

482. Swine Production and Management
Fall. 4(3-2) ANS 152, ANS 313B, ANS 314, ANS 315 or approval of department.

Historical aspects and current trends of breeds, breeding selection, nutritional requirements, management practices, marketing, housing, and environmental needs, disease and parasite control. Field trips required.

483. Swine Nutrition
Spring of odd-numbered years. 3(3-0) ANS 313B; ANS 482.

Digestive and metabolic development and nutrient requirements of swine. Interactions of genetics, disease, endocrinology and environment with nutrition. Critical evaluation of swine feeds and feed formulation. Recent swine nutrition research.

488. Animal Systems in International Development
Spring. 4(4-0) Juniors, ANS 211 or approval of department.

Animal production systems in diverse climatic, geographical and socio-economic environments. Emphasizes species efficiency in human food production and resource use in Africa, Latin America and Asia.

490. Senior Thesis in Animal Science
Fall, Winter, Spring, Summer. 6 to 12 credits. May reenroll for a maximum of 12 credits. Students are limited to a combined total of 12 credits in ANS 400 and ANS 490. Senior Animal Science Majors, approval of department. Not open to graduate students.

Individual study of selected topic and preparation of a senior thesis.

511. Animal Science for Veterinarians
Fall. 4(4-0) First year Veterinary Medicine students.

Husbandry and management of food animals, horses, companion animals, zoo animals and laboratory animals.

512. Physical Examination and Animal Handling II
Spring. 2(0-6) First year Veterinary Medicine students.

Techniques for restraint and examination of cattle, sheep, goats, and swine. Inspections of production units.

525. Animal Nutrition
Spring. 5(4-2) BCH 401.

Principles of nutrition. Nutrients and their metabolism. Nutritive requirements for maintenance, growth, reproduction, lactation and work. Nutrient sources and their use in preparing diets for domestic animals.

800. Advanced Independent Study
(A H 890.) Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 8 credits. Approval of department.

Investigation of areas within animal science of special interest to graduate students.

830. Rumen and Gastrointestinal Microbiology
Fall of odd-numbered years. 3(3-0) MPH 303, BCH 452 or approval of department.

Microbial activities in the rumen and gastrointestinal ecosystems of major livestock species. Microbial types, classification, distribution, degradation and fermentation of substrates, interactions, manipulation and cultivation.

832. Research Methods in Nutrition
(A H 827.) Winter of odd-numbered years. 2(2-0) Approval of department.

Experimental techniques in nutrition: ration formulation, animal management, sampling procedures, balance trials, bioassays, tracer methodology, determination of nutrient requirements.

871. Design of Animal Experiments
(854.) Spring. 4(4-0) STT 423.

Choice, implementation and statistical analysis of experimental plans for research with animals. Designs for reduction of experimental error. Analysis of experiments with complex structure or unequal subclass numbers.

872. Analysis of Unbalanced Multifactor Data
(855.) Spring. 4(4-0) STT 423.

Applied analysis techniques of field or survey data in biological sciences with unbalanced subclass numbers. Building models to fit data and research goals. Interpretation of analysis.

873. Statistical Packages for Analysis of Experiments
Fall. 3(2-2) STT 423 or approval of instructor.

Recording data for computer analysis. Computer files and the EDITOR. Methods include SPSS, SAS, BMDP and GENSTAT.

899. Master's Thesis Research
(A H 899.) Fall, Winter, Spring, Summer. Variable credit. Approval of department.

931. Advanced Ruminant Nutrition
(DRY 925.) Fall of even-numbered years. 4(4-0) PSL 811, ANS 830, approval of department.

Biochemistry, physiology, and microbiology of ruminant digestion. Absorption and metabolism of rumen fermentation products.

935. Comparative Nutrition—Lipids and Carbohydrates
(HNF 926.) Winter of odd-numbered years. 4(4-0) BCH 452 and a previous course on principles of nutrition. Interdepartmental with and administered by Human Nutrition and Foods.

Regulatory aspects of carbohydrate and lipid metabolism as influenced by nutrition in mammals. Emphasis on normal and abnormal physiological states such as obesity, ketosis and diabetes.

936. Comparative Nutrition—Protein Metabolism and Developmental Biology
(HNF 927.) Winter of even-numbered years. 4(4-0) PSL 811 or approval of department. Interdepartmental with Human Nutrition and Foods.

