Descriptions—Animal Science of Courses

511. Animal Science for Veterinarians
Spring, Summer. 3(3-0)
R: Open only to graduate-professional students in the College of Veterinary Medicine.
persons also may enroll. Management of animals, husbandry of domestic animals, and zoo animals. Animal husbandry, animal agriculture, production and management goals.
QA: ANS 511

512. Animal Nutrition for Veterinarians
Fall, Winter, Spring, Summer. 3(3-0)
R: Open only to graduate-professional students in the College of Veterinary Medicine.
Nutrition for domestic animals and wildlife. Comparative nutrient digestion and metabolism. Nutritional requirements for maintenance, growth, reproduction, lactation, and work.
QA: ANS 512, BHI 401 QA: ANS 525

810. Gastrointestinal Microbiology of Domestic Animals
Fall, 3(3-0)
Microbial ecology of gastrointestinal tract. Microbial role in nutrition, health, and productivity. Environmental applications. Livestock species emphasized.
QA: ANS 859

811. Research Techniques in Animal Nutrition and Metabolism
Fall, Winter, Spring, Summer. 3(3-0)
R: Open only to graduate students in Animal Science. Nutrient analyses, digesta flow kinetics, and digestion-balance trials. Hormone analyses, tissue culture, enzyme assays, metabolic fluxes, tracer methodology, and nuclear acid isolation and analysis.
QA: ANS 852

890. Advanced Independent Study
Fall, 1 to 6 credits. A student may earn a maximum of 8 credits in all enrollments for this course.
QA: ANS 800, AH 890

899. Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 96 credits in all enrollments for this course.
R: Open only to master's students in Animal Science. Approval of department.
QA: ANS 899

943. Linear Models in Quantitative Genetics
Spring, 3(3-0)
P: STT 444, R: Open only to graduate students in College of Agriculture and Natural Resources. Breeding values of livestock. Linear models to determine genetic basis of livestock performance. Covariance analysis, fixed and random models. Better linear unbiased predictions.
QA: STT 423 QA: ANS 872, ANS 943

999. Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 96 credits in all enrollments for this course.
R: Open only to doctoral students in Animal Science. Approval of department.
QA: ANS 999

ANTHROPOLOGY

101. Introduction to Anthropology
Fall, Spring, Summer. 3(3-0)

201. Sociocultural Diversity
Fall, Spring, Summer. 3(3-0)
Origins and diversity of cultural systems. Theories of culture. Patterns of kinship, Religious, economic, and political institutions.
QA: ANP 171

202. Biocultural Evolution
Fall, Spring, Summer. 3(3-0)
QA: ANP 100

220. Gender Relations in Comparative Perspective
Fall, 3(3-0)
Gender relations in different cultures, Economic and domestic division of labor between the sexes as a factor underlying power differentials.
QA: ANP 282

264. Great Discoveries in Archaeology
Spring, 3(3-0)
Great discoveries in archaeology that have captured the public imagination and shaped Western thought, from Olduvai Gorge and Stonehenge to Machu Picchu.
QA: ANP 264

270. Women and Health: Anthropological and International Perspectives
Fall, 3(3-0)
QA: ANP 250

280. The Anthropological Film
Spring, 3(2-2)
Ethnographic film as a record of vanishing cultures, as a tool for ethnological analysis, and as a source of perspectives on different cultures and variability within cultures.
QA: ANP 210

320. Social and Cultural Analysis
Fall, Spring, 4(4-0)
P: ANP 101 or ANP 201.
Major theoretical traditions of cultural anthropology. Functionalism, symbolism, structuralism, and contemporary developments.
QA: ANP 171 QA: ANP 221

321. Anthropology of Social Movements
Fall, 3(3-0)
P: ANP 101 or ANP 201.
How social movements within different cultures around the world organize, create, or impede change on the basis of class, religion, race, ethnicity, language, and territory.
QA: ANP 171, ANP 221 QA: ANP 388

