

422. National Defense Policy and Military Justice
Spring. 3(3-1)

Broad range of American civil-military relations and the environmental context in which defense policy is formulated. Military justice and the laws of war.

499. Independent Study

Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 6 credits. Juniors and approval of instructor.

Investigation of an aspect of aerospace activities of specific interest to the student and a faculty member.

AFRICAN LANGUAGES

See Linguistics and Germanic, Slavic, Asian and African Languages.

**AGRICULTURE
AND EXTENSION
EDUCATION**

AEE

(Name change effective July 1, 1983. Formerly Agriculture and Natural Resources Education Institute.)

College of Agriculture and Natural Resources

360. Developing Concurrent Work-Education Programs

Fall. 1(2-0) Approval of department.

Planning, organizing and implementing effective concurrent work-education programs for secondary vocational agribusiness and natural resources education students.

361. FFA in Agribusiness and Natural Resources Education

Winter. 1(2-0) Approval of department.

Planning and organizing an effective FFA program as an integral part of a secondary vocational agribusiness and natural resources education program.

362. Developing a Five-Year Plan

Spring. 1(2-0) Approval of department.

Developing and organizing a five-year plan for a comprehensive secondary vocational agribusiness and natural resources education program.

401. Agriculture and Natural Resources Communications

(ANR 401.) Fall, Winter, Spring. 3(2-2) IRN 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

(ANR 402.) Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 6 credits. AEE 401, approval of department.

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

483. Readings and Independent Study

Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 6 credits. Juniors; approval of department.

Study on an individual basis in the various areas of emphasis in agricultural and extension education.

826. Methods of Teaching Agricultural Mechanics

(ED 830G., ANR 826.) Fall of odd-numbered years. 3(3-0) Approval of department.

Methods of instruction including program planning, scheduling, use of teaching aids, management of buildings, facilities and equipment; the selection, organization, and evaluation of activities in farm mechanics.

828. Teaching Farmer Classes in Agriculture

(ED 828B., ANR 828.) Fall of even-numbered years. 3(3-0) Approval of department.

Objectives of adult education in agriculture, organizing and promoting classes, course planning, instructional procedures, follow-up and evaluation.

**AGRICULTURAL
ECONOMICS**

AEC

College of Agriculture and Natural Resources

805. Agricultural Production Economics I

Fall. 4(4-0) PAM 340 or EC 325.

Economic principles of production. Industry supply and factor demand analysis. Management concepts and choice criteria. Interrelationship of production and consumption decisions. Welfare economics. Agricultural economics applications.

809. Institutions; Behavior and Performance

Fall. 3(3-0) Approval of department.

Relationships among institutional structure, behavior, and performance. Concepts of behavioral sciences useful in public policy and program analysis emphasizing interactions of preferences, incentives and institutions.

810. Economics of Public Choice

Winter. 3(3-0) Approval of department. Interdepartmental with the departments of Resource Development and Economics.

Economics of alternative institutions for collective action. Emphasis on property rights and natural resources. Public goods, externalities, non-marginal change, commonwealth, income and power distribution, grants, welfare criteria and market failure.

811. Public Program Analysis

Spring. Summer of odd-numbered years. 3(3-0) EC 324 or approval of department. Interdepartmental with the departments of Economics and Resource Development.

Application of benefit-cost analysis to public programs of resources development. Issues and case studies in budgeting, investment criteria, pricing, externalities, and coordination.

831. Food Marketing Management

Fall, Spring. 4(4-0) May reenroll for a maximum of 8 credits. Interdepartmental with and administered by the Department of Marketing and Transportation Administration.

Food industry adjustment to changing social, economic and internal company environment. Managerial principles and techniques applied to food processing and distribution. Student interaction with industry, labor and government representatives.

835. Introduction to Econometrics

Spring, Summer. 3(3-0) EC 325, STT 422; not open to students with credit in EC 836. Interdepartmental with and administered by the Department of Economics.

Specification, estimation and interpretation of economic models. Applications to empirical problems.

837. Applied Operations Research I

Spring. 4(4-0) MTH 113 or MTH 228. Approval of department.

Use and interpretation of operations research techniques for problems encountered by agricultural economists. Emphasis on linear programming and its variations such as transportation models, network analysis, spatial equilibrium models.

838. Applied Operations Research II

Summer. 2(2-0) MTH 113 or MTH 228, STT 422. Approval of department.

Use and interpretation of operations research techniques for problems encountered by agricultural economists. Emphasis on techniques such as Markov processes, dynamic programming cohort analysis, queuing, Monte-Carlo techniques, elementary simulation.

841. Industrial Organization of Agricultural Markets

Fall. 3(3-0) Approval of department.

Market organization and evaluation of performance. Pricing and market coordination problems. Group action in agricultural markets. Role of marketing in economic development.

843. Commodity Market Analysis

Winter. 3(3-0) STT 422, EC 325.

Economic forecasting in agricultural commodity markets, short run and long run. Futures markets, hedging, speculation. Plant location and size. Selected topics. Emphasis on techniques of use to firm manager.

851. Advanced Farm Management

Summer. 3(2-2) FSM 430 or approval of department.

Emphasizes identification, analysis, and methods of solving problems of farm organization and operation; new technology, specialization and scale. Farm case studies, role-playing, computer games and farm business simulation.

860. Rural Welfare and Development Policy

Spring. 3(3-0) Approval of department.

Analysis of policies and programs for U.S. rural economic and human development. Development strategies. Public decision processes. Growth and distribution of income and public services. Poverty and income maintenance.