Anthropological Sciences.
5. Complete, for a letter grade, one designated 200-level course from each of the following three distribution areas of anthropological sciences:
 - a. Ethnography/Ecological Anthropology/Linguistics (DA-A)
 - b. Archaeology/Paleoanthropology/Primatology (DA-B)
 - c. Medical Anthropology/Anthropological Genetics/Demography (DA-C)

Courses that fulfill this requirement are shown by the distribution areas (DA) designation in the course listings that follow. Courses that fulfill DA-A must have significant ethnographic content.

6. Submit a substantial research paper of acceptable quality for the Master's degree in the Spring Quarter of the first year. To be consid-

ered acceptable, the paper must receive a grade of 'B+' or better from all three readers designated by the instructor of the spring paper course.

7. Enroll in a methods course in chosen area of specialization. This course must contain an ethics component and must be taken for a letter grade.
8. Serve as a teaching assistant for the department. 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.)
9. 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.

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. Take at least one quarter of Proposal Writing (ANTHSCI 294) and prepare a dissertation proposal. If necessary, obtain Human Subjects clearance.
2. Pass a Prospectus Examination by the end of Winter Quarter of the third year, and petition for candidacy. To pass the examination, a student is required to complete the following within a 6-week period: (a) submit a thesis proposal and obtain committee consent to proceed; (b) present the thesis proposal publicly; and (c) pass the University Orals exam consisting of both a review of the proposal and a test of knowledge in a chosen subfield (e.g., archaeology, medical anthropology, anthropological genetics) and/or geographic area as appropriate.
3. Submit the Doctoral Dissertation Reading Committee form no later than the end of the third year and before approval of TGR.
4. Take at least one quarter of Dissertation Writing (ANTHSCI 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 services 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), each with a grade 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 must come from the Department's Core Seminar (ANTHSCI 291, see below); 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 ANTHSCI 290A, Advanced Social Theory in Anthropological Sciences, or ANTHSCI 290B, Evolutionary Theory in Anthropological Sciences, and must enroll in the department's Core Seminar (ANTHSCI 291) 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, but only with the approval of the adviser.

- 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.
- For graduation, complete all necessary paperwork with the student services coordinator of the department.

COURSES

(WIM) indicates that the course satisfies 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 that the 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:

- 1- 99 Introductory Courses
 - 1-19 General Introductory Courses
 - 20-29 SIS Courses (freshmen)
 - 30-39 SIS Seminars and Dialogues (sophomore)
- 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. ANTHSCI 2A and 2B (HUMBIO 2A and 2B) provide a good introduction to the major; alternatively, a student may take three other introductory courses numbered from 3 to 40.

ANTHSCI 2A. Genetics, Evolution, and Ecology—(Enroll in HUMBIO 2A.)

5 units, Aut (Durham, Mountain)

ANTHSCI 2B. Culture, Evolution, and Society—(Enroll in HUMBIO 2B.)

5 units, Aut (Klein, Brown)

ANTHSCI 3. Introduction to Prehistoric Archaeology—(Same as ARCHLGY 1.) 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. (HEF II) GER:3b,4a

3-5 units, Win (Rick)

ANTHSCI 4. Language and Culture—(Enroll in CASA 4.)

5 units, Win (Inoue)

ANTHSCI 5. The Biology and Evolution of Language—(Graduate students register for 214.) 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. (HEF III; DA-A) GER:2a

4-5 units, Aut (Fox)

ANTHSCI 6. Human Origins—(Graduate students register for 206.) 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. (HEF III; DA-B) GER:2a

5 units, Win (Klein)

ANTHSCI 7. Marriage and Kinship—Variation in human kinship systems; whether or not they can be understood as evolutionary products and the contribution to be made by a Marxist perspective. Eurasia and Africa are contrasted with Europe and E. Asia. (HEF I) GER:3b,4c

4-5 units, Spr (Wolf)

ANTHSCI 8. Ethnography of Childhood—Tools and theories of anthropology to study the lives of children. Evolutionary perspective on why humans have a prolonged period of juvenile dependency and the ramifications for the place of children within human social groups. Ethnographies of children in different societies to ask questions about family, play, work, friendships, social expectations, and threats to child well-being. Methodological issues. (HEF I) GER:4c

5 units (Wolf, K. Barrett) not given 2003-04

ANTHSCI 10. Medical Anthropology—Introduction to the cross-cultural study of health beliefs and healing systems around the world. How social processes shape human health. (HEF IV; DA-C) GER:3b,4a

3-5 units, Win (R. Barrett)

ANTHSCI 11. Identity and Peoples of China—Who is Chinese? Perspectives on being Chinese from Han and ethnic minorities in China, in Taiwan, and among overseas Chinese. Emphasis is on distinguishing forces contributing to identity formation from ideological rhetoric about identity. (HEF I, IV) GER:3b,4a

3-5 units, Spr (Brown)

STANFORD INTRODUCTORY SEMINARS (SIS)

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

ANTHSCI 31Q. Earthquakes and Archaeology in the Eastern Mediterranean—(Enroll in GEOPHYS 50Q.) Stanford Introductory Seminar.

