361. Principles of Animal Breeding

(461.) Winter. 3(3-0) B S 211 or a course in Mendelian genetics.

Quantitative inheritance. Gene frequency. Statistical tools used in animal breeding, Effect of selection and mating systems on animal popu-

433. Ruminant Nutrition

(DRY 433.) Winter. 4(3-2) ANS 325. Interdepartmental with and administered by the Department of Dairy Science.

Principles of ruminant nutrition and application to actual feeding practices in commercial dairy and beef operations. Rumen fermentation as related to feed utilization, growth, milk production and milk composition.

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

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

826. Animal Nutrition

Spring. 4(4-0) One course each: biochemistry, physiology; and approval of department.

Nutrition basic to animal feeding. Application of chemistry and physiology to nutrition. Nutrient requirements for normal body functions. Techniques involved in nutrition research; readings in current literature.

854. Design of Animal Experiments 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.

855. Analysis of Unbalanced Multifactor Data

Spring. 4(4-0) STT 423.

Applied analysis techniques of field or survey data with unbalanced subclass numbers in field of biological sciences: predictions utilizing several variables; estimation of effects of factors and their interactions.

Biometrical Genetics 965.

Fall of odd-numbered years, 4(4-0) ANS 855 and one course in quantitative genetics.

Genetics models for quantitative traits: estimation of components of variance; correlation of relatives; Selection Index theory; multi-factor and multivariate responses in designed experi-

ANTHROPOLOGY ANP

College of Human Medicine College of Osteopathic Medicine College of Social Science

The Origin of Man and Culture Fall, Winter, Spring, Summer. 4(3-1)

Introduction to physical anthropology: the position of man in the animal kingdom, the genetic mechanisms of evolution, human beginnings and the fossil record, racial evolution and racial types among modern man, the anticipation of culture among other animals and the development of human culture, and culture as an adaptive mechanism.

171. Introduction to Sociocultural Anthropology

Fall, Winter, Spring, Summer. 4(3-1)

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.

IDC. Resource Ecology and Man

For course description, see Interdisciplinary Courses.

IDC. Introduction to Latin America I For course description, see Interdisci-

plinary Courses.

221. Introduction to Social and Cultural Analysis

Fall, Spring. 4(3-1) ANP 171.

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

250.Culture, Environment and Adaptation

Fall 4(3.1)

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

IDC.Continuing Revolution in China: Problems and Approaches

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.Origin of Civilization: Archaeology

Winter, 4(4-0)

The rise, development and spread of culture in the period before written history. Archaeological evidence is used to trace the evolution of culture as it has been reconstructed from the excavation of prehistoric sites in the Old and New World.

265.Vanished Peoples and Lost Civilizations

Fall, Spring. 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. 4(4-0)

Several cultural complexes and cultures typesfrom hunting and gathering through complex civiliation—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. The Africans and Their Cultures Fall, Spring. 4(4-0)

Racial and cultural problems confronting the African peoples.

285. Anthropology and the Modern World

Spring. 4(2-2) ANP 171.

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.

Contemporary Problems of South Asia

For course description, see Interdisciplinary Courses.

343. Introduction to Physical Anthropology

Fall. 4(3-2)

Problems, data and techinques 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.

Peasant Society 350.

Fall. 4(3-1) ANP 171.

Anthropological study of peasantry. Comparative examination of the rural societies and cultures of Asia, Europe, and Latin America.

356.Culture, Health and Illness Spring. 4(3-1) 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

Spring. 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.

Anthropology and Education 381.

Winter, 4(3-1) ANP 171 or other social science. For Education and Anthropology majors.

Maturation and socialization in various societies of Asia, Africa, and Latin American. 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.

Contemporary Problems of IDC.Japan

For course description, see Interdisciplinary Courses.

388. The Anthropology of Social Movements

Winter, 4(2-2) 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.

Survey of Sub-Saharan Africa

For course description, see Interdisciplinary Courses.

IDC. Survey of Sub-Saharan Africa

For course description, see Interdisciplinary Courses.

400H. Honors Work

Fall, Winter, Spring, Summer. 1 to 16 credits. May reenroll for a maximum of 20 credits. Approval of department.

407. Interactions of Culture and Nutrition

Fall, Summer of even-numbered years. 3(3-0) 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

Fall, Winter, Spring. 4(4-0) May reenroll for credit for Part II in an area and/or for another area. ANP 171; ANP 275 or approval of department.

Separate courses in Asian cultures: China; Japan; Southeast Asia; South Asia; Central Asia. A two-part course sequence is usually given. Part I: Ethnographic survey. Part II: Sub-areas, special problems and approaches.

415. Studies in the Anthropology of Africa

Winter, Spring. 4(4-0) May reenroll for credit for Part II in an area and/or for another area. ANP 171; ANP 281 or approval of department.

Separate courses on African cultures: West Africa; Central Africa; East Africa. A two-part course sequence is usually given. Part I: Ethnographic survey. Part II: Sub-areas, special problems and approaches.

419. Studies in the Anthropology of the New World

Fall, Winter, Summer. 4(4-0) May reenroll for credit for Part II in an area and/or for another area. ANP 171 or approval of department

Separate courses on New World cultures: Arctic; North America; Middle America; South America. A two-part course sequence is usually given. Part I: Ethnographic survey. Part II: Sub-areas, special problems and approaches.

423. Studies in the Anthropology of the Near East

Winter, Spring. 4(4-0) May reenroll for credit for Part II in an area and/or for another area. ANP 171 or approval of department.

