#### 411. Problems in American Civilization

Spring. 3(3-0) May reenroll for a maximum of 6 credits if different topic is taken. Juniors, approval of American Studies adviser.

Seminar approach to selected problems in American life employing the objectives and approaches of interdisciplinary studies. Offered by members of relevant departments, for majors in the American Studies program.

#### **AMERICAN THOUGHT AND LANGUAGE** ATL

## College of Arts and Letters

To satisfy the University General Education requirement, a student must take one course in each of the following groups. No courses may be taken for elective credit.

1. 1144, 121, 131, 141, 151, 161, 171, 181,

- 191H
- 2, 1154, 122, 132, 142, 152, 162, 172, 182, 192H
- 3. 1164, 123, 133, 143, 153, 163, 173, 183, 193H

# 0142. Writing Laboratory I

Fall, Winter, Spring. 0(0-2) [2(2-0) See page A-1 item 3.] ATL 0991 or admission by placement test; ATL 1144 concurrently.

An individualized program to develop composi-tion skills by aiding students to discover how lan-guage functions in communication and by helping them to accept responsibility for learning to write correctly.

## 0152. Writing Laboratory II

Fall, Winter, Spring. 0(0-2) [2(2-0) See page A-1 item 3.] ATL 0142, ATL 1144 or approval of department; ATL 1154 concurrently.

Continuation of ATL 0142.

#### Writing Laboratory III

Fall, Winter, Spring. 0(0-2) [2(2-0) See page A-1 item 3.] ATL 0152, ATL 1154 or approval of department; ATL 1164 concurrently.

Continuation of ATL 0152.

# 0991. Preparatory Writing Skills

Fall, Winter, Spring, Summer. 0(3-0) [3(3-0) See page A-1 item 3.] Admission by placement test.

Instruction and practice in writing. Emphasis on mastery of fundamental skills needed for a variety of writing assignments.

#### 104. Writing for Science Majors

Fall. 3(3-0) Satisfactory grade in English proficiency exam; College of Natural Science majors. Interdepartmental with and administered by the Department of English.

Writing workshop for science students that develops and refines composition ability.

#### 105. The Scientist as Writer

Winter, 3(3-0) ENG 104. Interdepartmental with and administered by the Department of English.

Study of various types of writing by scientists—fiction, poetry, and autobiography as well as professional papers and books. Students will write frequently about the readings.

#### Introductory Scientific Writing 106.

Spring. 3(3-0) ENG 105. Interdepartmental with and administered by the Department of English.

Writing of popular essays, scientific papers and reports, and other papers related to science.

#### 1144. Developmental Writing I

Fall, Winter, Spring. 3(3-0) ATL 0991 or admission by placement test; ATL 0142 concurrentlu.

Students engage in expressive writing to respond to reading in clear and direct prose. Students write personal essays and read autobiographical materials, making use of college-level readings.

# 1154. Developmental Writing II

Fall, Winter, Spring. 3(3-0) ATL 0142, ATL 1144 or approval of department; ATL 0152 concurrently.

Interpretive, analytical, and expository writing in response to college-level readings.

#### 1164. Developmental Writing III

Fall, Winter, Spring. 3(3-0) ATL 0152, ATL 1154 or approval of department; ATL 0162 concurrently.

Students write analytical/critical/persuasive papers and undertake a research project. Reading of college-level materials.

#### Use of Libraries 117.

Fall, Winter. 1(1-0)

The use of libraries, with emphasis on MSU Library. Course will stress knowledge and use of bibliographic and reference resources.

#### 121. Writing: American Expression

Fall, Winter, Spring, Summer. 3(3-0) Satisfactory performance on the placement test. Writing course to improve composition and critical reading abilities. Writings based on American literary and historical materials from Puritan times through the Enlightenment. Emphasis on unity and structure of essays.

#### 122. Writing: American Expression

Fall, Winter, Spring, Summer. 3(3-0) Three credits in the first term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition and critical reading abilities. Writings based on American literary and historical materials of the nineteenth century. Emphasis on style and development of essays.

#### 123. Writing: American Expression

Fall, Winter, Spring, Summer. 3(3-0) Three credits in the second term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition and research abilities. Writings based on American literary and historical materials of the twentieth century. Research project required.

