399. Professional Internships in Agriculture and Natural Resources

(A G 399.) Fall, Winter, Spring, Summer. Zero to 10 credits. 10 credits. Juniors and seniors. Professionalized experiences in a student's major. Supervision and evaluation by faculty and cooperating agencies.

401. Agriculture and Natural Resources Communications

(A G 401.) Winter, Spring, 3(3-2) JRN 201 or other writing course and approval of department. Techniques, strategies and practices in development of agricultural and natural resources information programs. Including writing, public relations, TV and radio production for specialized and general audiences.

402. Agriculture and Natural Resources Communications Internship

(A G 402.) Fall, Winter, Spring, Summer. 1 to 5 credits. May reenroll for a maximum of 6 credits. AG 401, approval of college. Internship with professionals in communications field with emphasis on student's areas of interest—writing, radio, TV, publications, etc.

410. Environmental Toxicology

(A G 410.) Winter. 4(4-0) B S 212, BCH 401. Interdepartmental with and administered by the College of Natural Science. Fat and effects of toxic chemicals in soil, plants, wildlife, and aquatic systems. Interactions between chemicals and the environment which influence their fate and ecological importance.

425. Agriculture and Natural Resources Seminar

(A G 425.) Spring. 2(2-0) Current agricultural, natural resources, and environmental problems and solutions as presented by discussion leaders from various disciplines, arranged by undergraduate students.

444. Pest Management I: Systems Management for Plant Protection

(A G 444.) Fall, 4(4-0) FSM 300 or EC 201. Interdepartmental with and administered by the College of Natural Science. Designed to integrate knowledge and improve ability in arriving at pest management decisions of varying complexity involving the fields of agronomy, wildlife, horticulture, entomology, and plant pathology.

445. Pest Management II: Pesticide Chemistry and Application Systems for Plant Protection

(A G 445, A G 446.) Winter. 3(3-4) CEM 132. Interdepartmental with and administered by the College of Natural Science. A broad overview of pesticide chemistry, efficient usage, environmental fate, legislation, and application techniques.

446. Pest Management III: Biological Systems for Plant Protection

(A G 446, A G 448.) Spring. 3(3-0) ENT 430, BOT 405, HRT 402 or CSS 402. Interdepartmental with and administered by the College of Natural Science. Management of plant pests utilizing host resistance, cultural practices, legislation, and biological systems.

450. Natural Resource Administration

(N R 450.) Fall, Spring, 4(4-0) Seniors. Interdepartmental with the departments of Fisheries and Wildlife, Forestry, Park and Recreation Resources and Resource Development. Administered by the Department of Forestry. Concepts and methods of administering wildland property. The legal, economic and social environment. Beneficiaries analysis of management change. Unit organization, personnel management and accounting. Presents a systems view of administration.

455. Natural Resource Economics

(N R 455.) Winter. 4(4-0) FOR 450 or approval of department. Interdepartmental with the departments of Fisheries and Wildlife, Forestry, Park and Recreation Resources and Resource Development. Administered by the Department of Forestry. Basic economic and political principles and techniques that govern the production and consumption of forest land products, including basic forest valuation procedures.

462. Agricultural and Rural Development in Developing Nations

(A G 462.) Fall, 3(3-0) PAM 201 or EC 201. PAM 260 recommended. Interdepartmental with Public Affairs Management and Food Systems Economics and Management and administered by Food Systems Economics and Management. Traditional agricultural systems and the incentive environment for economic growth in rural areas. Adjustment of technological, institutional and human change. Strategies for rapid agricultural transformation.

475. International Studies in Agriculture and Natural Resources

(A G 475.) Spring, Summer. 3 to 9 credits. Approval and study-travel experience emphasizing contemporary problems affecting agriculture in the world, national, and local communities. Field trips, case studies, interviews with leading experts, government officials, community leaders. Supervised individual study.

480. Selected Topics

Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 9 credits if different topics are taken. Approval of department. Juniors. Examination of special topics in agriculture and natural resources.

1DC. The Impact of Animal Resource Management Upon the World’s Developing Nations

For course description, see Interdisciplinary Courses.

491. Natural Resources and Modern Society

(N R 491.) Spring, 3(3-0) Juniors. Interdepartmental with the departments of Forestry and Resource Development and administered by the Department of Forestry. A survey of the social and economic significance of natural resources in modern industrial and urban society. Current problems of natural resource management and use are examined in terms of the society in which they exist.

