

929. Comparative Nutrition-Vitamins
Spring of odd-numbered years. 3(3-0)
BCH 452 and a previous course on principles
of nutrition. Interdepartmental with Human
Nutrition and Foods.
Chemical and physical properties, standards of
activity, occurrence, metabolic roles, antivita-
mins, deficiency and toxicity signs, requirements
and factors affecting requirements.

963. Genetics of Breed Improvement
Winter. 3(3-0) ANS 461, STT 421.
Breed improvement. Changing gene frequency.
Genetic and environmental subdivision of
phenotypic variance.

964. Breeding Systems and Plans
Spring. 3(3-0) 963.
Biometric relations between related animals.
Role of selection in changing populations. The
effects of different mating systems.

999. Research
Fall, Winter, Spring, Summer. Varia-
ble credit. Approval of department.

ANIMAL SCIENCE ANS
**College of Agriculture and
Natural Resources**

101. Animal Science
Fall. 5(4-2)
Survey of the animal industries including his-
tory, economic geography, anatomy and physi-
ology, nutrition and feed usage, and systems of
commercial livestock and poultry production.

213. Animal Science Seminar
Fall. 1(2-0)
Animal science industries. Industry representa-
tives will be utilized to discuss particular areas.

325. Principles of Animal Nutrition
Spring. 5(5-0) CEM 132; BCH 200
recommended.
Livestock feeds and their nutrients. Functions
of and requirements for nutrients. Evaluation
of feeds. Feeding practices. Formulation of
rations for beef and dairy cattle, horses, poultry,
sheep and swine.

461. Principles of Animal Breeding
Winter. 3(3-0) CSC 250.
Quantitative inheritance. Gene frequency. Sta-
tistical tools used in animal breeding. Effect of
selection and mating systems on animal popu-
lation.

525. Animal Nutrition
Winter, Summer. 5(4-2) BCH 401.
Principles of nutrition. Nutrients and their me-
tabolism. Nutritive requirements for mainte-
nance, growth, 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 de-
partment.
Nutrition basic to animal feeding. Application
of chemistry and physiology to nutrition. Nutrient
requirements for normal body functions. Tech-
niques 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.

965. Biometrical Genetics
Fall. 4(4-0) One course in quanti-
tative or population genetics.
Genetic expectations in random mating and in-
bred populations. Estimation of genetic param-
eters. Relation of gene frequency to population
mean and variance. Components of genetic
variance. Correlation of relatives. Selection
theory.

ANTHROPOLOGY ANP
**College of Human Medicine
College of Osteopathic Medicine
College of Social Science**

100. The Origin of Man and Culture
Fall, Winter, Spring, Summer. 4(3-1)
Introduction to physical anthropology: the po-
sition of man in the animal kingdom, the
genetic mechanisms of evolution, human begin-
nings and the fossil record, racial evolution and
racial types among modern man, the anticipation
of culture among other animals and the devel-
opment of human culture, and culture as an
adaptive mechanism.

171. Introduction to 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.

200. Resource Ecology and Man
For course description, see Interdisci-
plinary Courses.

**221. Introduction to Social and
Cultural Analysis**
Fall, Spring. 4(3-1) 171.
Basic theoretical framework of socio-cultural
analysis: structural functionalism, evolutionism,
and cultural ecology.

**250. Culture, Environment and
Adaptation**
Fall. 4(3-1) 100.
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.

**263. Origin of Civilization:
Archaeology**
Spring. 4(3-0) 100.
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 pre-historic sites in the Old and New World.

275. The Anthropology of Asia
Fall. 4(3-0) Sophomores or approval
of department.
Several cultural complexes and cultures 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. The Africans and Their Cultures
Fall, Spring. 4(3-0) Sophomores or
approval of department.
Racial and cultural problems confronting the
African peoples.

**285. Anthropology and the Modern
World**
Spring. 4(2-2) 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.

350. Peasant Society
Fall. 4(3-1) 171.
Anthropological study of peasantry. Compar-
ative examination of the rural societies and
cultures of Asia, Europe, and Latin America.

356. Culture, Health and Illness
Spring. 4(3-1) 171.
Anthropological study of health behavior. Com-
parative view of primitive, folk and scientific
medical systems and their effect on the in-
dividual and the community in the illness situa-
tion.

381. Anthropology and Education
Winter. 4(3-1) 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 con-
tribution to the broader cross-cultural investi-
gation of the teaching/learning process.

384. Contemporary Problems of Japan
For course description, see Interdisci-
plinary Courses.

387. Ethnicity and Nation Building
Spring. 4(2-2) 171.
Ethnic minorities and the roles they play in
fostering and/or hindering nation building
processes in Third World countries. A theo-
retical framework is utilized to compare sys-
tematically these roles in various areas of the
world.

**389. Continuing Revolution in China:
Problems and Approaches**
For course description, see Interdisci-
plinary Courses.

390. Survey of Subsaharan Africa
For course description, see Interdisci-
plinary Courses.

391. Survey of Subsaharan Africa
For course description, see Interdisci-
plinary Courses.

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

**411. Studies in the Anthropology of
Asia**
Fall, Winter, Spring. 4(3-0) May re-
enroll for credit for Part II in an area and/or
for another area. 171; 275 or approval of de-
partment.
Separate courses in Asian cultures: China; Ja-
pan; 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.