Protein quality assessment, protein status, protein calorie malnutrition, amino acid metabolism, protein turnover, digestion and absorption, hormonal control of protein metabolism, developmental aspects of protein metabolism and growth.

937. Comparative Nutrition—Minerals
(A H 928.) Fall of even-numbered years. 3 credits. PSL 811 or approval of department. Interdepartmental with Human Nutrition and Foods.

Forms and location in body, metabolic roles, deficiency and toxicity signs, interrelationships, requirements and biological availability of sources.

938. Comparative Nutrition—Vitamins
(A H 929.) Spring of odd-numbered years. 3(3-0) BCH 452 and a previous course on principles of nutrition. Interdepartmental with and administered by Human Nutrition and Foods.

Chemical and physical properties, standards of activity, occurrence, metabolic roles, anti-vitamins, deficiency and toxicity signs, requirements and factors affecting requirements.

941. Genetics of Breed Improvement
(A H 963.) Winter of odd-numbered years. 3(3-0) ANS 314, STT 421.

Breed improvement. Changing gene frequency. Genetic and environmental subdivision of phenotypic variance.

942. Breeding Systems and Plans
(A H 964.) Spring of odd-numbered years. 3(3-0) ANS 941.

Biometric relations between related animals. Role of selection in changing populations. The effects of different mating systems.

943. Biometrical Genetics
(965.) Fall. 4(4-0) ANS 872.

Estimation of variance and covariance components. Best linear unbiased prediction of breeding values and selection index. Genetic models for quantitative traits. Correlation of relatives. Selection theory.

999. Doctoral Dissertation Research
(A H 999.) Fall, Winter, Spring, Summer. Variable credit. Approval of department.

ANTHROPOLOGY ANP

College of Human Medicine College of Social Science

100. Human Evolution
Fall, Winter, Spring, Summer. 4(4-0)

Scientific fossil and archaeological evidence on human cultural and biological origins; anticipation of culture in other animals; place of humans among the primates; processes of organic evolution; modern human genetic variability; culture as an adaptive mechanism; cultural development to the dawn of civilization.

171. Introduction to Sociocultural Anthropology (S)
Fall, Winter, Spring, Summer. 4(4-0)

Comparison of ways of life among primitive, peasant and civilized peoples. Implications of these styles of life for understanding of human behavior in general and exotic cultures in particular.

210. The Anthropological Film
Winter. 3(2-2)

Ethnographic film as a preserver of vanishing cultures worldwide, as a tool for ethnological analysis and as a creator of perspectives about other cultures and cultural variability.

221. Social and Cultural Analysis
Fall, Spring. 4(4-0) ANP 171 or approval of department.

Basic theoretical framework of socio-cultural analysis: structural functionalism, evolutionism, and cultural ecology.

**Descriptions — Anthropology
of
Courses**

- 230. Women and Health: Anthropological and International Perspectives**
Spring, 3(3-0)

Crosscultural women's health issues. Health implications of differing life circumstances for women in developing countries. Women as health care providers and consumers. Health issues concerning the female life cycle.

- 250. Culture, Environment and Adaptation (S)**
Fall, 4(4-0)

Culture as an adaptive process—as developed in the million years of human history and still influencing environmental quality, population control, and allocation of resources in primitive and modern societies.

- 255. Prehistory of the Bible Lands**
Spring of odd-numbered years, 3(3-0)

Archaeological evidence for prehistoric cultures of Biblical Palestine up to the establishment of the ancient kingdoms of Judea and Israel around 1200 B.C.; rise of civilization into Old Testament times.

- IDC. Introduction to Contemporary China**
For course description, see *Interdisciplinary Courses*.

- IDC. Contemporary Japan**
For course description, see *Interdisciplinary Courses*.

- 262. Status of Women in Culture and Society: A Comparative View**
Fall, 3(3-0)

Comparative analysis of the status of women emphasizing non-Western cultures and societies. Economic and domestic division of labor between the sexes as a factor underlying division of status, power and authority.

- 263. Introduction to Archaeology**
Winter, 3(3-0)

Archaeologists, work in the field and laboratory; dating the past; analysis of finds; interpretation of sites from Stone Age Caves to ceremonial sites.