American Thought and Language - Descriptions of Courses

American Studies

301. Issues in American Civilization
Fall, Winter, Spring. 3(3-0) May reenroll for a maximum of 9 credits. Not applicable to major requirements. Selected issues in American life past and present, with materials drawn from such disciplines as history, social sciences, philosophy, literature and the arts. Topics vary.

375. Popular Culture and Technical Change
Winter. 4(4-0) Juniors or approval of department. Interdepartmental with and administered by Lyman Briggs College. Interrelationships among elements of mass culture and technical change. Introduction to relevant research methods.

410. Perspectives in American Studies
Fall. 3 credits. Juniors in American Studies or approval of American Studies Committee. Methods and significant works, for majors in the American Studies program. Offered by members of the relevant departments.

411. Problems in American Civilization
Winter. 3 credits. Majors must reenroll for a maximum of 6 credits. AMS 410, Juniors in American Studies or approval of American Studies Committee. 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

101A. Comprehensive English
Fall, Winter, Spring. 3(3-1) Admission by examination or approval of department. Students may not receive credit in more than one of the following courses: ATL 101A, ATL 101B, ATL 101E. Instruction and practice in reading and writing. Emphasis upon mastery of fundamental skills needed for a variety of reading and writing assignments.

101B. Comprehensive English
Fall, Winter, Spring. 3(3-1) Admission by examination or approval of department. Students may not receive credit in more than one of the following courses: ATL 101A, ATL 101B, ATL 101E. Instruction and practice in reading and writing. Instruction in reading is emphasized.
102. Comprehensive English
   Fall, Winter, Spring, Summer. 3(3-1)
   ATL 101A or ATL 101B or approval of department. Students may not receive credit in both ATL 102 and ATL 102E.
   Continuation of ATL 101 with emphasis on reading and writing.

103. Comprehensive English
   Fall, Winter, Spring, Summer. 3(3-1)
   ATL 102 or approval of department. Students may not receive credit in both ATL 103 and ATL 103E.
   Continuation of ATL 102 with emphasis on reading and writing on American cultural topics.

117. Use of Libraries
   Fall, Winter. 1(1-0)
   The use of libraries, with emphasis on MSU Library. Course will stress skill and use of bibliographic and reference resources.

121. American Expression
   Fall, Winter, Spring, Summer. 3(3-0)
   Satisfactory grade on English proficiency examination or in Comprehensive English. Students may not receive credit in both ATL 121 and ATL 121E.
   Aims to improve the student's ability to read and write, and to acquaint him with his American heritage. Selected reading and theme topics.

122. American Expression
   Fall, Winter, Spring, Summer. 3(3-0)
   Three credits in the first term of any ATL sequence numbered ATL 121 or above; or satisfactory performance in Comprehensive English. Students may not receive credit in both ATL 122 and ATL 122E.
   Aims to improve the student's ability to read and write, and to acquaint him with his American heritage. Selected reading and theme topics.

123. American Expression
   Fall, Winter, Spring, Summer. 3(3-0)
   Three credits in the second term of any ATL sequence numbered ATL 121 or above; or satisfactory performance in Comprehensive English. Students may not receive credit in both ATL 123 and ATL 123E.
   Aims to improve the student's ability to read and write, and to acquaint him with his American heritage. Selected reading and theme topics.

133. Major Currents in American Experience
   Fall, Winter, Spring, Summer. 3(3-0)
   Three credits in the second term of any ATL sequence numbered ATL 121 or above; or satisfactory performance in Comprehensive English.
   Aims to acquaint the student with ideas concerning radical social change, and to improve his ability at reading and writing. Selected readings and theme topics.

134. American Humanities
   Fall, Winter, Spring, Summer. 3(3-0)
   Satisfactory grade on English proficiency examination or in Comprehensive English. Aims to acquaint the student with women's experience in America, and to improve his ability at reading and writing. Selected readings and theme topics.

136. American Radical Thought
   Winter. 3(3-0) Three credits in the first term of any ATL sequence numbered ATL 121 or above; or satisfactory performance in Comprehensive English.
   Aims to acquaint the student with ideas concerning radical social change, and to improve his ability at reading and writing. Selected readings and theme topics.