322. Peasants and Social Change in the Developing World
Spring, 3(3-0)
P: ANP 101, ANP 201.
Cross-cultural perspectives on patterns and variations in peasant systems worldwide. Social mechanisms with which they respond to change.
QA: ANP 171, ANP 221 QA: ANP 350

340. Introduction to Physical Anthropology
Spring, 3(3-2)
P: ANP 101 or ANP 202.
Problems, data, and methods of physical anthropology. Human genetics, hominid evolution, primates, human osteology, and human diversity. Field trips at the student's expense may be required.
QA: ANP 100 QA: ANP 348

350. Introduction to Archaeology
Fall, 3(3-0)
Theory, methodology, and techniques of archaeology. Applications to questions about past human behavior. History and concepts of archaeology as an anthropological subdiscipline.
QA: ANP 100, ANP 264 QA: ANP 263

361. Paleolithic Archaeology
Fall, 3(3-0)
P: ANP 101 or ANP 264 or ANP 360.
Stone Age archaeology from the dawn of tool making to the specialized hunters and cave artists of the late Ice Age.
QA: ANP 100, ANP 263, ANP 264 QA: ANP 454

362. Evolution of Agrarian Society
Spring, 3(3-0)
P: ANP 101 or ANP 262 or ANP 264 or ANP 360. R: Not open to freshmen and sophomores.
Food production as adaptive strategy. Archaeological evidence for the appearance and development of food production in prehistory. Theories, problems, and issues in the study of food production evolution.
QA: ANP 100, ANP 263, ANP 264 QA: ANP 453

363. Rise of Civilization
Spring, 3(3-0)
P: ANP 101 or ANP 360.
Archaeological evidence for the appearance and development of the world's earliest prehistoric civilizations. The nature of complex societies and the comparative evolution of states.
QA: ANP 100, ANP 263, ANP 264 QA: ANP 353

370. Culture, Health, and Illness
Spring, 3(3-0)
P: ANP 101 or ANP 201 or ANP 202 or ANP 270.
Cross-cultural perspectives on the definition and treatment of illness.
QA: ANP 171, ANP 200, ANP 221, ANP 239 QA: ANP 356

410. Revolution and Social Change in Latin America
Fall of odd-numbered years. 3(3-0)
P: ANP 101 or ANP 201. R: Not open to freshmen and sophomores.
Revolutionary events and their social and political consequences in Latin America.
QA: ANP 171, ANP 221

411. North American Indian Ethnography
Spring of even-numbered years. 3(3-0)
P: ANP 101 or ANP 201.
Social and cultural patterns of North American Indian societies. History, economy, politics, social organization, religion, and social change.
QA: ANP 171, ANP 221 QA: ANP 421

412. Social and Cultural Status of Latinos in the U.S.
Spring of odd-numbered years. 3(3-0)
P: ANP 101 or ANP 201 or SOC 101. R: Not open to freshmen and sophomores.
Social and cultural history of Chicano, Puerto Rican, Cuban, and Central American populations in the United States and their contributions to American society.
QA: ANP 171, ANP 221, SOC 241

413. Cultures of Southeast Asia
Spring of odd-numbered years. 3(3-0)
P: ANP 101 or ANP 201.
Southeast Asian peoples, cultures, and nations. Tropics, forests, and sea trading adaptations. Recent social change.
QA: ANP 171, ANP 221 QA: ANP 411

414. Anthropology of South Asia
Fall of even-numbered years. 3(3-0)
P: ANP 101 or ANP 201.
Anthropology of India, Pakistan, Nepal, Bangladesh, and Sri Lanka. Religion, social organization, village life, urban structures, economic organization, history, and social change.
QA: ANP 171, ANP 221, ANP 275 QA: ANP 411

415. China: Culture and Society
Fall of odd-numbered years. 3(3-0)
P: ANP 101 or ANP 201.
Socioeconomic and cultural continuity and change from traditional civilization to the contemporary state and the communist period. Village and urban society and their relationships.
QA: ANP 171, ANP 221, ANP 275 QA: ANP 412
Anthropology—Descriptions of Courses