### Writing: Major Currents in American Experience

Fall. 3(3-0) Satisfactory performance on the placement test.

Writing course to improve composition and critical reading abilities. Writings based on materials concerning the individual's search for meaning in America. Emphasis on unity and structure of essays.

#### 132. Writing: Major Currents in American Experience

Winter. 3(3-0) Three credits in the first term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition and critical reading abilities. Writings based on materials concerning American dreams and realities. Emphasis on style and development of essays.

#### Writing: Major Currents in American Experience

Spring. 3(3-0) Three credits in the second term of any ATL sequence numbered 121.or higher or approval of department.

Writing course to improve composition and research abilities. Writings based on materials concerning cultural pluralism in America. Research project required.

## Writing: American Humanities

Fall. 3(3-0) Satisfactory performance on the placement test.

Writing course to improve composition and critical reading abilities. Writings based on American literature, painting, music, and architecture before 1800. Emphasis upon unity and structure of essays.

#### Writing: American Humanities 142.

Winter. 3(3-0) Three credits in the first term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition and critical reading abilities. Writings based on American literature, painting, music, architecture and sculpture of the nineteenth century. Emphasis upon unity and development of essays.

#### Writing: American Humanities

Spring. 3(3-0) Three credits in the second term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition and research abilities. Writings based on innovation in twentieth century American literature and the visual, plastic, musical, and dramatic arts. Research project required.

#### 151. Writing: American Minorities

Fall. 3(3-0) Satisfactory performance on the placement test.

Writing course to improve composition and critical reading abilities. Writings based on minority literature from mythology to experiences of immigrants and ex-slaves. Emphasis upon unity and structure of essays.

#### 152. Writing: American Minorities

Winter. 3(3-0) Three credits in the first term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition and critical reading abilities. Writings based on minority literature from Reconstruction, Indian wars and end of European immigration. Emphasis upon style and development of essays.

#### 153. Writing: American Minorities

Spring. 3(3-0) Three credits in the second term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition and research abilities. Writings based on minority literature. Modern fiction and cultural pluralism emphasized; a research project is required.

#### 161. Writing: American Radical Thought

Fall. 3(3-0) Satisfactory performance on the placement test.

Writing course to improve composition and critical reading abilities. Writings based on dissenting thought from the colonial to the early national period. Emphasis upon unity and structure of essays.

## Courses

# 162. Writing: American Radical Thought

Winter. 3(3-0) Three credits in the first term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition and critical reading abilities. Writings based on the literature of dissent in American society from 1850 to 1946. Emphasis on style and development of essays.

# 163. Writing: American Radical Thought

Spring. 3(3-0) Three credits in the second term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition and research abilities. Writings based on the literature and history of the New Left and contemporary dissent in America. Research project required.

## 171. Writing: America on Film

Fall. 3(3-2) Satisfactory performance on the placement test.

Writing course to improve composition abilities. Writings and readings based on American films and film adaptations of American literature. Emphasis upon unity and structure of essays.

## 172. Writing: America on Film

Winter. 3(3-2) Three credits in the first term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition abilities. Writings and readings based on American film genres (e.g., Western, Gangster). Emphasis on style and development of essays.

# 173. Writing: America on Film

Spring. 3(3-2) Three credits in the second term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition and research abilities. Writings and readings based on analysis of major social issues as reflected in American film: e.g., war, women, minorities. Research project required.

### 181. Writing: Women in America

 $\begin{tabular}{ll} Fall. & 3(3-0) & Satisfactory & performance \\ on the placement test. \end{tabular}$ 

Writing course to improve composition and critical reading abilities. Writings based on critical works introducing contemporary and historic American feminist issues. Emphasis on unity and structure of essays.

## 182. Writing: Women in America

Winter. 3(3-0) Three credits in the first term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition and critical reading abilities. Writings based on American women from pre-Colonial times through First Wave Feminism. Emphasis on style and development of essays.

# 183. Writing: Women in America

Spring. 3(3-0) Three credits in the second term of any ATL sequence numbered 121 or higher or approval of department.

