

**AGRICULTURE  
AND NATURAL  
RESOURCES**

**ANR**

**College of Agriculture and  
Natural Resources**

**101 Preview of Science**

Fall. 1 credit. Interdepartmental with Engineering and Natural Science and Social Science. Administered by Natural Science. R: Approval of college.

Overview of natural sciences. Transitional problems. Communications and computer skills. Problem-solving skills. Diversity and ethics problems in science. Science and society.

**101A Academic and Career Decision Making**

Fall, Spring. 2(2-0)

Exploration of the career possibilities in agriculture, natural resources and related areas.

**110 New Student Seminar: Issues and Ideas in Agriculture and Natural Resources**

Fall. 1(0-2) R: Open only to freshmen or sophomores or juniors in the College of Agriculture and Natural Resources.

Issues in agriculture and natural resources. Personal and professional development through discussion and interactive experiences.

**192 Environmental Issues Seminar**

Fall, Spring. 1 credit. A student may earn a maximum of 4 credits in all enrollments for this course. Interdepartmental with Communication Arts and Sciences and Engineering and Natural Science and Social Science. Administered by Natural Science. R: Open only to students in the College of Agriculture and Natural Resources or College of Engineering or College of Natural Science or College of Communication Arts and Sciences or College of Social Science. Approval of college.

Environmental issues and problems explored from a variety of perspectives, including legal, scientific, historical, political, socio-economic, and technical points of view.

**202 Michigan's Agricultural and Natural Resources Heritage**

Fall. 2(2-0) Interdepartmental with ANR Education and Communication Systems. Administered by Agriculture and Natural Resources. P:M: Completion of Tier I writing requirement.

Michigan's historical agricultural and natural resources. Orientation to sources for research and learning. Self-directed study integrating agricultural and natural resources heritage to family, community and careers.

**210 Pathways in Connected Learning**

Fall, Spring. 3(2-2) R: Approval of college.

Active, self-directed, and reflective learning associated with agriculture and natural resource issues, self and social development, and ethical choice making. Development of a learning plan and design of a learning portfolio. Individual and group presentations.

**250 Global Issues in Agriculture and Natural Resources**

Fall. 3(3-0) Interdepartmental with Community, Agriculture, Recreation and Resource Studies. Administered by Agriculture and Natural Resources. P:M: Completion of Tier I writing requirement. SA: AEE 301

Globalization. Economic, political, and social issues related to natural resources and agricultural production. Historical perspectives and future projections.

**292 Applications in Environmental Studies**

Fall. 2(1-2) Interdepartmental with Communication Arts and Sciences and Engineering and Natural Science and Social Science. Administered by Natural Science. P:M: NSC 192 R: Open only to students in the Specialization in Environmental Studies.

Community engagement project. Projects vary depending on student's major and area of environmental interest.

**310 Connected Learning Seminar I**

Fall, Spring, Summer. 3(3-0) P:M: ANR 210

Learner-directed critical analysis of contemporary issues in agriculture and natural resources. Communication of outcomes to professional communities. Collaborative learning integrated with individual experiences.

**311 Connected Learning Seminar II**

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. P:M: ANR 310

Advanced analysis and presentation of contemporary issues in agriculture and natural resources.

**392 Agriculture and Natural Resources Seminar**

Spring. 1(2-0) R: Not open to freshmen or sophomores.

Current agricultural, natural resources and environmental problems and solutions. Discussion leaders from various disciplines.

**410 Connected Learning Transitions**

Fall, Spring. 3(3-0) P:M: ANR 310

Synthesis and analysis of structured experiences in agriculture and natural resources. Personal and interpersonal development, personal and professional integrity, communication competence, and critical and reflective thinking.

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

Fall, Spring, Summer. 2 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of college; application required.

Study-travel experience. Contemporary problems affecting agriculture and natural resources in world, national and local communities. Case studies and interviews with officials, community leaders and leading professionals.

**490 Independent Study in Agriculture and Natural Resources**

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to sophomores or juniors or seniors or graduate students in the College of Agriculture and Natural Resources.

Supervised individual study in topics related to agriculture and natural resources.

**491 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 or sophomores.

Special topics in agriculture and natural resources.

**493 Professional Internship in Agriculture and Natural Resources**

Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. A student may earn a maximum of 6 credits in all enrollments for any or all of these courses: ABM 493, AEE 493, ANR 493, ANS 493, CSS 493, EEP 493, FIM 493, FW 493, HRT 493, PKG 493, PLP 493, PRR 493, and RD 493. R: Open only to juniors or seniors in the College of Agriculture and Natural Resources. Approval of department; application required.

Supervised professional experiences in agencies and businesses related to a student's major field of study.

**810 International Food Laws and Regulations**

Fall, Spring, Summer. 3(3-0) RB: Food science, law, food safety or related disciplines.

Survey of food laws of various countries and regions.

**811 U.S. Food Laws and Regulations**

Fall, Spring, Summer. 3(3-0) RB: (ANR 810) or food science, law or food safety. Not open to students with credit in FSC 421.

Food laws and regulations of the United States.

**820 Proseminar in Food and Agricultural Standards**

Fall. 3(3-0) Interdepartmental with Social Science. Administered by Social Science.

Interdisciplinary theoretical and applied perspectives on societal roles and implications of standards in food and agriculture.

**828 Food Safety Seminar Series**

Fall, Spring. 1(1-0) Interdepartmental with Natural Science and Social Science and Veterinary Medicine. Administered by Veterinary Medicine. RB: Enrollment in graduate program in related discipline

Selected current topics covering the broad areas of food safety as they relate to production, processing, transport, microbiology, toxicology, and social and human dimensions.

**829 Problems in Food Safety**

Fall. 1(1-0) Interdepartmental with Natural Science and Social Science and Veterinary Medicine. Administered by Veterinary Medicine. RB: Enrollment in graduate program in related discipline

In-depth discussion of selected problems in food safety.

**880 Leadership and the Policy Process in Agriculture and Natural Resources**

Fall, Spring. 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. RB: Demonstrated leadership in ANR R: Approval of department.

Theory and practice of leadership and engagement in the policy process. Current issues facing agriculture, natural resources, manufacturing, and the environment in Michigan.

## **Agriculture and Natural Resources—ANR**

### **886 Teaching and Learning in Applied Sciences**

Fall of odd years. 3(2-2)

Applications of pedagogical techniques to applied sciences through discussions, presentations, and activities.

### **891 Food and Agricultural Standards Seminar**

Spring. 3(3-0) Interdepartmental with Social Science. Administered by Social Science.  
P:M: SSC 820

Integration of multidisciplinary perspectives on Food and Agricultural Standards.