5 units, Win (Nur) alternate years, not given 2004-05

CULTURE, SOCIAL RELATIONS, AND LANGUAGE

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

CULTURE AND SOCIAL RELATIONS

ANTHSCI 101. The Human Hand: Evolution, Ontogeny and Influence—(Enroll in HUMBIO 101.)

3 units (Porzig) alternate years, given 2004-05

ANTHSCI 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: hunter/gatherer, horticultural (Melanesian), southern Chinese, and Anglo American societies. (HEF I, IV)

5 units, Spr (K. Barrett)

ANTHSCI 106. Mythology and Human Origins—Comparison of peoples' accounts of their 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 primitive and advanced cultures and their cognitive models of time and space. (HEF IV) GER:3b,4a

5 units, Win (Fox)

ANTHSCI 108. Models and Imaging in Archaeological Computing—(Graduate students register for 208.) Hands-on seminar covering digital photography, mapping, and modeling methodology. Emphasis is on sharing skills between participants and instructor. Working with digital data and imagery relevant to archaeology. (DA-B)

3-5 units (Rick) not given 2003-04

LANGUAGE

ANTHSCI 110. Introduction to Language Change—(Enroll in LINGUIST 160.)

4-5 units, Win (Kiparsky)

ANTHSCI 111. Language and Prehistory—(Graduate students register for 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 (Fox) not given 2003-04

ANTHSCI 112. Human Diversity: A Linguistic Perspective—(Enroll in HUMBIO 118.)

3 units, Spr (Ruhlen)

ANTHSCI 115. Maya Hieroglyphic Writing—(Graduate students register for 215.) Deciphering 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 (Fox) not given 2003-04

ANTHSCI 116. Research in Maya Hieroglyphic Writing—(Graduate students register for 216.) Workshop. Current issues in the decipherment and analysis of Maya hieroglyphic writing and literacy. Prerequisite: 115 or consent of instructor. (HEF II, IV)

1-2 units (Fox) not given 2003-04

ANTHSCI 121. Indigenous Languages of the Americas—The classification, history, structural variation, and sociocultural aspects of the indigenous languages of N. and S. 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)

5 units (Fox) not given 2003-04

AREA STUDIES: THE AMERICAS

ANTHSCI 122. The Ancient Maya—(Graduate students register for 222.) Archaeology and culture of the ancient Maya of Mesoamerica. The natural world of the Maya, languages and writing, and origins of Maya culture. Archaeological and historical dating and classification of periods. Life cycle, daily life, food, agriculture, technology, and medicine. Power, social structure, gender, and the origins of the state. Mythology, time, astronomy, art, and religion. Maya sites, their relations with each other and other Mesoamerican states and peoples. The classic Maya collapse, the Spanish conquest, and today's Maya. Changes of archaeological focus and issues as exemplified in the study of the Maya. Optional Spring Break field trip to Maya country (at extra expense, limited capacity). (HEF II, IV; DA-A)

2-5 units (Fox) not given 2003-04

ANTHSCI 124. Perspectives on Sustainable Development in Latin America—(Graduate students register for 224A; same as LATINAM 195.) Crossdisciplinary. Interactions among poverty, development, environmental degradation, and approaches to growth and stability in agroecology, agroforestry, small farm development, and conservation biology. Limited enrollment.

5 units (Staff) not given 2003-04

AREA STUDIES: ASIA

See also ANTHSCI 165.

ANTHSCI 125A. 20th-Century Chinese Societies—(Graduate students register for 225A.) Nationalist China, the People's 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; DA-A) GER:4a

3-5 units (Brown) not given 2003-04

ANTHSCI 125B. Late Imperial China—(Graduate students register for 225B.) Chinese civilization in the late imperial era (960-1911) in its spatial, temporal, structural, institutional, and ideational complexity. 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 religion. (HEF IV; DA-A) GER:4a

5 units (Wolf) not given 2003-04

ANTHSCI 128. Postwar Japan in Historical Perspective—(Same as CASA 128.)