- 264. Great Discoveries in Archaeology (S)**
Winter, 4(4-0)

Great discoveries in archaeology that have captured the public's imagination and shaped Western thought, from Olduvai Gorge and Stonehenge to Machu Picchu.

- 265. Vanished Peoples and Lost Civilizations**
Fall, 4(4-0)

Concepts of cultural evolution and origins of civilization as found in popular literature ranging from Atlantis to Chariots of the Gods.

- 266. War and Aggression**
Fall, Spring, 3(3-0)

The question "What makes friends and what makes enemies?" is examined from the standpoint of cultural anthropology. Violence-prone cultures and peaceful ones are compared for factors influencing human aggression.

- 275. The Anthropology of Asia**
Fall of odd-numbered years, 4(4-0)

Several cultural complexes and culture types—from hunting and gathering through complex civilization—of East, Southeast, and South Asia. The cultures and nature of their development will be examined. Past and present significance of cultural stability and change will be seen in a comparative framework.

- 281. Introduction to African Cultures**
Spring, 4(4-0)

Patterns and diversity among contemporary African societies, emphasizing cultural continuity and change.

- 285. Anthropological Perspectives on Global Interdependence**
Spring, 4(4-0)

Interwoven nature of cultural traditions in the modern world. Consideration of how people of developing nations respond to the dominant cultural forces of industrialized nations.

- IDC. Contemporary South Asia**
For course description, see *Interdisciplinary Courses*.

- 343. Introduction to Physical Anthropology**
Fall, 4(3-2)

Problems, data and techniques associated with the main topical areas of physical anthropology: human genetics, hominid evolution, primate behavior, human osteology and human diversity. Field trips may be required.

- 350. Peasant and Social Change in the Developing World**
Fall, 4(4-0) ANP 171.

Cross-cultural examination of peasantry and rural cultures and societies of Asia, Europe and Latin America. Traditional peasants and social change in developing nations.

- 353. Rise of Civilization**
Spring of even-numbered years, 3(3-0)
ANP 100 or ANP 263, or approval of department.

Archaeological evidence for the appearance and development of the world's earliest prehistoric civilizations; ethnological and ethnohistoric perspectives and the nature of complex societies as models applied to archaeological evidence.

- 356. Culture, Health and Illness**
Spring, 4(4-0) ANP 171.

Anthropological study of health behavior. Comparative view of primitive, folk and scientific medical systems and their effect on the individual and the community in the illness situation.

- 380. Methods of Sociocultural Anthropology**
Winter, 4(4-0) ANP 171, one upper division sociocultural ANP course, approval of department.

Field research and analysis methods and techniques in anthropology; development of research problems and questions; alternate models of validation; ethics of research and presentation of findings.

- 381. Anthropology and Education**
Winter, 4(4-0) ANP 171 or other social science. For *Education and Anthropology* majors.

Maturation and socialization in various societies of Asia, Africa, and Latin America. These will be compared with educational institutions in the U.S. and Europe. It is expected to be a contribution to the broader cross-cultural investigation of the teaching/learning process.

- 388. The Anthropology of Social Movements**
Winter, 4(4-0) ANP 171 or approval of department.

Analysis of how different cultures around the world organize and create (or impede) change on the basis of class, religion, race, ethnicity, language, and territory.

- 400H. Honors Work**
Fall, Winter, Spring, Summer, 1 to 16 credits. May reenroll for a maximum of 20 credits. Approval of department.

- 406. Environmental History**
Winter, 4(4-0) Juniors. Interdepartmental with and administered by the Department of History.

History of the impact of human societies on the natural environment. Effect of human induced environmental change on the history of various peoples. Global, thematic approach with emphasis on Europe and America since the 16th century.

- 407. Interactions of Culture and Nutrition**

Spring, 3(3-0) Juniors; HNF 102 or ANP 171 or approval of instructor. Interdepartmental with and administered by Human Nutrition and Foods.

World and U.S. food behavior focusing on conflicts between behavior and nutritional needs at various stages of life cycle. Anthropological, psychological and social influences affecting food behavior are analyzed.

- 411. Studies in the Anthropology of Asia (MTC)**

Fall, Winter, Spring, 4(4-0) May reenroll for a maximum of 16 credits if different subtitles are taken. ANP 171; ANP 275 or approval of department.