Separate courses on Near East cultures: North Africa and Southwest Asia. A two-part course sequence is usually given. Part I: Ethnographic survey. Part II: Sub-areas, special problems and approaches.

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 Man

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.

450. Area Courses in Prehistory

Fall, Winter. 4(4-0) May reenroll for a maximum of 16 credits when other areas are offered. ANP 100 or ANP 263.

Archaeology of different areas with emphasis on prehistoric adaptations to natural and social environments. Settlement patterns, subsistence, technology, and style will be considered. Areas covered will vary with staff and student interest.

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.

463. Social Anthropology

Fall, Spring. 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

Winter, 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.

468. Systems of Rank

Spring of odd-numbered years. 4(4-0) ANP 221 or ANP 463 or approval of department. A comparative study of systems of rank such as age grading, sexual, spatial, caste, ethnicity, and class systems. The course emphasizes both symbolic and transactional analyses of rank.

469. Cultural Areas of the World

Winter, Summer. 4(4-0) May reenroll for credit when new area is given. ANP 100 or ANP 171 or SOC 241 or approval of department. Social character of people, social organization, culture of area in relationship to social heritage, local conditions and world affairs. Areas emphasized will vary with staff and student's interest: Africa, American Indian, Latin America, Near East, Northeast Asia, Pacific, and Southeast Asia.

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

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.

474. Culture and Economic Behavior

Winter. 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.

475. Political Anthropology

Spring of odd-numbered years. 4(4-0) ANP 22I or ANP 463 or approval of department. Political systems of changing cultures in Asia, Africa and Latin America. Relation between political and other social institutions and analysis of the organization of conflict in non-Western societies. The relation of tribal and peasant politics to national politics in development countries seen in a comparative framework.

IDC. Canadian-American Studies

For course description, see Interdisciplinary Courses.

481. Cross-Cultural Relations in the Modern World

(466.) Winter of even-numbered years. 4(4-0) ANP 473. Interdepartmental with the Department of Sociology.

Relationship of native peoples to world-wide forces and reactions of native peoples to world struggle for power. Problems involved in administration of programs for non-Western societies.

485. Methods of Archaeological Research

Spring. 4(3-1) ANP 450 or approval of department.

Methods of doing anthropological research through archaeology. Problem formation, hypothesis development, testing; principles and procedures of data recognition, collection, preliminary laboratory processing and preliminary analysis; preparation for field archaeology.

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

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

Fall, Winter, Spring. 2 to 6 credits. May reenroll for a maximum of 16 credits. 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.

801. Core Seminar in Ethnographic Analusis I

Fall. 4(4-0) Approval of department.

Develops professional competence in the analytical assessment of monographic studies in social authroplogy and examines a selected range of analytical issues in relation to their ethnographic contexts.

802. Core Seminar in Ethnographic Analusis II

Winter. 4(4-0) ANP 801.

Continuation of ANP 801.

803. Introduction to Paleoanthropology I

Winter, 4(4-0) Approval of department.

Exploration of evolutionary theory followed by an examination of data and modes of analysis pertinent to the study of hominid evolution and the development of culture through the Middle Pleistocene.

804. Introduction to Paleoanthropology II Spring. 4(4-0) ANP 803.

Exploration of hominid evolution and cultural development from the Middle Pleistocene through the Early Holocene. Emphasis on selected issues illustrating the ways in which paleoanthropologists solve problems.

805. History of Anthroplogical Theory

(829.) Fall. 5(5-0) ANP 802, ANP 804 or approval of department.

A review of the various schools of thought, important personalities, and principal concepts that have contributed to the development of anthropological theory.

825. Seminar in Cross-Cultural Relations

Winter of odd-numbered years. 4(4-0) Approval of department. Interdepartmental with the Department of Sociology.

Analysis of the relations between superordinate and subordinate societies and between coordinate societies and cross-cultural exchange programs.

827. Anthropological Theorists

Winter, 4(4-0) May reenroll for credit with approval of department. Approval of department.

Review of current theoretical problems in social and cultural anthropology.

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 anthroplogy. Various controversies and theoretical trends will be presented and analyzed.

831. Linguistic Anthropology

Winter. 5(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

833. Anthropological Topics in Prehistory

Spring, 4(4-0) May reenroll for a maximum of 12 credits when other problems are offered. Approval of department.

Relation of archaeology to the other fields of anthropology on both a theoretical and practical level. Archaeological data are used to introduce problems of long-range cultural change and development.

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.

IDC. Interdisciplinary Seminar on Africa

For course description, see Interdisciplinary Courses.

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.

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.

865. Environment, Technology, and Culture

Winter of even-numbered years. 4(4-0) Approval of department.

Cultural ecology, study of the relation of man and his physical environment, the role of technology in mediating between the two. Comparative analysis of the interdependence of social organization, technology and environment. Case histories of cultural and social change arising from technological innovations.

870. Applied Anthroplogy

Spring of odd-numbered years. 4(4-0) Approval of department.

Theoretical and methodological problems involved in planned social change. Course will focus on field experience in the local community. Designed mainly for graduate students having professional interest in the application of social change.

872. Seminar in Special Subject Fields

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.

875. Individual Reserach 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. Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

999. Research

 $Fall, Winter, Spring, Summer. Variable \\ credit. \ Approval of department.$

ART

College of Arts and Letters

History of Art

HA

205. Introduction to Art

 $Fall, Winter, Spring.\ 3 (3-0)\ Not\ open\ to$ majors.

Painting, sculpture and architecture from the time of the Greeks to the present. Individual works of art examined intensively, as regards both their formal qualities and the manner in which they exemplify the shifting patterns of Western culture.