3-5 units (Befu) not given 2003-04

ANTHSCI 128B. Globalization and Japan—(Graduate students register for 228B; same as CASA 128B.) Globalization theories in anthropology and sociology. Japan's globalization in the context of these theories. Ethnographic cases of Japan's global presence from the 15th century to the present. Processes of globalization in business management, popular culture, and expatriate communities. (HEF IV)

3-5 units, Spr (Befu)

ARCHAEOLOGY AND EVOLUTIONARY STUDIES

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

EVOLUTIONARY STUDIES

ANTHSCI 130. Paleoanthropology Seminar—(Graduate students register for 230B.) An aspect of human evolution through primary literature and fossils. Topics vary to fit the interests of participants. (HEF II)
4-5 units, *Spr (DeGusta)*

ANTHSCI 131A. Primate Evolution—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 I, II; DA-B)
5 units, *Spr (Jablonski)*

ANTHSCI 131B. Primate Societies—(Graduate students register for 231B.) 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, III; DA-B)
5 units (*Staff*) not given 2003-04

ANTHSCI 131C. Current Issues in Primatology—(Graduate students register for 231C.) Seminar. Evolution of cognitive abilities in primates. Selective forces increasing intelligence from ecological factors impacting early prosimian primates to social and cultural factors affecting hominid evolution. Hypotheses about relationships between brain morphology and intelligence in humans, nonhuman primates, and hominid ancestors. Prerequisite: 131B or consent of instructor. (HEF II, III)
5 units (*Staff*) not given 2003-04

ANTHSCI 132. Hormones and Behavior—(Graduate students register for 232.) Seminar. Human and non-human primate behavioral endocrinology. The endocrine correlates of behavior and the behavioral correlates of changes in hormone levels. Investigation of the evolutionary significance of relationships between social behavior and endocrine physiology in primates. Focus is on women and hormonal influences on emotions and behavior, from menarche to menopause. Prerequisites: 2A, 2B, 102, or BIOSCI 150. (HEF I, III; DA-C)
5 units (*Staff*) not given 2003-04

ANTHSCI 133A. Beginning Osteology—(Graduate students register for 233A; same as HUMBIO 180.) The study of human skeletal remains. Basic bone nomenclature, biology and anatomy, growth and development, and methods for assessing age and sex. Emphasis is on hands-on study and identification of human skeletal material. (HEF I, V; DA-B)
5 units, *Win (DeGusta)*

ANTHSCI 133B. Advanced Osteology—(Graduate students register for 233B.) Analysis of human skeletal remains from archaeological and paleontological contexts. Advanced topics 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; DA-B)
5 units, *Spr (DeGusta)*

ANTHSCI 133C. Human Evolutionary Anatomy—(Graduate students register for 233C.) Seminar. Focus is on the skeletal evidence for reconstructing the body forms, behaviors, and life histories of human fossil ancestors and relatives. Anatomical features within an evolutionary framework based on comparative primate anatomy. Musculature, body size, posture, brain structure, activity patterns, sexual dimorphism, birth, and speech. (HEF II, V; DA-B)
5 units (*Staff*) not given 2003-04

ANTHSCI 134. Human Behavioral Biology—(Enroll in BIOSCI 150/250.)
6 units, *Spr (Sapolsky) alternate years, not given 2004-05*

ANTHSCI 137. Darwin, Evolution, and Galapagos—Seminar. 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. Optional field trip to Galapagos (at extra expense, limited capacity). Enrollment limited to 20. (HEF III)
5 units (*Durham*) not given 2003-04

ANTHSCI 139A. An Undergraduate Course in Anatomy—(Enroll in SURG 101.)
7 units, *Win (Dolph, Gosling)*

ARCHAEOLOGY

ANTHSCI 141. Hunter-Gatherers in Archaeological Perspective—(Graduate students register for 241.) Methods and data used to reconstruct the organization and subsistence of band-level hunter-gatherers. Studies of modern hunter-gatherers provide background for interpreting prehistoric groups, and the archaeological record of Africa, Europe, and the New World contribute examples of how archaeological data are used to reconstruct the life ways of extinct hunter-gatherers. (HEF I, II; DA-B) GER:3a,4a
4-5 units (*Rick*) not given 2003-04

ANTHSCI 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, ceramics, and textiles. Cultural evolution, and why and how major transformations occurred. (HEF II, III) GER:4a
3-5 units, *Spr (Rick)*

ANTHSCI 144. Archaeology of North America—Why and how people of N. America developed. Issues and processes that dominate or shape developments during particular periods considering 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) GER:4b
3-5 units, *Aut (Rick, Truncer)*