Traditional cultures of Asia, emphasizing social, political, economic and ideological factors; traditional cultures and culture change in colonial and modern periods; subtitles focus on different regions of Asia.

- 412. China: Its Civilization, Culture and Society**

Winter, 4(4-0) ANP 171; ANP 275 or approval of department; juniors.

Chinese culture and society from traditional civilization to contemporary state. Emphasis on cultural continuity and change, village and urban society and their relationships.

- 415. Studies in the Anthropology of Africa (MTC)**

Winter, Spring, 4(4-0) May reenroll for a maximum of 16 credits if different subtitles are taken. ANP 171; ANP 281 or approval of department.

Separate courses on African cultures with emphasis on traditional patterns of social organization, political systems, subsistence and ideology; culture change through colonialism and modernization; traditional cultures and modern states.

- 418. Critical Issues in Contemporary Africa (MTC)**

Fall, Spring, 3(3-0) May reenroll for a maximum of 9 credits if different topics are taken. One course on African subject and approval of instructor. Interdepartmental with African Languages and the departments of Geography, History, Political Science, and Sociology. Administered by the Department of History.

Four separate multidisciplinary topics will be offered at different times: The Horn of Africa, Southern Africa, Africa and the Americas, Social Impact Studies.

**Anthropology — Descriptions
of
Courses**

- 419. Studies in the Anthropology of the New World (MTC)**
Fall, Winter, Spring, 4(4-0) May reenroll for a maximum of 12 credits if different subtitles are taken. ANP 171 or approval of department.
Separate courses on cultures within the Americas, with emphasis on traditional patterns of society, political systems, subsistence and ideology; culture change through colonialism and modernization; traditional cultures and modern states.
- 421. North American Indian Ethnography**
Fall of odd-numbered years. 4(4-0) ANP 171; ANP 250 or approval of department.
Native cultures of North America on eve of European contact and during past three centuries of interaction with Europeans. Federal policy toward Native Americans. Traditional adaptations and contemporary problems.
- 423. Cultural Anthropology of Mexican Americans**
Spring. 4(4-0) ANP 221 or ANP 350.
Origins, development, and contemporary variation in Chicano culture as studied anthropologically. Comparative theoretical perspectives in Chicano anthropology.
- 426. Humanistic Perspectives on Global Diversity and Interdependence**
Fall. 4(4-0) Juniors or approval of department. Interdepartmental with and administered by the Department of History.
Anthropological and historical analysis of global diversity and interdependence since the 16th century.
- 427. Contemporary Issues In Global Interdependence and Change**
Winter. 4(4-0) Juniors or approval of department. Interdepartmental with and administered by the Department of History.
Interdependence of the modern world since 1945. Focus on such issues as the impact of the West on the non-western world, industrialization, modernization, population and natural resources.
- 428. Project in Global Studies**
Spring. 4(4-0) HST 426 or HST 427 or approval of instructor. Interdepartmental with and administered by the Department of History.
Supervised project to test students' competence in applying the cultural and historical diversity/interdependence frameworks introduced in the prerequisite courses.
- 430. Environments of International Enterprise**
Fall, Spring. 4(4-0) ANP 171 or approval of department.
Natural, sociocultural, governmental, and global competitive environments that limit and are affected by multinational firms' operations are presented in an anthropological framework.
- 439. Anthropology of Birth**
Fall of odd-numbered years. 4(4-0) ANP 171 or ANP 230 or ANP 262 or ANP 356 or approval of department.
Ethno-obstetrics. Pregnancy, childbirth and infant care in developed and developing nations. Interaction of culture and biology in obstetric phenomena.
- 444. Human Diversity**
Winter of even-numbered years. 3(3-0) ANP 100.
Origins and evolutionary meaning of human physical variability. Racial variation as an adaptive phenomenon. Roles of genetic and environmental influences in creating the phenotype.
- 445. Fossil Hominids**
Winter of odd-numbered years. 3(3-0) ANP 100.
Fossil evidence and theory pertaining to human evolution during the last four million years.
- 446. Primatology**
Spring. 3(3-0) ANP 100.
The order primates: evolution, taxonomy, biology, and behavior. Primate learning, cultural, sexual, maternal, and aggressive behavior; and social organization.
- 448. Forensic Anthropology**
