

**AGRICULTURE  
AND NATURAL  
RESOURCES**

**ANR**

**College of Agriculture  
and Natural Resources**

**101A Academic and Career Decision Making**  
Fall, Spring. 2(2-0)  
Exploration of the career possibilities in agriculture, natural resources and related areas.

**150 Academic Success and Careers in Agriculture and Natural Resources**  
Fall. 3(3-0) R: Open to freshmen.  
Decision making and critical thinking for success in college. Time management, classroom ethics, test taking, listening and writing. University resources and career paths in agriculture and natural resource fields.

**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.

**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: 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: 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: 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: 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: 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, CMP 493, CSS 493, EEP 493, FIM 493, FSC 493, FW 493, HRT 493, PKG 493, PLP 493, PRR 493, and ESA 493. R: Open 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.

**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.

**826 Principles of Scholarship: Integrity, Ethics and Research**  
Fall. 2(2-0) Interdepartmental with Packaging. Administered by Packaging.  
Principles, considerations, expectations and culture of professional scholarship.

**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. Field trips required.

**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: SSC 820  
Integration of multidisciplinary perspectives on Food and Agricultural Standards.