416. Anthropology of Southern Africa
Fall of odd-numbered years. 3(3-0)
P: ANP 101 or ANP 201.
Structure and organization of major cultures. Transformations caused by global, national, and local forces.
QP: ANP 171, ANP 221 QA; ANP 415

417. Anthropology of East Africa
Spring of odd-numbered years. 3(3-0)
P: ANP 101 or ANP 201.
Social and cultural organization of the peoples of eastern Africa. Relationships between states and ethnic groups.
QP: ANP 171, ANP 221, ANP 281 QA; ANP 415

420. Language and Culture
Fall, Spring. 3(3-0) Interdepartmental with English.
P: ANP 101 or ANP 201 or ANP 320.
QP: ANP 171, ANP 221

421. Social Anthropology
Fall of odd-numbered years. 3(3-0)
P: ANP 101 or ANP 201.
Social structure and social organization. The anthropological understanding of human conduct.
QP: ANP 171, ANP 221 QA; ANP 483

422. Religion and Culture
Fall of odd-numbered years. 3(3-0)
P: ANP 101 or ANP 201.
The anthropology of religion and the symbolic analysis of ritual. Theoretical and ethnographic literature.
QP: ANP 171, ANP 221 QA; ANP 464

423. Psychological Anthropology
Spring of odd-numbered years. 3(3-0)
P: ANP 101 or ANP 201.
Cross-cultural perspectives on culture and personality. Enculturation, life-cycle, person and self, emotion and cognition, mental illness.
QP: ANP 171, ANP 221 QA; ANP 473

424. Culture and Economic Behavior
Fall of even-numbered years. 3(3-0)
P: ANP 101 or ANP 201 or SOC 101 or EC 202.
Studies of the relationship of economy to sociocultural phenomena in pre-capitalist and dependent capitalist societies.
QP: ANP 171, ANP 221, SOC 241, EC 262 QA; ANP 474

455. Culture and Power
Fall of odd-numbered years. 3(3-0)
P: ANP 101 or ANP 201.
Recent theoretical studies of power. Societal rules and conventions. How and why people abide or transcend rules and conventions.
QP: ANP 171, ANP 221

426. Urban Anthropology
Spring of even-numbered years. 3(3-0)
P: ANP 101 or ANP 201.
The anthropological approach to urban issues. Cross-cultural perspectives on the informal economy, power, ideology, and the city.
QP: ANP 171, ANP 221 QA; ANP 477

427. Interpretive Anthropology
Fall of even-numbered years. 3(3-0)
P: ANP 101 or ANP 201.
Cultural study as a system for interpreting experiences through shared meanings and understandings. The relationship of social science to systems of action. Implications for conducting anthropological fieldwork and describing other cultures.
QP: ANP 171, ANP 221 QA; ANP 477

429. Ethnographic Field Methods
Summer. 3(3-0)
P: ANP 101 or ANP 201.
Field research in cultural anthropology. Research design, participant observation, relationships of techniques to methods, and ethics.
QP: ANP 171, ANP 221 QA; ANP 490

440. Hominid Fossils
Spring of even-numbered years. 3(3-0)
P: ANP 101 or ANP 202.
Theory of human evolution through the five million years fossil evidence.
QP: ANP 100, ANP 343 QA; ANP 445

441. Osteology and Forensic Anthropology
Spring of odd-numbered years. 3(3-0)
P: ANP 202 or CS 210.
QP: ANP 100, ANP 343, CS 210 QA; ANP 448

442. Genes and Diversity
Fall of odd-numbered years. 3(3-0)
Controversies over the contributions of nature and nurture to biology. Early human population differentiation and the race concept.
QP: ANP 100, ANP 343 QA; ANP 444

450. African Archaeology
Fall of even-numbered years. 3(3-0)
P: ANP 101 or ANP 360.
The archaeological sequence in Africa from the dawn of the Paleolithic to the late Iron Age. Key sites and the interpretation of archaeological evidence.
QP: ANP 100, ANP 263 QA; ANP 451