Spring of odd-numbered years. 3(3-0) ANP 343 or approval of instructor.
Physical anthropological analysis of human skeletal remains, reconstruction of individuals from skeletal evidence, and place of physical anthropology in legal proceedings.
- 450. Area Courses in Prehistory (MTC)**
Fall, Winter. 4(4-0) May reenroll for a maximum of 16 credits if different subtitles are taken. ANP 100 or ANP 263.
Archaeology of different areas with emphasis on prehistoric adaptations to natural and social environments. Settlement patterns, subsistence, technology, social organization, economy, style analyzed. Areas vary with staff and student interest.
- 451. African Prehistory**
Fall. 4(4-0) ANP 100 or ANP 263 or approval of instructor.
Prehistory of Africa, with emphasis south of the Sahara, from first human cultures two million years ago to Iron Age. Major research problems, issues, strategies and researchers.
- 453. Origins of Food Production**
Spring of even-numbered years. 4(4-0) ANP 263 or ANP 353.
Archaeological evidence for origins and development of prehistoric animal and plant domestication. Models and theories of adaptive change involving food production origins.
- 454. Paleolithic Archaeology**
Fall of odd-numbered years. 3(3-0) ANP 100, ANP 263 or ANP 353.
Current archaeological knowledge of the origins and development of human culture in Paleolithic Period (2,000,000-12,000 years ago); development, issues and problems in field of Paleolithic archaeology.
- 455. Theory in Historical Archaeology**
Winter of even-numbered years. 4(4-0) ANP 263 or approval of department.
Traces the history of the development of theory and method in historical archaeology. Historic site interpretation is also considered.
- 456. The Practice of Historical Archaeology**
Spring of even-numbered years. 4(4-0) ANP 263 or approval of department.
Course content includes the various methods of artifact typology. Artifact classes, including ceramics, trade goods, firearms, and architecture, are examined for purposes of identifying attributes useful in the areal and temporal placement of historic sites.
- 457. Public Archaeology**
Fall of even-numbered years. 3(3-0) ANP 100; at least one 400-level archaeology course.
History of public archaeology; legislation and review procedures at State and Federal level; contract requirements for reports and field work; roles of amateurs, professional certification and private contractors.
- 458. Archaeological Investigation of Frontiers and Colonization**
Fall. 4(4-0) ANP 100 or ANP 263 or approval of department.
Use of archaeology to study cultural dynamics of frontiers and colonization movements, with emphasis on North America. Results of recent historical archaeological research in frontier and colonizing situations.
- 463. Social Anthropology**
Fall. 4(4-0) ANP 171 or approval of department.
Organization and structure of non-Western societies, ranging from simpler tribal and peasant societies to complex civilizations. Social institutions, such as those based upon kinship, sex, age and status, analyzed for specific groups.
- 464. Religion and Culture**
Fall. 4(4-0) ANP 171 or SOC 241 or approval of department.
Religious beliefs and magical practices of primitive peoples and functions of magic and folklore in contemporary society. Religion as an institution in society.
- 465. Symbolic Anthropology**
Winter. 4(4-0) ANP 221 or ANP 463 or ANP 464. or approval of department.
Course explains how human perception and communication are guided by systems and meanings and relates systems of thought to systems of action. Examples from western and non-western cultures.
- 467. Language and Culture**
Fall, Spring. 4(4-0) Approval of department. Interdepartmental with the Department of English.
A survey exploring the interconnectedness of language and culture. Special areas to be emphasized include: Child Language Learning; Linguistic and Cultural Contact Phenomena; "Specialized" Languages, such as Cant, Argot, Trade Jargon, Lingua Franca; "Hybridization" and "Substratum"; Language and Cultural Change; a brief examination of Theories of Origins and of the Sapir-Whorf Hypothesis.
- 472. Anthropology of Legal Systems**
Spring of even-numbered years. 4(4-0) ANP 221 or ANP 463 or approval of department.
A comparative examination of legal ideas in selected non-Western preindustrial and peasant societies; parallels and contrasts are drawn with key legal ideas of modern Western systems.
- 473. Culture and Personality**
Fall, Spring. 4(4-0) One 300 level anthropology or sociology course. Interdepartmental with the Department of Sociology.
Human nature in evolutionary and cross-cultural perspective. Special attention to relating theories of anthropology and psychology to methods of studying personality in non-Western societies.