137. American Radical Thought
   Spring. 3(3-0) Three credits in the second term of any ATL sequence numbered ATL 121 or above; or satisfactory performance in Comprehensive English.
   Aims to acquaint the student with ideas concerning radical social change, and to improve his ability at reading and writing. Selected readings and theme topics.

138. American Radical Thought
   Winter. 3(3-0) Three credits in the first term of any ATL sequence numbered ATL 121 or above; or satisfactory performance in Comprehensive English.
   Aims to acquaint the student with ideas concerning radical social change, and to improve his ability at reading and writing. Selected readings and theme topics.

139. American Radical Thought
   Spring. 3(3-0) Three credits in the second term of any ATL sequence numbered ATL 121 or above; or satisfactory performance in Comprehensive English.
   Aims to acquaint the student with ideas concerning radical social change, and to improve his ability at reading and writing. Selected readings and theme topics.
191H. Honors Work in American Experience
Fall. 3(3-0) Satisfactory grade in entrance examination.
Students read and write on selected topics to improve their knowledge of the American heritage and their ability at reading and writing.

192H. Honors Work in American Experience
Winter. 3(3-0) Satisfactory grade in the first term of any ATL sequence numbered ATL 121 or above.
Students read and write on selected topics to improve their knowledge of the American heritage and their ability at reading and writing.

193H. Honors Work in American Experience
Spring. 3(3-0) Satisfactory grade in the second term of any ATL sequence numbered ATL 121 or above.
Students read and write on selected topics to improve their knowledge of the American heritage and their ability at reading and writing.

205. Reading for University-Level Understanding
Winter. Fall, Winter, Spring. 2(0-4) May reenroll for a maximum of 4 credits.
Individualized instruction in techniques for improving vocabulary, comprehension, rate, study skills and test taking skills in order to achieve a better understanding of university-level materials.

232. American Humor
Winter. 4(4-0) Sophomores.
An interdisciplinary study of the relationship between American humor and the developing American experience, especially of the nineteenth and twentieth centuries.

300. Supervised Individual Study
Fall, Winter, Spring. 2 to 4 credits. May reenroll for a maximum of 12 credits. 2 credits in a composition course; 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 approval.

329. Advanced Writing: The Prose Essay
Spring. 4(4-0) Completion of ATL sequence, ENG 201 or approval of department.
Provides instruction in the acquisition of knowledge from the prose essay, making sophisticated inferences from the ideas collected, and formulating and supporting logical theses in the writing of such essays.

350. American Film
Fall, Winter, Spring. 4(2-4) May reenroll for a maximum of 8 credits if different topic is taken. Sophomores.
American films as they reflect and influence society.

380. The Role of Women in America: Arts and Self
Winter of even-numbered years. 4(4-0) Juniors.
Various set forms by women and the exploration of a lifetime commitment, society, race, class interactions, sexual stereotypes; male views of women and themselves; the impact of the media.

381. The Role of Women in America: Movements and Ideology
Spring of odd-numbered years. 4(4-0) Juniors.
Key personalities and philosophical currents in the women's movement, biological and cultural myths and realities, the historical role of the family, 'The Culture of Romance.'

439. Writing the Research Report
Winter, Spring. 4(4-0) Juniors.
Advanced methods and organization of written research reports will be taught by providing examples, exercises, and writing practice based on research submitted by the students.

449. Technical Report Writing
Winter, Spring. 4(4-0) Completion of ATL requirement, Juniors or approval of instructor.
Use and understanding of language through writing and editing clear, concise, purposeful technical reports, letters, instructions, proposals.

ANATOMY - ANT

381. Applied Human Anatomy
Fall, Spring. 5(4-3) HPR major or minor.
Structural anatomy of the various systems of the human body. Concepts of kinesiological applications.

361. General Anatomy
Fall, 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.

490. 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.

505A. Anatomy in Physical Diagnosis
Fall. 1 to 3 credits. H M 505 concurrent.
Exercises in which students study systemic anatomy in a physical diagnosis context. Preparatory self-instruction precedes exercises.

505B. Anatomy in Physical Diagnosis
Winter. 1 to 3 credits. ANT 505A or approval of department.
Exercises in which students study regional anatomy in a physical diagnosis context. Preparatory self-instruction precedes exercises.