451. European Prehistory
Spring of odd-numbered years. 3(3-0)
P: ANP 101 or Spring.
Patterns of change in technology, subsistence, economy, settlement, social organization, and political complexity from the earliest human occupation through the Iron Age. Major issues in European archaeology.
QP: ANP 100, ANP 263

452. North American Prehistory
Spring of even-numbered years. 3(3-0)
P: ANP 101 or ANP 360.
Character and processes of North American prehistory on a regional level. Economic, social, political, and technological change through time.
QP: ANP 100, ANP 263 QA; ANP 450

453. Mesoamerican Prehistory
Fall of odd-numbered years. 3(3-0)
P: ANP 101 or ANP 360.
Emergence and development of civilizations from first occupation to Spanish contact. Use of archaeology, ethnohistory, and history. Major theories of plant domestication and state evolution.
QP: ANP 100, ANP 263 QA; ANP 450

459. Public Archaeology
Fall of even-numbered years. 3(3-0)
P: ANP 360.
Federal and state legislation and regulations governing archaeology and historic preservation. Major agencies responsible for compliance.
QP: ANP 100, ANP 263 QA; ANP 457

461. Method and Theory in Historical Archaeology
Fall of odd-numbered years. 3(3-0)
P: ANP 360.
Theory and methodology in historical archaeology and its relation to history and anthropology.
QP: ANP 100, ANP 263 QA; ANP 455

462. Frontiers and Colonization in Historical Archaeology
Spring of odd-numbered years. 3(3-0)
P: ANP 360. R: Not open to freshmen.
Cultural dynamics and processes of colonial and post colonial archaeology. Theoretical and methodological research in frontier and contact archaeology. European expansion in North America.
QP: ANP 100, ANP 263 QA; ANP 458

463. Laboratory Methods in Archaeology
Spring of even-numbered years. 3(3-0)
P: ANP 360.
Preparation and preservation of archaeological data. Characteristics of soil, the analysis, and classification of artifacts, analysis of habitation, ceramics, faunal and floral remains, metals, and glass.
QP: ANP 100 or ANP 263

464. Field Methods in Archaeology
Summer. 2 to 6 credits.
A student may earn a maximum of 12 credits in all enrollments for this course.
P: ANP 101 or ANP 360.
Field research. Survey, excavation, mapping, data recording, and field laboratory procedures.
QP: ANP 100, ANP 263 QA; ANP 464, ANP 466

470. Food, Hunger and Society
Fall of even-numbered years. 3(3-0)
P: ANP 201 or ANP 202 or ANP 370 or HNW 150. R: Not open to freshmen and sophomores.
Cultural, economic, social, and ecological factors affecting the production and use of food. Relationship of culture to hunger.
QP: HNW 102, ANP 171 QA; ANP 470

480. History of Anthropological Theory
Fall of even-numbered years. 3(3-0)
P: ANP 201 or ANP 202; one 500-level Anthropology course or ANP 360.
The 18th, 19th and early 20th century foundations of science and theory. Major contemporary theoretical approaches.
QP: ANP 100, ANP 171

485. Anthropology Capstone Course
Spring. 3(3-0)
P: ANP 201, ANP 202, ANP 360. R: Open only to seniors in Anthropology.
Integration of the subdivisions of anthropology. Differences between anthropology and other approaches in the social sciences. Future directions of anthropological inquiry.
QP: ANP 100, ANP 171 QA; ANP 479

490. Independent Study
Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
R: Approval of department.
Individual research and reading supervised by a faculty member.
QA: ANP 499

491. Topics in Anthropology
Fall. Spring. Summer. 1 to 4 credits.
A student may earn a maximum of 12 credits in all enrollments for this course.
P: ANP 101 or ANP 201 or ANP 202; one 500-level anthropology course or ANP 360.
Selected topics in sociocultural anthropology, archaeology, physical anthropology, anthropological linguistics, or medical anthropology.
QP: ANP 100, ANP 171 QA; ANP 490