**Descriptions — Anthropology
of
Courses**

474. Culture and Economic Behavior

*Winter of even-numbered years. 4(4-0)
ANP 221 or ANP 463 or approval of department.*
Economic systems of changing cultures in Asia, Africa and Latin America. The cultural matrix of economic transactions and relations of economic and other social and cultural institutions seen in a comparative framework. Emphasis is placed on traditional agricultural or tribal communities.

477. Urban Anthropology

*Winter of even-numbered years. 3(3-0)
Juniors.*
Applies anthropological concepts to urban issues. The cross-cultural perspective includes the study of American culture and cities. Topics include ideology, social organization, power, proxemics, urbanization processes and urban reform.

479. Anthropology Capstone Course

Spring. 4(4-0) Senior Anthropology majors.
Seminar on the integration of the subdivisions of anthropology and its distinctions from other approaches in the social sciences; perspectives on future directions of anthropological inquiry and options for careers.

482. American Folk Medicine

Winter. 3(3-0) Juniors or approval of department.
Traditional practices of health maintenance and healing in American subcultures. Health-related folklore and practices include taboos, religious healing, witchcraft and herbal medicine.

484. Methods of Field Archaeology

Summer. 4(4-0) ANP 263 or approval of department.
Methods of field research in archaeology. Site survey, excavation, sampling, data recording, field photography, field laboratory procedures, mapping. Problem formation, hypothesis testing, preliminary analysis.

486. Practicum in Field Archaeology

Summer. 2 to 12 credits. May reenroll for a maximum of 20 credits. Approval of department.
Application of methods and techniques of field archaeological research using actual sites and in the context of participation in a research program. Small groups work closely with staff in the execution of research designs.

490. Topics in Anthropology (MTC)

Fall, Winter, Spring, Summer. 2 to 6 credits. May reenroll for a maximum of 20 credits when a different topic is given. Approval of department.
Experimental courses and courses taught by visiting scholars.

495. Topics in Medical Anthropology (MTC)

Fall, Winter, Spring. 2 to 6 credits. May reenroll for a maximum of 16 credits if different subtitles are taken. Approval of department.
Western and non-Western health care and medical systems, relationships between cultural systems and treatment of illness, cross-cultural analysis of health maintenance and medical delivery.

499. Independent Study

Fall, Winter, Spring, Summer. 2 to 16 credits. May reenroll for a maximum of 16 credits. Written approval of instructor and department.
Study of a selected topic under the guidance of a faculty adviser in the area of speciality, including field work.

800A. Concepts in Anthropology: Sociocultural Anthropology

Fall. 4(4-0) Approval of department.
Theories, methods, data and issues characterizing anthropology among the social sciences and distinguishing sociocultural anthropology from other subdisciplines.

800B. Concepts in Anthropology: Biocultural Evolution

Winter. 4(4-0) Approval of department.
Theories, methods, data and issues characterizing the study of human biological and cultural development from the perspective of anthropology.

800C. Concepts in Anthropology: The Archeological Study of Culture

Spring. 4(4-0) Approval of department.
Archaeological methods and techniques of cultural study and reconstruction. Application of archaeological data to study of world prehistory. Archaeological approaches to culture theory and process.

820. Overview I, Medical Anthropology

Fall. 3(3-0) Approval of instructor.
Theoretical frameworks central to studies of health and illness. Culturally defined approaches to diagnosis and healing. The evolution of disease.

821. Overview II, Medical Anthropology

Winter. 3(3-0) Approval of instructor.
A modular seminar in theoretical and applied issues in medical anthropology. A different theme is explored each year (e.g., healers, biology and culture, political economics of health).

822. Overview III, Medical Anthropology

Spring. 3(2-2) Approval of department.
Clinical applications of medical anthropological method and theory. Observation and analysis of health care delivery in varied cultural and clinical settings.

823. Seminar on Ethno-obstetrics and Midwifery

*Fall of even-numbered years. 3(3-0)
ANP 439 or approval of department.*
Anthropological perspectives on obstetric systems in different cultures. Functions, philosophies and efficacy of birth practitioners in modern and traditional societies. Crosscultural obstetric technologies. Crosscultural maternal and child health care delivery systems.

