891. Advanced Topics in Agricultural Technology and Systems Management Fall, Spring, Summer. 1 to 4 credits. A

student may earn a maximum of 8 credits in all enrollments for this course.

R: Open only to graduate students in College of Agri-culture and Natural Resources or College of Engineer-

New developments in agricultural technology and systems management. QA: ATM 890

Master's Thesis Research

Fall, Spring, Summer. 1 to 10 credits. A student may earn a maximum of 99 credits in all enrollments for this course.
R: Open only to graduate students in Agricultural Technology and Systems Management. Approval of

department.

QA: ATM 899

Doctoral Dissertation Research

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course.

R: Open only to Ph.D. students in Agricultural Tech-

nology and Systems Management. Approval of depart-

QA: ATM 999

AGRICULTURE AND NATURAL RESOURCES ANR

College of Agriculture and Natural Resources

350. Leadership Development for Agriculture and Natural Resources Spring. 2(2-0)

R: Not open to freshmen and sophomores. Approval of college; application required.

Preparation for community leadership. Field observa-

tion of social, economic and political problems. Emphasis on awareness, action and involvement. Seminars and interviews. QA: ANR 350

392. Agriculture and Natural Resources Seminar

Spring. 1(2-0)
R: Not open to freshmen and sophomores. Current agricultural, natural resources and environmental problems and solutions. Discussion leaders from various disciplines. QA: ANR 425

International Studies in Agriculture and Natural Resources

Fall, Spring, Summer. Given at various off campus sites. 2 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this

R: Approval of college; application required.
Study-travel experience emphasizing contemporary problems affecting agriculture and natural resources in the world, national and local communities. Case studies and interviews with officials, community leaders and leading professionals. QA: ANR 475

Agricultural Research Systems in Developing Countries Summer. 2(2-0) Interdepartmental with 481.

Agricultural Economics, Animal Science, and Crop and Soil Sciences.

R: Open only to seniors and graduate students in the College of Agriculture and Natural Resources. Planning, organizing and managing agricultural research systems. Problems and alternative reforms to improve research productivity. Adapting new agricultural technology in developing countries. QA: ANR 480

Integrated Approaches to Agriculture and Natural Resources Problems 489.

Fall, Spring. 3(2-2)
P: MTH 110 or MTH 116; EC 201 or EC 202. R: Open only to seniors in the College of Agriculture and Natural Resources.

Holistic solutions to resource management and allocation: an integrated, multidisciplinary team approach to case study problems. QP: MTH 109, MTH 110, MTH 111, EC 201, EC

Selected Topics

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

R: Not open to freshmen and sophomores. Special topics in agriculture and natural resources. QA: ANR 480

Professional Internship in Agriculture and Natural Resources

Fall, Spring, Summer. 3 credits. A stu-dent may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to juniors and seniors in the College of Agriculture and Natural Resources. Approval of de-

partment; application required.
Supervised professional experiences in agencies and businesses related to a student's major field of study. QA: ANR 399

AMERICAN STUDIES **AMS**

College of Arts and Letters

Perspectives in American Studies

Fall. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Not open to freshmen and sophomores. Methods and significant works in American Studies. Topics vary. QA: AMS 410

492. Seminar in American Studies

Spring 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to majors in Arts and Letters, James Madison College, and Lyman Briggs School. Selected topics in American life emphasizing interdisciplinary approaches. Topics vary. QA: AMS 411

American Studies Theory, Methods, 881. and Bibliography Fall. 3(3-0)

Methods and bibliographical sources of American Studies research. Interdisciplinary approaches to studying American culture. $QA:A \perp 801$

Independent Study 890.

Fall, Spring Summer. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course.

R: Approval of college.

Special projects, directed reading, and research arranged by an individual graduate student and a faculty member in areas supplementing regular course offerings. QA: A L 803

Special Topics in American Studies Fall, Spring, Summer. 4(4-0) A student

may earn a maximum of 12 credits in all enrollments for this course.

R: Approval of college.

Special topics supplementing regular course offerings proposed by faculty for graduate students on a group study basis. QA: A L 802

Master's Thesis Research

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

R: Approval of college.

Directed research leading to a master's thesis in partial fulfillment of Plan A master's degree require-

AMERICAN THOUGHT AND LANGUAGE ATL

Department of American Thought and Language College of Arts and Letters

Preparation for College Writing Fall, Spring. 0(0-2)[1[0-2] See page A-2,

C: ATL 1004 R: Designated score on English placement test.

Practice in applying the principles of English grammar, syntax, and word usage to writing. QA: ATL 0991

1004. Preparation for College Writing

Fall, Spring. 3(3-0) C: ATL 0102 R: Designated score on English placement test.

Composing, revising, and editing. Active reading and pre-writing strategies. Style, mechanics, and usage. organization and proofreading. QĂ: ATL 1144, ATL 1154

Library Resources

Fall, Spring, Summer. 1(1-0) Use of libraries for researching college assignments and papers. Emphasis on bibliographic and reference tools. QA: ATL 117

110. Writing: Science and Technology Fall, Spring. 4(4-0)

P: Designated score on English placement test or ATL 1004. R: Not open to students with credit in MC 111, MC 112, LBS 133, ATL 120, ATL 125, ATL 130, ATL

140, ATL 145, ATL 150, ATL 195H.

Drafting, revising, and editing compositions derived from readings on American science and technology to develop skills in narration, persuasion, analysis, and documentation. QA: ATL 1154, ATL 1164, ATL XY2, ATL XY3

Writing: American Philosophy, Literature, and the Arts

P: Designated score on English placement test or ATL 1004. R: Not open to students with credit in MC 111, MC 112, LBS 133, ATL 110, ATL 125, ATL 130, ATL

140, ATL 145, ATL 150, 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. QA: ATL 1154, ATL 1164, ATL XY2, ATL XY3

Writing: The American Ethnic and Racial Experience 125.

Fall, Spring. 4(4-0) P: Designated score on English placement test or ATL 1004. R: Not open to students with credit in MC 111, MC 112, LBS 133, ATL 110, ATL 120, ATL 130, ATL 140, ATL 145, ATL 150, 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.

QA: ATL 1154, ATL 1164, ATL XY2, ATL XY3

Writing: American Radical Thought

Fall, Spring. 4(4-0)
P: Designated score on English placement test or ATL 1004. R: Not open to students with credit in MC 111, MC 112, LBS 133, ATL 110, ATL 120, ATL 125, ATL 140, ATL 145, ATL 150, ATL 195H.

Drafting, revising, and editing compositions derived from readings on American radical thought to develop skills in particular proprieties analysis and derived development.

skills in narration, persuasions, analysis, and documentation.

QA: ATL 1154, ATL 1164, ATL XY2, ATL XY3

Writing: Women in America Fall, Spring. 4(4-0)

P: Designated score on English placement test or ATL 1004. R: Not open to students with credit in MC 111, MC 112, LBS 133, ATL 110, ATL 120, ATL 125, ATL 130, ATL 145, ATL 150, ATL 195H.

Drafting, revising, and editing compositions derived from readings on women in America to develop skills in narration, persuasion, analysis, and documentation. QA: ATL 1154, ATL 1164, ATL XYZ, ATL XY3