ANTHSCI 145A. Evolutionary Theory in Archaeology—(Graduate students register for 245.) 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 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)
3-5 units (*Staff*) not given 2003-04

ANTHSCI 145B. Evolution of Civilizations—(Graduate students register for 245B.) How archaeology contributes to understanding prehistoric civilizations. How and why complex social institutions arose, and the conditions and processes behind their collapse. The development of monumental architecture, craft specialization, trade and exchange, and social stratification using examples from the archaeological record. (HEF II, III)
3-5 units (*Staff*) not given 2003-04

ANTHSCI 146. Archaeological Ceramics—(Graduate students register for 246.) Treatment of archaeological ceramics with emphasis on practical applications. What these objects can tell us about the lives of ancient peoples and the larger scale systems in which they lived. Ceramic technology. Methodological (chronology, seriation), economic (produc-

tion, exchange, consumption), and social (style, signaling) aspects of ceramic analysis. (HEF V)

4 units (Bandy) not given 2003-04

ANTHSCI 147. Archaeology of Modern Times—(Same as ARCHLGY 4.) 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. (HEF IV)

5 units, Win (Rathje)

ANTHSCI 148. Introduction to Scientific Methods in Archaeology—(Same as ARCHLGY 2.) Scientific methods used in archaeology to interpret the material traces of the past: 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; DA)

5 units, Win (Truncer)

ANTHSCI 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, ANTHSCI 123, 124, 133B, and 141, listed in other concentration tracks, also count towards the Track 3 concentration.

POPULATION/DEMOGRAPHY

ANTHSCI 150. Population and Society—(Graduate students register for 250.) The relationship between social structure (marriage, kinship, and political organization) and population dynamics (fertility, mortality, and migration) in various societies. The differences between hunter-gatherers and agriculturists, and between peoples of Europe and Asia. (HEF I, IV; DA-C)

5 units (Wolf) not given 2003-04

ANTHSCI 155. Human Population Biology—(Graduate students register for 255.) Problems in demography and theoretical population biology applied to human systems. Emphasis is on establishing relationships between models in theoretical population biology and empirical demographic methodology. Topics include philosophy of models and model building, population dynamics, stable population theory, species interactions in human ecology, models of infectious diseases and their control, cultural evolution. Prerequisites: HUMBIO 137 or consent of instructor. (HEF III, V; DA-C)

5 units, Aut (Jones)

ANTHSCI 156. Population Studies—(Enroll in BIOSCI 146.)

1 unit, Win (Feldman)

ENVIRONMENT/ECOLOGY

ANTHSCI 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 protection. (HEF II)

5 units, Spr (Staff)

ANTHSCI 161B. Human Ecology of the Amazon—(Graduate students register for 261B.) 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 economics and lifeways due to acculturation and market forces, and the implications for conservation. (HEF IV)

5 units (Staff) not given 2003-04

ANTHSCI 162. Indigenous Peoples and Environmental Problems—(Graduate students register for 262; same as HUMBIO 171.) 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; DA-A) GER:3b

3-5 units (Durham, Irvine) not given 2003-04

ANTHSCI 164. Ecological Anthropology—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)

3-5 units, Win (Durham)

ANTHSCI 164A. Ethnoecology—(Graduate students register for 264A.) Role of human beings in ecosystems as mediated by culture, markets, and environment. Theory and methods for investigating human-nature relationships at the local and global level. Variation in how people of different cultures and languages conceptualize and categorize plants, animals, landscapes, ecological relationships, and ecosystem processes. Relationship of traditional ecological knowledge (TEK) to Western ecological science and its importance to policy and development. Field methods include ethnotaxonomy and ethnomapping. (HEF I, III)

3-5 units, Win (Irvine)

ANTHSCI 165A. Kashmir: History, Politics, and Security—(Enroll in HISTORY 285A.)

3 units (Mancall, Rosencranz) not given 2003-04

ANTHSCI 165B. Central America: Environment, Sustainable Development, and Security—(Graduate students register for 265B; same as IPER 265.) Interrelationships among environmental stress, poverty, and security in Central America, with focus on Costa Rica. The legacy of the Cold War in Central America as manifested in the Contra War and U.S. policy. Current development schemes and their impact on environment and security in the region. Dilemmas between population growth in the developing world and consumption patterns in the industrial world. Some years, the course includes an optional field trip to Costa Rica over Spring Break at extra expense; limited capacity. (HEF III)

3-5 units (Hoagland) alternate years, given 2004-05

ANTHSCI 166A. Indigenous Forest Management—(Graduate students register for 266A.) (HEF IV)

