AGRICULTURAL ECONOMICS

Department of Agricultural Economics
College of Agriculture and Natural Resources

481. Agricultural Research Systems in Developing Countries
Summer. 3(3-0) Interdepartmental with Agriculture and Natural Resources, Animal Science, and Crop and Soil Sciences. Administered by Agriculture and Natural Resources.
R: Open only to seniors and graduate students in the College of Agriculture and Natural Resources.

480. Foundations of Agricultural Economics
Fall. 3(3-0) Concepts of agricultural economics drawn from economic and management theory. Applications to economic decisions and policy issues related to agricultural, food, and natural resource firms, markets, and institutions.

480A. Mathematical Applications in Agricultural Economics
Fall. 1(1-0)
C: AEC 809 concurrently.

80. Institutional and Behavioral Economics
Fall. 3(3-0) Interdepartmental with Economics and Resource Development.
R: Open only to seniors and graduate students in the College of Agriculture and Natural Resources.

815. Applied Welfare Economics in Agriculture
Fall of odd-numbered years. 3(3-0)
P: EC 801; EC 805 or EC 812A; EC 809 or EC 813A.

817. Political Economy of Agricultural and Trade Policy
Spring. 3(3-0) P: EC 805 or EC 812A; EC 809 or EC 813A.

821. Econometrics II
Fall. 3(3-0) Interdepartmental with Economics and Statistics and Probability. Administered by Economics.
P: EC 820, STT 442.

831. Food Marketing Management
Spring. 3(3-0) Interdepartmental with Marketing and Supply Chain Management.
P: MHA 820 or MSC 865.
Marketing management decisions in food firms. Consumer orientation, computer technologies, food system cost reduction, global opportunities, environmental and social issues.

832. Environmental and Natural Resource Law
Fall. 3(3-0) Interdepartmental with Resource Development, Forestry, Crop and Soil Sciences, and Geography. Administered by Resource Development.
P: RD 450.
Origin and development of environmental law. Theories of power, jurisdiction, sovereignty, property interests, pollution, and other bases for legal controls of natural resources. Common law and constitutional limitations on governments' power.

835. Introductory Econometrics
Summer. 3(3-0)
P: STT 430.
Estimation and interpretation of multiple regression models and their modifications when usual assumptions are not valid. Applications focus on problems faced by agricultural economists.

887. Water Law
Spring. 3(3-0) Interdepartmental with Resource Development and Forestry. Administered by Resource Development.
P: RD 450.
Legal principles applicable to surface water and groundwater, private and public water rights, and controls over water resources. Cases, statutes, and administrative procedures.

888. Master's Research
Fall, Spring, Summer. 1 to 4 credits. Open only to graduate students in Agricultural Economics.
R: Open only to graduate students in Agricultural Economics. Approval of department. Master's degree Plan B research.
Agricultural Economics

929. Master's Thesis Research
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 29 credits in all enrollments for this course. R: Open only to graduate students in Agricultural Economics. Approval of department.

930. Theory of Resource and Environmental Economics

947. Analysis of Food Systems Organization
Summer. 3(3-0) P: AEC 810, AEC 841, AEC 846. Public and private policy issues related to the organization and performance of food systems.

950. Advanced Topics in Agricultural Economics (MFC)
Fall, Spring, Summer. 2 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open only to Ph.D. students in the colleges of Agriculture and Natural Resources, Business, and Social Science. Topics such as international agricultural development, environmental economics, and trade policy.

952. Seminar in Agricultural Economics
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Open only to Ph.D. students in Agricultural Economics. Approval of department; application required. Price analysis, development, risk, trade, dynamic modeling research methods, finance and environmental economics.

960. 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 Economics. Approval of department.

AGRICULTURAL TECHNOLOGY AND SYSTEMS MANAGEMENT

ATM

Department of Agricultural Engineering

College of Agriculture and Natural Resources

College of Engineering

315. Occupational and Personal Safety
Spring. 2(2-0) P: CSS 101 or ANS 110 or ARE 101 or HRT 201. R: Open only to College of Agriculture and Natural Resources majors. Principles of safety problem solving. Accident causation and prevention. Regulations, machinery, electrical, chemical and fire safety. Security, safety program development.

326. Principles of Animal Environments
Spring. 2(2-0) P: MTH 116 or MTH 120; CPS 101 or CPS 131. R: Open only to College of Agriculture and Natural Resources majors. Heat and moisture balances for confined livestock. Interior environment and its control. Waste management.

431. Irrigation, Drainage and Erosion Control Systems
Fall. 3(2-2) P: MTH 116 or MTH 120; CSS 210. R: Not open to freshmen and sophomores. Principles of soil and water conservation engineering including: land and soil surveying, basic hydraulics, hydrology, soil moisture, and soil and water conservation practices with applications to irrigation, drainage and erosion control systems.

490. Independent Study
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

491. Special 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.

840. Analysis of Physical Systems
Fall. 3(3-0) P: ATM 440, BCM 311 or MGT 306. R: Open only to graduate students in College of Agriculture and Natural Resources. Identification and definition of systems problems in agricultural and construction industries. Model formulation and estimation.

845. Process Network Theory Applied to Agroecosystems
Spring of odd-numbered years. 4(4-0) R: Open only to graduate students in College of Agriculture and Natural Resources or College of Engineering. Numerical framework for the technical, economic and environmental analysis of agricultural and biological systems.

890. Special Problems
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: Approval of department. Individual study of selected topics.

AGRICULTURE AND NATURAL RESOURCES

ANR

College of Agriculture and Natural Resources

101. Preview of Science

192. Environmental Issues Seminar
Fall, Spring. 1(1-0) A student may earn a maximum of 4 credits in all enrollments for this course. Interdepartmental with Natural Science, Engineering, and Social Science. Administered by Natural Science. R: Open only to students in the College of Agriculture and Natural Resources, College of Engineering, College of Natural Science, and 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.

550. 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 observation of social, economic and political problems. Emphasis on awareness, action and involvement. Seminars and interviews.

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.