# 101B. Comprehensive English

(I S 095; 100.) Fall, Winter, Spring, Summer. 3(4-0) No student may earn credit in both 101A and 101B. Admission by examination or approval of department.

Instruction and practice in reading and writing. Instruction in reading is emphasized.

#### 102. Comprehensive English

Fall, Winter, Spring, Summer. 3(4-0) 101A or 101B.

Continuation of 101 with emphasis on writing and reading.

#### 103. Comprehensive English

Fall, Winter, Spring, Summer. 3(4-0)

102

Continuation of 102 with emphasis on reading and writing on American cultural topics.

### American Thought and Language

Fall, Winter, Spring, Summer. 3(3-0) Students may not receive credit for 111 and 102. Admission by examination or approval of department.

- A. Aims to improve the student's ability to read and write and to acquaint him with his American heritage. Reading is in selected historical, social, and literary documents.
- Whole books approach to regular program. Emphasizes American humanities approach to regular program.
- American minorities track. Subject matter for writing will be accounts of the experience of blacks, Indians and immigrants during the nineteenth and twentieth cen-
- American Radical Thought and Literature. Subject matter for writing will be radical literary and social documents of the seven-
- teenth and eighteenth centuries.
  Film track. Written exposition is based on both cinematic and fictional versions of literary and historical documents.
- Adaptation of the regular program for honors students.

# American Thought and Language

Fall, Winter, Spring, Summer. 3(3-0) Students may not receive credit for 112 and 103. 111 or 102.

- A. Aims to improve the student's ability to read and write and to acquaint him with his American heritage. Reading is in selected historical, social, and literary documents.
- Whole books approach to regular program, Emphasizes American humanities approach to regular program.
- American minorities track. Subject matter for writing will be accounts of the ex-perience of blacks, Indians and immigrants during the nineteenth and twentieth centuries.
- American Radical Thought and Literature. Subject matter for writing will be radical literary and social documents of nineteenth and early twentieth century.
- Film track. Written exposition is based on both cinematic and fictional versions of literary and historical documents.
- Adaptation of regular program for honors

### 113.American Thought and Language Fall, Winter, Spring, Summer. 112 or 103.

- Aims to improve the student's ability to read and write and to acquaint him with his American heritage. Reading is in se-lected historical, social, and literary docu-
- Whole books approach to the regular program.
- American humanities approach to the regular program.
- American minorities track. Subject matter for writing will be accounts of the experi-ence of blacks, Indians and immigrants

- during the nineteenth and twentieth centuries.
- American Radical Thought and Literature. Subject matter for writing will be radical literary and social documents of the twen-
- tieth century.
  Film track. Written exposition is based on both cinematic and fictional versions of literary and historical documents.
- Adaptation of regular program for honors students.

#### 300.Supervised Individual Study

Fall, Winter, Spring. 1 to 4 credits. 113; approval of department.

Selected students requesting individual study of interdisciplinary problems will work under supervision of University College professors. Variable elective credit will be determined when the student secures instructor, adviser, and department

# ANATOMY

# College of Human Medicine College of Osteopathic Medicine College of Veterinary Medicine

# General Anatomy

Fall, Spring. 5(5-0) N S 193.

Designed to impart the basic concepts of the broad field of anatomy. Special requirements of the various disciplines will be met in their respective laboratories.

### Microscopic Anatomy

Fall. 5(2-8) Medical Technology students or approval of department.

Microscopic study of the structure of cells, tissues and organs.

### Gross and Microscopic Anatomy 521.

Fall, Spring. 9(4-14) First-term Veterinary Medicine students; approval of department for graduate students.

Gross anatomy of a representative animal, the dog, is studied. Cytology, embryology, compara-tive histology, neuroanatomy and organology are combined with dissection, demonstration and practical applications to give complete coverage.

### 522. Gross and Microscopic Anatomy Winter, Summer. 9(5-11) 521. Continuation of 521.

### Anatomy of Areas of Surgical and Clinical Importance in 523. Domestic Animals

Winter, Summer. Sixthterm Veterinary Medicine students.

Lectures, dissection of fresh material and the study of prosections, models, radiographs and reprints related to areas of surgical and clinical importance in domestic animals.

# Gross Biomedical Structure

Fall, Winter, Spring. Variable credit. May re-enroll for a maximum of 15 credits. Human Medicine students; approval of department for graduate students.

Human structure, systemic and regional, is studied in self-instructional and dissection sequences. Application of this knowledge to rec-ognition of normal and abnormal structure in appropriate medical contexts is accomplished through self-instructional and clinical sessions.

#### 543. Microscopic Anatomy

Fall. 5(3-6) Human Medicine students; approval of department for graduate students.

The normal structure of cells, tissues and organs as they appear under the light and electron microscope.

#### 801. Seminar

Fall, Winter, Spring. 1(1-0) Approval of department.

#### 813. Problems in Anatomu

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 15 credits. Basic disciplines in various areas and approval of department.

Various anatomical fields such as gross anatomy, histology, hematology, tissue culture, cytology, neurology and embryology will be studied.

### 815. Anatomy of the Nervous System (415.) Fall. 5(3-5) Approval of

department. Developmental, gross and microscopic anatomy

of the nervous system. Organizational and func-tional aspects of the peripheral and central nerv-ous system are stressed. Gross demonstrations include brain and dog dissections.

### Research

ANT

Fall, Winter, Spring, Summer. Variable credit. Majors.

#### 901. Seminar

Fall, Winter, Spring. 1(1-0) Approval of department.

#### 999. Research

Fall, Winter, Spring, Summer. Variable credit. Majors.

#### ANIMAL HUSBANDRY AH

# College of Agriculture and Natural Resources

### 111. Livestock and Meat Industry Fall, Spring. 4(3-4)

Adaptation, distribution and numbers of live-Adaptation, distribution and numbers of investock throughout the world; significance and economic importance. Trends in livestock production. Evaluating, grading, classifying and marketing of livestock and meat. Relationship of live animal conformation to carcass merit.

### Meat Production

Winter. 4(2-6) 111.

Principles of meat evaluation and selection. Carcass certification programs. Influence of production factors on carcass desirability. Practice in slaughtering, cutting and meat processing.

#### 242, Meats, Poultry and Fishery Products I

Fall. 3(2-2) Interdepartmental with and administered by Food Science.

Principles of evaluation and nutritive value. Identification of grades and cuts of beef, pork, lamb and poultry products.

#### 245. Meat Evaluation and Grading

Fall, Spring. 1 to 3 credits. May re-enroll for a maximum of 4 credits subject to a maximum of 10 credits in 245 and 335 com-

Evaluation of carcasses and wholesale cuts of beef, pork, veal and lamb in accordance with federal and commercial grading standards. Inspection trips through large meat packing plants.

#### 335. Livestock Selection

Fall, Winter, Spring. 1 to 3 credits. May re-enroll for a maximum of 9 credits subject to a maximum of 10 credits in 245 and 335 combined. 111.

Evaluation of productive merit of individual animals. Comparison of type with a standard. Relationship of form to function. Field trips to prominent livestock breeding establishments and to major livestock events.