

443. Machinery and Tractor Systems
(A E 443.) Fall, Spring. 4(3-2) A E
243 or approval of department.

Characteristics of basic agricultural field machinery. Diesel engine, fuel injection and combustion chamber characteristics. Torque and power transmission, tractor stability and implement hitching.

AGRICULTURE

AG

**College of Agriculture and
Natural Resources**

**124A. Introduction to Careers in
Vocational and Practical Arts
Education—Agriculture**

Fall. 2(1-2) Interdepartmental with
and administered by Education.

**275. Exploring International
Agriculture**

Spring. 3(3-0) Interdepartmental with
Natural Resources.

Exploration of overseas assignments with international agencies; potential world food actualities and potentialities; special problems of the tropics compared with those in temperate regions.

**350. Leadership Development for
Agriculture and Natural
Resources**

Winter, Spring. 3(3-0) May re-
enroll for a maximum of 6 credits. Approval
of department. Interdepartmental with Natural
Resources.

Leadership development. Preparation for community leadership. Firsthand look at social, economic, and political problems. Series of seminars, interviews, field trips. Emphasis on awareness, action, and involvement.

399. Agriculture Internship

Fall, Winter, Spring, Summer. Zero
credit. [10 credits.]† Juniors and approval of
department. Interdepartmental with Natural
Resources.

An opportunity for exposure to the applied aspects of a student's major. Supervision and evaluation conducted by faculty and cooperating agencies.

**401. Agriculture and Natural
Resources Communications**

Winter, Spring. 3(2-2) 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**

Fall, Winter, Spring, Summer. 1 to 6
credits. May re-enroll for a maximum of 6
credits. 401, approval of college.

Internship with professionals in communications field with emphasis on student's areas of interest—writing, radio, TV, publications, etc.

**425. Agriculture and Natural
Resources Seminar**

Spring. 2(2-0) Interdepartmental
with Natural Resources.

Current agricultural, natural resources, and environmental problems and solutions as presented by discussion leaders from various disciplines, arranged by undergraduate students.

†See page A-2, item 3.

**IDC. The Impact of Animal Resource
Management Upon the World's
Developing Nations**

For course description, see Interdisci-
plinary Courses.

**462. Agricultural and Rural
Development in Developing
Nations**

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 to technological, institutional and human change. Strategies for rapid agricultural transformation.

**471. Environmental Topics in
Nonmetropolitan Regions**

Fall. 4(4-0) Nomination of students
by own department and approved by participating
faculty. Interdepartmental with the College
of Natural Science and Natural Resources and
administered by Natural Resources.

Environmental topics in nonmetropolitan regions including issues on: production agriculture, service industries, non-agricultural uses, rural urban balance, discussion topics and case studies.

**475. International Studies in
Agriculture and Natural
Resources**

Spring, Summer. 3 to 9 credits. Ap-
proval of the college. Interdepartmental with
Natural Resources.

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.

AMERICAN STUDIES

AMS

College of Arts and Letters

301. Issues in American Civilization

Fall, Winter, Spring. 3(3-0) May re-
enroll for a maximum of 9 credits. Not appli-
cable 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.

**410. Perspectives in American
Studies**

Fall. 3 credits. Juniors in American
Studies or approval of American Studies Com-
mittee.

Methods and significant works, for majors in the American Studies program. Offered by members of the relevant departments.

**411. Problems in American
Civilization**

Winter, Spring. 3 credits. Majors
must re-enroll for a maximum of 6 credits. 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**

ATL

University College

Students may earn credit in only one of the courses in each of the following three groups:
1. 121, 131, 141, 151, 161, 171, 181, 191H
2. 122, 132, 142, 152, 162, 172, 182, 192H
3. 123, 133, 143, 153, 163, 173, 183, 193H

101A. Comprehensive English

(100.) Fall, Winter, Spring, Summer.
3(3-1) No student may receive credit in both
101A and 101B. Admission by examination or
approval of department.

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

(100.) Fall, Winter, Spring, Summer.
3(3-1) 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(3-1)
101A or 101B.

Continuation of 101 with emphasis on writing
and reading.

103. Comprehensive English

Fall, Winter, Spring, Summer 3(3-1)
102.

Continuation of 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 M.S.U.
Library. Course will stress knowledge and use
of bibliographic and reference resources.

121. American Expression

(111A.) Fall, Winter, Spring, Summer.
3(3-0) Satisfactory grade on English
proficiency examination or in Comprehensive
English.

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

(112A.) Fall, Winter, Spring, Summer.
3(3-0) Three credits in the first term
of any ATL sequence numbered 121 or above;
or satisfactory performance in Comprehensive
English.

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

(113A.) Fall, Winter, Spring, Summer.
3(3-0) Three credits in the second term
of any ATL sequence numbered 121 or above;
or satisfactory performance in Comprehensive
English.

Aims to improve the student's ability to read
and write, and to acquaint him with his American
heritage. Selected reading and theme topics.

**131. Major Documents in
American Experience**

(111B.) Fall, Winter, Spring, Summer.
3(3-0) Satisfactory grade on English
proficiency examination or in Comprehensive
English.

Aims to acquaint the student with significant
works, and to improve his abilities at reading
and writing. Selected readings and theme topics.