5 units (Irvine) not given 2003-04

ANTHSCI 166C. Ocean Policy—(Graduate students register for 266C; same as EARTHYSYS 167/276.) Introduction to the formulation and implementation of ocean policy with regard to a variety of issues across a range of spatial scales: U.S., foreign, and international efforts to regulate ocean uses such as fishing, mineral extraction, and pollution. Emphasis is on problem solving, using case studies to encourage creative thinking about new tools to improve ocean use management, including economic and regulatory options. A multidisciplinary approach to thinking about ocean policy, with readings in science, economics, anthropology, and law. (HEF II)

4 units, Aut (Eagle)

ANTHSCI 167. Social Policy for Sustainable Resource Use—(Graduate students register for 267.) The development of social policies that foster a positive human role in the ecosystem. Goal is to develop group skills in a team setting while researching case studies of forest peoples

impacted by integration into the global economy. The case of voluntary forest product certification under the Forest Stewardship Council system. Local participation in policy development, the effectiveness of certification, tenure and institutional aspects of sustainability, indigenous rights and forest conservation, and the role of local communities and workers in sustaining forests over the long term. Prerequisite: consent of instructor. (HEF II, IV)

5 units, Aut (Irvine)

ANTHSCI 168B. Environmental Justice in the U.S.—(Graduate students register for 268B.) 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 mostly from the U.S., including 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. (HEF II, IV)

5 units (Staff) not given 2003-04

ANTHSCI 168C. Environmental Politics in Latin America—(Graduate students register for 268C.) (HEF II, IV)

5 units (Staff) not given 2003-04

ANTHSCI 169D. Conservation and Colonialism—Interdisciplinary seminar. How colonial ideas and policies are manifest in contemporary efforts at conservation and environmental protection. Western concepts of ecology, evolution, population, and pollution, and the influence of these cultural formulations on environmental debates and everyday lives of people around the world. (HEF II, IV)

5 units (Kosek) not given 2003-04

MEDICAL ANTHROPOLOGY AND GENETICS

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

MEDICAL ANTHROPOLOGY

ANTHSCI 171. Aging: From Biology to Social Policy—What can people 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 elderly population? What implications do they have for social policy? Films. Students are assisted in research and working with the elderly. (HEF I) GER:3b

5 units, Spr (Barnett)

ANTHSCI 172. Evolution of Human Disease—(Graduate students register for 272.) Seminar. 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 (R. Barrett) not given 2003-04

ANTHSCI 173. Diet, Nutrition, and Human Growth—Comparative evolutionary ecological perspective. Emphasis is on the ecology of food distribution and acquisition, and applied questions of health significance. Topics include measurement and interpretation of childhood growth and development, growth standards, plasticity/canalization, ecology and evolutionary biology of food distribution and subsistence strategies, dietary requirements, metabolic physiology, reproductive ecology, nutritional epidemiology, obesity, ecology of activity patterns, eating disorders, and reduction diets. (HEF I, IV)

5 units, Win (Jones)

ANTHSCI 174. Bioethics and Anthropology—(Graduate students register for 274; same as CASA 130A.) The relevance of moral and ethical issues in health and illness, the development of scientific knowledge, and applications of biomedical technology from an anthropologi-

cal 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. (HEF IV) GER:3b

5 units, Win (Koenig)

ANTHSCI 175. The Anthropology of Death and Dying—(Graduate students register for 275.) Death as a biocultural process. Funerary practices and attitudes toward dying in different societies. Issues include hospice care, palliative care, and euthanasia. Instructor is an anthropologist and a registered nurse with hospice experience. (HEF I, IV; DA-C)

5 units (R. Barrett) not given 2003-04

ANTHSCI 176A. Anthropological Perspective on Child Welfare—(Graduate students register for 276A.) Practices at the core of child welfare debates, including corporal punishment, neglect, male and female circumcision, gender discrimination, emotional abuse, child labor, and sexual abuse. Legal and ethical issues surrounding global definitions of maltreatment. Literature on child growth and development. (HEF I)

5 units (K. Barrett) not given 2003-04

ANTHSCI 178. Contagion and Conflict—Historical and anthropological relationships between human disease and human conflict. Major disease epidemics from Paleolithic conflicts and medieval crusades to the world wars and genocides of the last century. The uneasy alliances between military institutions, sanitary reform movements, and public and international health agencies. The history of biowarfare from smallpox blankets to cold war weaponry and bioterrorism. Application to current events and future policy implications. (HEF IV)

5 units, Spr (R. Barrett)