520. Language and Cultural Meaning
Spring of even-numbered years. 4(3-2)
P: ANP 420. R: Open only to graduate students.
Cultural and historical linguistic thinking. Saussure's influence on cultural anthropology. Post-structuralist approaches.
QP: ANP 467, ENG 467 QA; ANP 851, ANP 832

522. Religion and Ritual
Fall of even-numbered years. 3(3-0)
R: Open only to graduate students in Anthropology. Cross-cultural comparison of religious beliefs, values, and practices in traditional and developing cultures. Religious institutions in cultural systems. Anthropological theories of religion and culture.
QP: ANP 484, ANP 486

529. Research Methods in Cultural Anthropology
Spring of odd-numbered years. 3(3-0)
P: ANP 420. R: Open only to graduate students in Anthropology.
Theoretical and methodological understandings. Project design, field strategies, research techniques, and methods of data analysis.
QA: ANP 855

530. Kinship Studies
Spring of odd-numbered years. 3(3-0)
P: ANP 421. R: Open only to graduate students.
Cultural and historical kin-relatedness, kinship conflicts and kinship in familial, political, and other domains.
QP: ANP 463 QA; ANP 830
Descriptions—Anthropology of Courses

831. Seminar in Cultural Ecology
Fall of even-numbered years. 3(3-0)
R: Open only to graduate students. Approval of department.
Anthropological theories for understanding culture as a system of mediation between humans and environment. Cultural ecological approaches applied to sociocultural change and stability.
QA: ANP 865

832. Class and Ethnicity in Social Differentiation
Fall of odd-numbered years. 3(3-0)
R: Open only to graduate students. Approval of department.
Anthropological theories on nature and sources of social differentiation and inequality within cultures and ethnic communities. Class and ethnic identity in cultural contexts.
QA: ANP 883

833. Ethnographic Analysis
Fall of even-numbered years. 3(3-0)
R: Approval of instructor.
Methodological and theoretical issues in the analysis of the ethnographic monograph.
QA: ANP 858

834. Medical Anthropology I: Overview
Fall. 3(3-0)
R: Approval of department.
Anthropological approaches to the study of sickness, disease, and healing. Medical anthropology as a sub-discipline.
QA: ANP 820

835. Medical Anthropology II: Theoretical and Applied Issues
Spring. 3(3-0)
P: ANP 834. R: Approval of department.
Seminar in the description and analysis of themes in medical anthropology.
QA: ANP 821, ANP 822

836. Theories of Sociocultural Change
Fall of even-numbered years. 3(3-0)
R: Open only to graduate students. Theoretical and methodological issues. Major theorists and models.
QA: ANP 883

837. Seminar in Economic Anthropology
Spring of odd-numbered years. 3(3-0)
P: ANP 424 or approval of department. R: Open only to graduate students in Anthropology.
Central research topics in the economic anthropology of peasant societies. Dependent capitalist formation and marginal sectors.
QP: ANF 474 QA: ANP 874

838. Agrarian Systems and Social Transformation
Fall of odd-numbered years. 3(3-0)
Structure and organization of agrarian societies. Transformations caused by global, national and local forces.

839. Age and Gender
Fall of odd-numbered years. 3(3-0)
R: Open only to graduate students. Cultural construction of age and gender. Effects on the individual and society.
QA: ANP 864

840. Bicultural Evolution
Fall. 3(3-0)
R: Open only to graduate students in Anthropology. One course in human evolution. Major contemporary issues in evolutionary theory, taxonomy, and the evolution of biology and culture.
QA: ANP 840

841. Physical Anthropology
Spring of even-numbered years. 3(3-0)
R: Open only to graduate students. Approval of department.
Controversies in biological anthropology. History of physical anthropology and current theoretical perspectives. Critical approaches to research design.
QA: ANP 837

842. Human Osteology
Spring of even-numbered years. 5(4-2)
R: Approval of department.
Human bone biology, skeletal anatomy, and osteological analysis.
QA: ANP 835

