

- 999 Doctoral Dissertation Research**  
Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Approval of college.  
Doctoral dissertation research.

## AMERICAN THOUGHT AND LANGUAGE ATL

### Department of American Thought and Language College of Arts and Letters

- 1002 Preparation for College Writing**  
Fall, Spring. 0(0-2) P:M: Designated score on English placement test. C: ATL 1004 concurrently.  
Practice in applying the principles of English grammar, syntax, and word usage to writing.
- 1004 Preparation for College Writing**  
Fall, Spring. 3(3-0) P:M: Designated score on English placement test. C: ATL 0102 concurrently.  
Composing, revising, and editing. Active reading and pre-writing strategies. Style, mechanics, and usage. Organization and proofreading.
- 110 Writing: Science and Technology**  
Fall, Spring. 4(4-0) P:M: (ATL 1004) or designated score on English placement test. Not open to students with credit in MC 111 or MC 112 or LBS 133 or AL 192 or AL 192H or ATL 110 or ATL 115 or ATL 120 or ATL 125 or ATL 130 or ATL 135 or ATL 140 or ATL 145 or ATL 150 or ATL 195H.  
Drafting, revising, and editing compositions derived from readings on American science and technology to develop skills in narration, persuasion, analysis, and documentation.
- 115 Writing: Law and Justice in the United States**  
Fall, Spring. 4(4-0) P:M: (ATL 1004) or designated score on English placement test. Not open to students with credit in MC 111 or MC 112 or LBS 133 or AL 192 or AL 192H or ATL 110 or ATL 120 or ATL 125 or ATL 130 or ATL 135 or ATL 140 or ATL 145 or ATL 150 or ATL 195H.  
Drafting, revising, and editing compositions derived from readings on American law and justice to develop skills in narration, persuasion, analysis and documentation.
- 120 Writing: American Philosophy, Literature, and the Arts**  
Fall, Spring. 4(4-0) P:M: (ATL 1004) or designated score on English placement test. Not open to students with credit in MC 111 or MC 112 or LBS 133 or AL 192 or AL 192H or ATL 110 or ATL 115 or ATL 120 or ATL 125 or ATL 130 or ATL 135 or ATL 140 or ATL 145 or ATL 150 or ATL 195H.  
Drafting, revising, and editing compositions derived from readings on American philosophy, literature, and the arts to develop skills in narration, persuasion, analysis, and documentation.

- 125 Writing: The American Ethnic and Racial Experience**  
Fall, Spring. 4(4-0) P:M: (ATL 1004) or designated score on English placement test. Not open to students with credit in MC 111 or MC 112 or LBS 133 or AL 192 or AL 192H or ATL 110 or ATL 115 or ATL 120 or ATL 130 or ATL 135 or ATL 140 or ATL 145 or ATL 150 or ATL 195H.  
Drafting, revising, and editing compositions derived from readings on the experience of American ethnic and racial groups to develop skills in narration, persuasion, analysis, and documentation.

- 130 Writing: American Radical Thought**  
Fall, Spring. 4(4-0) P:M: (ATL 1004) or designated score on English placement test. Not open to students with credit in MC 111 or MC 112 or LBS 133 or AL 192 or AL 192H or ATL 110 or ATL 115 or ATL 120 or ATL 125 or ATL 135 or ATL 140 or ATL 145 or ATL 150 or ATL 195H.  
Drafting, revising, and editing compositions derived from readings on American radical thought to develop skills in narration, persuasion, analysis, and documentation.

- 135 Writing: Public Life in America**  
Fall, Spring. 4(4-0) P:M: (ATL 1004) or designated score on English placement test. Not open to students with credit in MC 111 or MC 112 or LBS 133 or AL 192 or AL 192H or ATL 110 or ATL 115 or ATL 120 or ATL 125 or ATL 130 or ATL 140 or ATL 145 or ATL 150 or ATL 195H.  
Drafting, revising, and editing compositions derived from readings on American civic tradition and community service-learning experiences to develop skills in narration, persuasion, analysis, and documentation.