ANTHROPOLOGICAL GENETICS

ANTHSCI 180. Introduction to Anthropological Genetics—(Graduate students register for 280.) The extent and pattern of variation among human genomes, the origin of these patterns in human evolution, and the social and medical impact of recent discoveries. Topics include: the Human Genome Project; human origins; ancient DNA; genetic, behavioral, linguistic, cultural, and racial diversity; the role of disease in shaping genetic diversity; DNA forensics; genes and reproductive technology. Prerequisites: 2A, 2B, or consent of instructor. (HEF I, II; DA-C) GER:2a

5 units (Mountain) not given 2003-04

ANTHSCI 187. The Genetic Structure of Populations—Inference of evolutionary history from the current structure of genetic variation within a population genetic and phylogenetic framework. Methods include tree inference, analysis of molecular variance, gene genealogies and the coalescent, phylogeography, clustering algorithms, and Bayesian and frequentist approaches. Applications in evolutionary studies, medicine, conservation, and forensics. Principles and methods illustrated primarily with human and other primate examples; students investigate species of own choice. Prerequisites: 2A or Biology Core. (HEF II, III, V; DA-C)

5 units, Spr (Mountain)

ANTHSCI 188. Research in Anthropological Genetics—(Graduate students register for 288.) Seminar. Current research at Stanford and beyond. Presentations by instructor, guests, and class participants. May be repeated for credit. (HEF V)

1-5 units, Aut, Win (Mountain)

SPECIAL COURSES

ANTHSCI 190. Social Theory in the Anthropological Sciences—Required of all majors. Foundational course in the history of social theory in anthropology from the late 19th century to the present. Major approaches to human culture and society: symbolic, social, material, and psychological. Fundamental questions about the role of theory in anthropology and how it can be applied to human issues. (HEF IV) GER:3b (WIM)

5 units, Win (R. Barrett)

ANTHSCI 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, Spr (Klein)

ANTHSCI 193. Prefield Research Seminar—Preparation 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 (K. Barrett)

ANTHSCI 194. Post Field 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. Limited enrollment. (HEF V)

5 units, Aut (K. Barrett)

ANTHSCI 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, Aut, Win, Spr, Sum (Staff)

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

2-6 units, Aut, Win, Spr, Sum (Staff)

ANTHSCI 197. Internship in Anthropological Sciences—Provides undergraduates with the opportunity to pursue their area of specialization in an institutional setting such as a laboratory, a clinic, a research institute, or a government agency.

4-5 units, Aut, Win, Spr, Sum (Staff)

ANTHSCI 198. Museum Method—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 instructor. (HEF V)

1-4 units, Aut, Win, Spr, Sum (Rick)

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

1-10 units, Aut, Win, Spr, Sum (Staff)

GRADUATE

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

ANTHSCI 200. Introduction to the Anthropological Sciences—Themes and topics of lasting heuristic value in the anthropological sciences. Combines the lecture content of 2A and 2B with a discussion section for graduate students. Must be taken in the Autumn Quarter of a student's first year in the graduate program.

5 units, Aut (Brown, Durham, Klein, Mountain)

ANTHSCI 201B. Social Theory in the 20th Century—Continuation of 201A. Comparative analysis of major 20th-century social theories as they relate to anthropology. (HEF IV)

5 units (Brown) not given 2003-04

ANTHSCI 206. Human Origins—(Graduate section; see 6.)

5 units, Win (Klein)

ANTHSCI 208. Models and Imaging in Archaeological Computing—(Graduate section; see 108.)

3-5 units (Rick) not given 2003-04

ANTHSCI 210. Examining Ethnographies—Eight or nine important ethnographies, including their construction, their impact, and their faults and virtues. (HEF IV; DA-A)

5 units, Aut (Wolf)

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

5 units (Fox) not given 2003-04

ANTHSCI 213. Topics in Linguistic Anthropology: Vocabulary and Culture—Seminar. Culture, society, and cognition as reflected in vocabulary. Semantic analysis and universals of terminological systems; vocabulary size, abstraction, and the issue of primitiveness; variation, strategy, and figures of speech in vocabulary use. Emphasis is on vocabularies of identity (kinship, personal names, and the body) and environment (plants, animals, and place).

4-5 units, Spr (Fox)

ANTHSCI 214. The Biology and Evolution of Language—(Graduate section; see 5.)

4-5 units, Aut (Fox)

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

5 units (Fox) not given 2003-04

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

1-2 units (Fox) not given 2003-04

ANTHSCI 222. The Ancient Maya—(Graduate section; see 122.)