825. Nutritional Anthropology

*Fall of odd-numbered years. 3(3-0)
Approval of instructor.*
Cross-cultural perspectives on dietary issues with intensive examinations of foodways of different societies such as hunter-gathers compared with farmers; cultural considerations in nutrition and growth studies; genetic adaptation to environment.

826. Anthropological Analysis of Population

*Spring of odd-numbered years. 4(4-0)
SOC 420 or approval of instructor.*
Anthropological approaches to human population dynamics from prehistoric times to the present. Critical approaches to the theory of the demographic transition. Relationships among social structure, household economic situations and population.

830. Kinship Studies

*Winter of odd-numbered years. 4(4-0)
Approval of department.*
The course will raise the question of what kinship is and why it has been such a central topic in anthropology. Various controversies and theoretical trends will be presented and analyzed.

831. Linguistic Anthropology

Winter. 4(3-2) Approval of department.
The nature of language; techniques for the description and comparison of languages; linguistics as an anthropological tool; language and culture.

832. Language and Cultural Meaning

*Spring of even-numbered years. 4(4-0)
ANP 467 or approval of department.*
Anthropological understandings of nature of language and its relationship to meaning in communication. Structuralist and nonstructuralist approaches in French and American anthropological linguistics.

835. Human Osteology and Osteometry

*Spring of even-numbered years. 5(3-4)
Approval of department.*
Identification of human bones and fragments; aging, sexing and determining the race of skeletal remains; measuring techniques for cranial and postcranial remains; the more common forms of paleopathology.

837. Problems in Contemporary Physical Anthropology

*Winter of even-numbered years. 3(3-0)
Approval of department.*
Research problems, issues, questions and controversies in physical anthropology as reflected in contemporary literature.

839. African Research

*Fall, Winter, Spring. 2 to 4 credits.
May reenroll for a maximum of 8 credits. Graduate standing or approval of instructor. Interdepartmental with African Languages and the departments of Educational Administration, Geography, History, Political Science, and Sociology.*
African-related archival and field research topics and methodologies viewed from perspective of relevant social science and humanistic disciplines associated with the African Studies Center.

840. Biocultural Evolutionary Theory

Fall. 3(3-0) Approval of department.
Anthropological theories about processes, causes and nature of evolutionary development in human biology and culture, and about the interaction between biology and culture in humans.

850. Archaeological Methods and Techniques

Winter. 4(4-0) Approval of department.
Seminar outlining archaeological method and the role of technique in the strategy of archaeology. Techniques and problems of information retrieval will be emphasized.

853. Problems in the Origins of Complex Societies

*Spring of even-numbered years. 3(3-0)
Approval of department.*
Issues and problems in archaeological and ethnological theory concerning appearance and early development of civilization in prehistory.

855. Current Issues in Archaeology
Spring of odd-numbered years. 3(3-0)
Approval of department.

Issues, problems, theoretical advances and methodological innovations affecting the conduct of research in contemporary archaeology.

856. Methodology of Anthropological Research
Winter. 1 to 12 credits. Approval of department.

Seminar in problems of anthropological investigation considered in the framework of history and philosophy of science. Relevance of various field techniques, methods of data gathering and data handling, and strategies of analysis for various problems are treated.

858. Ethnographic Analysis
Fall of even-numbered years. 4(4-0)
Approval of department.

Methodological and theoretical issues and approaches to analysis of the ethnographic monograph.

860. Anthropological Theory
Fall of odd-numbered years. 4(4-0)
Approval of department.

Development of contemporary anthropological theory from 18th and 19th century foundations. Major paradigms in current anthropology, emphasizing critical issues and problems in theory.

861. Religion and Ritual
Winter of even-numbered years. 3(3-0)
Approval of department.

Anthropological theories and crosscultural analyses of the significance of religion and ritual and patterns of their variation among world cultures.

862. Theories of Sociocultural Change
Winter of even-numbered years. 3(3-0)
Approval of department.

Anthropological theories concerning change in sociocultural systems and relationships. Major theorists in sociocultural change and the development of theory. Methods of analysis and their applications.

863. Class and Ethnicity in Social Differentiation
Spring of odd-numbered years. 4(4-0)
Approval of department.

Anthropological theories on nature and sources of social differentiation and inequalities within cultures and ethnic communities. Class and ethnic identity in their cultural contexts.