843. Nutritional Anthropology
Spring of even-numbered years. 3(3-0)
P: ANP 470 or approval of department.
Food, foodways, and nutrition in different cultural systems. Production, storage, processing, and consumption. The social significance of eating, foods, and body image.
Research methods.
QA: ANP 825

850. Principles of Archaeological Analysis
Spring of even-numbered years. 3(3-0)
P: GEO 465 or approval of instructor. R: Open only to graduate students.
Formal, spatial, and temporal dimensions of archaeological research design. Appropriate analytic techniques.
QA: GEO 427 QA: ANP 850

853. Archaeological Theory
Fall of even-numbered years. 3(3-0)
R: Open 300- or 400-level archaeology course and approval of department.
Major anthropological theories of the emergence and development of civilizations. Role of archaeological data in formulating, testing, and refining these theories.
QA: ANP 853

855. The Roots of Contemporary Anthropological Theory
Spring. 3(3-0)
Development of contemporary anthropological theory from the 19th and 20th centuries. Major paradigms in current anthropology.
QA: ANP 860

857. Social Impact Analysis
Fall of even-numbered years. 3(3-0)
Inter-departmental with Sociology. Sociocultural consequences of development programs on populations, communities, and regions in developing and industrial societies. Theory, purposes, methods, outcomes, and uses of social impact analysis.
QA: ANP 869, SOC 869

880. Issues in Contemporary Archaeology
Fall of odd-numbered years. 3(3-0)
R: Open only to graduate students in Anthropology. One 300- or 400-level archaeology course. Approval of department.
Theories, issues, problems, and methodological innovations affecting the conduct of research in archaeology.
QA: ANP 885

890. Individual Readings
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 16 credits in all enrollments for this course.
R: Open only to graduate students. Approval of department.
Advanced study, based on prior preparation, under faculty direction.
QA: ANP 880

890B. Individual Research
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 16 credits in all enrollments for this course.
R: Approval of department.
Graduate student projects under faculty direction.
QA: ANP 875

892. Seminar in Anthropology
Fall, Spring, Summer. 1 to 4 credits.
R: Open only to graduate students in Anthropology. Approval of department.
Studies in selected fields.
QA: ANP 872

899. Master's Thesis Research
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 99 credits in all enrollments for this course.
R: Open only to graduate students in Anthropology. Approval of department.
QA: ANP 899

999. Doctoral Dissertation Research
Fall, Summer. 1 to 24 credits.
A student may earn a maximum of 99 credits in all enrollments for this course.
R: Approval of department.
QA: ANP 999

ARABIC

Department of Linguistics and Germanic Slavic, Asian and African Languages
College of Arts and Letters

101. Elementary Arabic I
Fall. 4(4-0)
Basic standard Arabic. Speaking, listening comprehension, reading and writing with emphasis on developing oral proficiency skills.
QA: ARB 101, ARB 102

102. Elementary Arabic II
Spring. 4(4-1)
P: ARB 101 or approval of department.
Further work on speaking, listening comprehension, reading and writing of standard Arabic, with continued emphasis on developing oral proficiency skills.
QP: ARB 101 QA: ARB 102, ARB 103

201. Second-Year Arabic I
Fall, Spring. 1 to 4 credits.
P: ARB 102 or approval of department. Intermediate-level work on speaking, listening comprehension, reading and writing of standard Arabic, with increased emphasis on reading and culture.
QP: ARB 201 QA: ARB 202

202. Second-Year Arabic II
Spring. 4(4-0)
P: ARB 201 or approval of department.
Further intermediate-level work on speaking, listening comprehension, reading and writing of standard Arabic, with continued increased emphasis on reading and culture.
QP: ARB 201 QA: ARB 202, ARB 203

290. Independent Study
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.
R: Approval of department.
Special projects arranged by an individual student and faculty member in areas supplementing regular course offerings.

490. Independent Study
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.
R: Approval of department.
Special projects arranged by an individual student and faculty member in areas supplementing regular course offerings.

491. Special Topics in Arabic Studies
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.
R: Approval of department.
Special topics supplementing regular course offerings proposed by faculty on a group study basis.