2-5 units (Fox) not given 2003-04

ANTHSCI 224A. Perspectives on Sustainable Development in Latin America—(Graduate section; see 124; same as LATINAM 195.)

5 units (Staff) not given 2003-04

ANTHSCI 225A. 20th-Century Chinese Societies—(Graduate section; see 125A.)

3-5 units (Brown) not given 2003-04

ANTHSCI 225B. Late Imperial China—(Graduate section; see 125B.)

5 units (Wolf) not given 2003-04

ANTHSCI 228B. Globalization and Japan—(Graduate section; see 128B; same as CASA 128B.)

3-5 units, Spr (Befu)

ANTHSCI 230B. Paleoanthropology Seminar—(Graduate section; see 130.)

4-5 units, Spr (DeGusta)

ANTHSCI 231A. Primate Evolution—(Graduate section; see 131A.)

5 units, Spr (Jablonski)

ANTHSCI 231B. Primate Societies—(Graduate section; see 131B.)

5 units (Staff) not given 2003-04

ANTHSCI 231C. Current Issues in Primatology—(Graduate section; see 131C.)

5 units (Staff) not given 2003-04

ANTHSCI 232. Hormones and Behavior—(Graduate section; see 132.)

5 units (Staff) not given 2003-04

ANTHSCI 233A. Beginning Osteology—(Graduate section; see 133A; same as HUMBIO 180.)

5 units, Win (DeGusta)

ANTHSCI 233B. Advanced Osteology—(Graduate section; see 133B.)
5 units, Spr (*DeGusta*)

ANTHSCI 233C. Human Evolutionary Anatomy—(Graduate section; see 133C.)
5 units (*Staff*) not given 2003-04

ANTHSCI 236. Evolution and Aggression—(Graduate section; see 136.)
5 units (*Staff*) not given 2003-04

ANTHSCI 241. Hunter-Gatherers in Archaeological Perspective—(Graduate section; see 141.)
4-5 units (*Rick*) not given 2003-04

ANTHSCI 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. (DA-B)
5 units, Win (*Rick*)

ANTHSCI 245. Evolutionary Theory in Archaeology—(Graduate section; see 145A.)
3-5 units (*Staff*) not given 2003-04

ANTHSCI 245B. Evolution of Civilizations—(Graduate section; see 145B.)
3-5 units (*Staff*) not given 2003-04

ANTHSCI 246. Archaeological Ceramics—(Graduate section; see 146.)
4 units (*Bandy*) not given 2003-04

ANTHSCI 247. Animal Bones for the Archaeologist (Faunal Analysis)—Seminar. Focus is 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. Limited enrollment. (HEF II, V; DA-B)
5 units (*Staff*) not given 2003-04

ANTHSCI 249. Archaeological Field Methods
3-5 units (*Bandy*) not given 2003-04

ANTHSCI 250. Population and Society—(Graduate section; see 150.)
5 units (*Wolf*) not given 2003-04

ANTHSCI 250A. Advanced Ecological Anthropology—Seminar. 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. (DA-A)
5 units, Spring (*Staff*)

ANTHSCI 255. Human Population Biology—(Graduate section; see 155.)
5 units, Aut (*Jones*)

ANTHSCI 261B. Human Ecology of the Amazon—(Graduate section; see 161B.)
5 units, Win (*Irvine, Lu Holt*)

ANTHSCI 262. Indigenous Peoples and Environmental Problems—(Graduate section; see 162; same as HUMBIO 171.)
3-5 units (*Durham, Irvine*)

ANTHSCI 263. Indigenous People, Resources, and Self Determination in Latin America—Focus is on the organization of indigenous communities in defense of traditional resource rights and political autonomy. Case studies such as Miskitu people of Nicaragua, the Kuna

of Panama, and the Shuar of Ecuadorian Amazon to explore pathways and potentials for indigenous self-determination in contemporary Latin America.

5 units (*Durham*) not given 2003-04

ANTHSCI 264A. Ethnoecology—(Graduate section; see 164A.)
3-5 units, Win (*Irvine*)

ANTHSCI 265B. Central America: Environment, Sustainable Development, and Security—(Graduate section; see 165B; same as IPER 265.)
3-5 units (*Hoagland*) alternate years, given 2004-05

ANTHSCI 266. Human Evolutionary Ecology—How theories and models from evolutionary ecology can elucidate patterns of human adaptation and behavior. 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 (*Staff*) not given 2003-04

ANTHSCI 266A. Indigenous Forest Management—(Graduate section; see 166A.)
5 units (*Irvine*) not given 2003-04