864. Gender, Age and Social Differentiation
Fall of odd-numbered years. 4(4-0)
Approval of department.

Anthropological theories on nature and sources of social differentiation and inequality within cultures and ethnic communities, emphasizing gender and age distinctions in their cultural contexts.

865. Cultural Ecology
Spring of even-numbered years. 4(4-0)
Approval of department.

Relationship of human populations to their ecosystems; comparative analysis of roles of technology and culture in mediating environmental adaptation; processes of change; case studies of technologically induced sociocultural change.

869. Social Impact Analysis and International Development
Spring of odd-numbered years. 4(4-0)
Approval of department. Interdepartmental with the Department of Sociology.

Evaluation of development programs and assessment of their sociocultural impacts on Third World rural populations. Methods of impact analysis. Anthropological theories of change and development.

872. Seminar in Special Subject Fields (MTC)
Fall, Winter, Spring, Summer. 2 to 6 credits. May reenroll for a maximum of 24 credits when new fields are offered. Approval of department.

Special fields of study will include any area of anthropology selected.

874. Seminar in Economic Anthropology
Winter of odd-numbered years. 4(4-0)
ANP 474 or approval of instructor.

Issues, problems, theories and current research in anthropological analyses of nonindustrial economies and their relationship to rest of culture. Emphasizes primitive, peasant cultures before and since emergence of capitalism.

875. Individual Research Projects
Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 24 credits with approval of department. Approval of department.

880. Individual Readings
Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 24 credits with approval of department. Approval of department.

899. Master's Thesis Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

999. Doctoral Dissertation Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

ARABIC

See Linguistics and Germanic, Slavic, Asian and African Languages.

ART

College of Arts and Letters

History of Art

HA

205. Purposes of Art (A)
Fall, Winter, Spring. 3(3-0) Not open to majors.

Individual paintings, sculptures, and architectural works examined intensively for their reflections of cultural life, especially in the Western World, as well as for their formal and stylistic qualities.

206. History of Western Art: The Ancient World (A)
Fall, Winter, Spring. 4(4-0)

The art and architecture of the ancient world and their significance as a vehicle of expression of changing values in the cultural milieu discussed.

207. History of Western Art: The Middle Ages and the Renaissance (A)
Fall, Winter, Spring. 4(4-0)

Changes in style and concept in art and architecture, and the significance of these changes in the cultural and social life of the Medieval and Renaissance periods.

208. History of Western Art: The Baroque to the Present (A)
Fall, Winter, Spring. 4(4-0)

The nature and significance of art in the modern period as an extension of church and state, as an expression of revolution, and as a symbol of individualism.

304. Greek Art and Archaeology
Winter of odd-numbered years. 4(4-0)
H A 206 or approval of department.

The history of painting, sculpture, and architecture of Ancient Greece from the Bronze Age through the Hellenistic period. The history of archaeological excavations of selected sites.

305. Roman Art and Archaeology
Spring of odd-numbered years. 4(4-0)
H A 206 or approval of department.

The history of painting, sculpture and architecture of Ancient Rome from the Republic through the 4th century. The history of archaeological excavations of selected sites.

330. Baroque Art
Fall of odd-numbered years. 3(3-0)
H A 208 or approval of department.

Painting, sculpture, and architecture circa 1600 to circa 1750, with emphasis on Bernini, Rubens, Rembrandt, Velazquez, and Poussin, and their significance in the social and cultural life of their times.

350. Women in Modern Art
Fall, Winter of odd-numbered years. 3(3-0) H A 208 recommended.

Contributions of selected European and American women artists and architects active since the late nineteenth century: analysis of their oeuvres and their changing relationships to mainstream artistic/critical developments.

406. Ancient Painting
Spring of odd-numbered years. 4(4-0)
H A 206 or approval of department.

Ancient Greek and Roman painting, including Minoan Crete. Special emphasis is placed on Archaic and Classical Greek painting on pottery and on Roman wall painting from Pompeii and elsewhere.

407. Ancient Sculpture
Fall of odd-numbered years. 4(4-0)
H A 206 or approval of department.

The sculpture of Ancient Greece and Rome, from the Bronze Age through Early Christian times.

408. Ancient Architecture
Spring of even-numbered years. 4(4-0)
H A 206 or approval of department.

The architecture of Ancient Greece and Rome, from Mycenaean times to the 6th century A.D., with special emphasis on the religious architecture of Classical Greece and Imperial Rome.