- 140 Writing: Women in America**  
Fall, Spring. 4(4-0) P:M: (ATL 1004) or designated score on English placement test. Not open to students with credit in MC 111 or MC 112 or LBS 133 or AL 192 or AL 192H or ATL 110 or ATL 115 or ATL 120 or ATL 125 or ATL 130 or ATL 135 or ATL 145 or ATL 150 or ATL 195H.  
Drafting, revising, and editing compositions derived from readings on women in America to develop skills in narration, persuasion, analysis, and documentation.

- 145 Writing: Men in America**  
Fall, Spring. 4(4-0) P:M: (ATL 1004) or designated score on English placement test. Not open to students with credit in MC 111 or MC 112 or LBS 133 or AL 192 or AL 192H or ATL 110 or ATL 115 or ATL 120 or ATL 125 or ATL 130 or ATL 135 or ATL 140 or ATL 150 or ATL 195H.  
Drafting, revising, and editing compositions derived from readings on men in America to develop skills in narration, persuasion, analysis, and documentation.

- 150 Writing: The Evolution of American Thought**  
Fall, Spring. 4(4-0) P:M: (ATL 1004) or designated score on English placement test. Not open to students with credit in MC 111 or MC 112 or LBS 133 or AL 192 or AL 192H or ATL 110 or ATL 115 or ATL 120 or ATL 125 or ATL 130 or ATL 135 or ATL 140 or ATL 145 or ATL 195H.  
Drafting, revising, and editing compositions derived from American historical, social, and cultural texts to develop skills in narration, persuasion, analysis, and documentation.

- 195H Writing: Major Topics in American Thought**  
Fall, Spring. 4(4-0) RB: Designated score on English placement test. Not open to students with credit in MC 111 or MC 112 or LBS 133 or AL 192 or AL 192H or ATL 110 or ATL 115 or ATL 120 or ATL 125 or ATL 130 or ATL 135 or ATL 140 or ATL 145 or ATL 150.  
Drafting, revising, and editing compositions derived from readings on major topics in American thought to develop advanced skills in narration, persuasion, analysis, and documentation.

- 290 Independent Study**  
Fall, Spring, Summer. 1 to 4 credits. R: Open only to freshmen or sophomores. Approval of department.  
Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

## ANATOMY ANT

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

- 802 Clinical Surgical Anatomy**  
Spring. 4(2-4) Interdepartmental with Surgery. Administered by Department of Surgery. R: Open only to Master's students in Surgery.  
Review of surgical anatomy. Detailed anatomical information through lecture and dissection sessions. Clinical interpretation of anatomy and surgical approaches.
- 813 Problems in Anatomy**  
Fall, Spring, Summer. 1 to 5 credits. A student may earn a maximum of 5 credits in all enrollments for this course. R: Approval of department.  
Fields such as gross anatomy, histology, tissue culture, cytology, neurology and embryology.
- 814 Graduate Seminar**  
Spring of even years. 1 to 3 credits. R: Open only to graduate students in Anatomy. Supervised practice in evaluating abstracts and delivering oral presentations of anatomical sciences. Organization, timing and effective illustrations.
- 820 Advanced Neuroanatomy**  
Summer of odd years. 1 to 5 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department.  
Current topics in anatomy and physiology and processes of central nervous system cells.
- 839 Systems Neuroscience**  
Spring of odd years. 4(4-0) Interdepartmental with Pharmacology and Toxicology; Physiology. R: Open only to graduate students in the Colleges of Human Medicine, Osteopathic Medicine, Agriculture and Natural Resources, Natural Science, and Veterinary Medicine.  
Anatomy, pharmacology, and physiology of multicellular neural systems. Sensory, motor, autonomic, and chemo-regulatory systems in vertebrate brains.