Writing course to improve composition and critical reading abilities. Writings based on women in American life and literature from 1920 to the present. Research project required.

# 191H. Honors Writing: The American Experience

Fall. 3(3-0) Satisfactory performance on the placement test.

Writing course to improve composition and critical reading abilities. Writings based on analysis of selected material from Colonial to early nineteenth century topics.

# 192H. Honors Writing: The American Experience

Winter. 3(3-0) Satisfactory grade in the first term of any ATL sequence numbered ATL 121 or above.

Writing course to improve composition and critical reading abilities. Writings based on analysis of selections from the late nineteenth and early twentieth centuries.

# 193H. Honors Writing: The American Experience

Spring. 3(3-0) Satisfactory grade in the second term of any ATL sequence numbered ATL 121 or above.

Writing course to improve composition and research abilities. Writings based on analysis of twentieth century materials reflecting American issues.

## 300. Supervised Individual Study

Fall, Winter, Spring, Summer. 2 to 4 credits. May reenroll for a maximum of 12 credits. 9 credits in a composition course; approval of department.

Selected students requesting individual study of interdisciplinary problems. Variable elective credit will be determined when the student secures instructor, adviser, and department approval.

# ANATOMY

## ANT

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

# 216. Applied Human Anatomy

Fall. 5(4-3) HCP major or coaching minor, approval of department. Interdepartmental with the School of Health Education, Counseling Psychology and Human Performance

Structural anatomy of the various systems of the human body. Concepts of kinesiological applications.

## 316. General Anatomy

Spring. 5(5-0) B S 211 or B S 212 or approval of department.

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.

## 420. Microscopic Anatomy

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

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

# 480. Special Problems

Fall, Winter, Spring, Summer. 1 to 5 credits. May reenroll for a maximum of 15 credits. Approval of department.

Individual study or project under the direction of a faculty member in biomedical research, gross anatomy, histology, neurology, or embryology.

#### 510. Veterinary Gross Anatomy

Fall. 6(3-9) First-term Veterinary Medicine students.

Gross anatomy of a representative animal, the dog, is studied. Lecture, dissection of embalmed specimen, study of prosections, slides, models and living animals.

#### 511. Veterinary Histology

Fall. 5(3-6) First-term Veterinary Medicine students.

A general histology course for veterinary students which includes a survey of the tissue of the animal body.

#### 512. Veterinary Neuro Anatomy

Winter. 2(2-0) Second-term Veterinary Medicine students.

Gross anatomy of the central nervous system in animals emphasizing functional and dysfunctional aspects of pathways and nuclei in dogs as a foundation for clinical neurology.

## 513. Veterinary Microscopic Anatomy

Winter. 4(2-4) Second-term Veterinary Medicine students.

Microscopic anatomy of the digestive, urinary, respiratory, male and female reproductive systems, integumentary system, central nervous system and special sense organs of domesticated animals.

## 514. Veterinary Comparative Anatomy

(523.) Spring. 5(4-4) Third-term Veterinary Medicine students.

Lecture, dissection of embalmed specimens and the study of prosections, models and live animals related to the anatomy of the domestic animals.

## 540. Gross Biomedical Structure

Winter. 1 to 15 credits. May reenroll for a maximum of 15 credits. Admission to a college of medicine; graduate students with approval of department.

Regional gross anatomy of the back, thorax, abdomen, pelvis and perineum.

Approved through Fall 1989.

#### 541. Gross Biomedical Structure

Spring. Admission to a college of medicine; graduate students with approval of department

Regional gross anatomy of the head and neck. Approved through Winter 1990.

## 543. Human Histology

Fall. 4(2-4) Human Medicine students; approval of department for graduate students. The structure and function of human cells, tissues, and organs.

## 544. Human Ontogenesis

Fall. 3(3-0) Admission to a college of medicine; graduate students with approval of department.

Formal lectures, class conferences and student reports on the normal and abnormal organogenesis of the human embryo and fetus with emphasis on clinical correlations.

## 545. Neuroanatomy

Winter. 4(3-3) Admission to medical school or approval of the course coordinator.

Introduction to gross and microscopic anatomy of the human nervous system, to related basic neurophysiologic concepts and to a problemsolving approach to the diagnosis of nervous system disease.