ANTHSCI 266C. Ocean Policy—(Graduate section; see 166C; same as EARTHSYS 167/267.)
4 units, Aut (*Eagle*)

ANTHSCI 267. Social Policy for Sustainable Resource Use—(Graduate section; see 167.)
5 units, Aut (*Irvine*)

ANTHSCI 267A. Ecotourism and Social Entrepreneurship—Prospects for a transition in the tourism industry toward environmental and social objectives. Case study approach to investigate nature-based destinations around the world and tourism companies and business partnerships with local communities. Competitive implications of certification and labeling.
5 units, Win (*W. Barnett, Durham*)

ANTHSCI 268B. Environmental Justice in the U.S.—(Graduate section; see 168B.)
5 units (*Staff*) not given 2003-04

ANTHSCI 268C. Environmental Politics in Latin America—(Graduate section; see 168C.)
5 units (*Staff*) not given 2003-04

ANTHSCI 269D. Conservation and Colonialism—Interdisciplinary seminar. How colonial ideas and policies are manifest in contemporary efforts at conservation and environmental protection. Western concepts of ecology, evolution, population, and pollution, and the influence of these cultural formulations on environmental debates and everyday lives of people around the world. (HEF II, IV)
5 units (*Staff*) not given 2003-04

ANTHSCI 270. Advanced Medical Anthropology—Prerequisite: 140 and consent of instructor.
5 units, Win (*R. Barrett*)

ANTHSCI 272. Evolution of Human Disease—(Graduate section; see 172.)
5 units (*R. Barrett*) not given 2003-04

ANTHSCI 274. Bioethics and Anthropology—(Graduate section; see 174.)
5 units, Win (*Koenig*)

ANTHSCI 275. The Anthropology of Death and Dying—(Graduate section; see 175.)
5 units (*R. Barrett*) not given 2003-04

ANTHSCI 276A. Anthropological Perspective on Child Welfare—(Graduate section; see 176A.)
5 units (*K. Barrett*) not given 2003-04

ANTHSCI 280. Introduction to Anthropological Genetics—(Graduate section; see 180.)

5 units (Mountain) not given 2003-04

ANTHSCI 286. Advanced Andean Archaeology

3-5 units (Staff) not given 2003-04

ANTHSCI 288. Research in Anthropological Genetics—(Graduate section; see 188.)

1-5 units, Aut, Win (Mountain)

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

5 units (Mountain) not given 2003-04

SPECIAL COURSES

ANTHSCI 290A. Advanced Social Theory in the Anthropological Sciences—Social theories that have influenced anthropology including evolutionism, Marxism, interpretivism, and postmodernism. Implications of debates among theorists for conducting anthropological research. Prerequisite: graduate standing or consent of instructor. With consent of instructors of 190 and 290A, undergraduate majors may substitute 290A for 190. (HEF IV; WIM)

5 units, Win (Brown)

ANTHSCI 290B. Evolutionary Theory in Anthropological Sciences—History of evolutionary theory from the 19th century to present, emphasizing anthropological applications. Theory and concept in evolutionary biology; evolutionary theories of culture; and interactions of genetic and cultural evolution and their implications. Emphasis is on tools of analysis and the value of evolutionary thinking for formulating research questions in anthropology today. Prerequisite: graduate standing or consent of instructor. (HEF II, III)

5 units, Aut (Durham)

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

5 units, Aut, Win, Spr (Staff)

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

5 units, Spr (Klein)

ANTHSCI 293. First Year Paper/M.A. Writing Seminar—Assistance and guidance with first-year paper and master's thesis.

2-3 units, Win, Spr (Mountain)

ANTHSCI 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, Aut, Win, Spr, Sum (Staff)

ANTHSCI 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.

3-5 units, Aut, Win, Spr, Sum (Staff)

ANTHSCI 296. Graduate Internship—Provides graduate students with the opportunity to pursue their area of specialization in an institutional setting such as a laboratory, clinic, research institute, or government agency.

4-5 units, Aut, Win, Spr, Sum (Staff)

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

3-5 units, Aut, Win, Spr, Sum (Staff)

ANTHSCI 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, Aut, Win, Spr, Sum (Staff)

ANTHSCI 299. Directed Individual Study—(Graduate section; see 299.)

1-10 units, Aut, Win, Spr, Sum (Staff)

This file has been excerpted from the *Stanford Bulletin*, 2003-04, pages 221-232. Every effort has been made to ensure accuracy; post-press changes may have been made here. Contact the editor of the bulletin at arod@stanford.edu with changes or corrections. See the bulletin website at <http://bulletin.stanford.edu> for late changes.