African Languages

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

Agricultural and Extension Education

AFRICA

Agricultural Education (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(3-0) 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
(ANR 402.) Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 6 credits.
Internship with professionals in communication field with emphasis on student's areas of interest—writing, radio, TV, publications, etc.

483. Readings and Independent Study
Fall, Winter, Spring. 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.

806. Education Through Cooperative Extension
Winter. 3(3-0) AEE 828 or EAD 800 or approval of department. Interdepartmental with the Department of Educational Administration.
Cooperative extension programs in the United States with emphasis on Michigan model: philosophy, history, scope, organizational structure, programs and methods.

810. Planning Programs
Spring of even-numbered years. 3(3-0)
AEE 806 or approval of department.
Principles, theories and practices in developing state and local agricultural and extension education programs.

812A. Externship: Beginning Professionals in Agricultural and Extension Education
Fall. Winter. Spring. 1 to 3 credits.
May reenroll for a maximum of 3 credits. Approval of department.
Current assignments of beginning professionals used for identifying roles and program characteristics; inventory of school and community resources; establishing mentor networks.

812B. Externship: Experienced Professionals in Agricultural and Extension Education
Fall. Winter. Spring. 1 to 3 credits.
May reenroll for a maximum of 3 credits. AEE 810; AEE 812A.
Current assignments of experienced professionals for identifying problems and proposing possible solutions; review of trends in society and technology with application to local programs.

820. Developing Courses
Summer. 3(3-0) Approval of department.
Developing and utilizing survey instruments to identify community instructional needs in agricultural and extension education and designing courses to assist in meeting those needs.

821. Principles and Practices in Directing Concurrent Work Education
Summer of odd-numbered years. 3(3-0) AEE 820 or approval of department.
Principles and practices involved in directing agricultural students in ownership, placement or school land laboratory programs.

824. Instructional Strategies
Spring. 3(3-0) AEE 820 or approval of department.
Strategies and methods for teaching agriculture and natural resources: objectives, mastery learning, demonstrations and others. Application of learning theory.

826. Methods of Teaching Agricultural Mechanic
(ED 820C, 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.

830. Effective Communications in Agriculture
Fall. Winter. 3(3-0)
Scientific writing for professional lay agricultural and natural resources publications; grant writing; organizing; preparing and delivering of professional scientific presentations.

A-9
Agricultural and Extension Education

Describes - Agricultural and Extension Education

of Courses

851. Program Administration and Supervision
Spring of odd-numbered years. 3(3-0) ANR 806, EAD 812
Principles and practices for developing, supervising and administering agricultural and extension educational programs.

858. Leadership Development in Agricultural and Extension Education
Winter. 3(3-0) Approval of department.
Sociological and philosophical bases for leadership development for agricultural and extension education in a democratic society.

860. Program Evaluation
Summer of even-numbered years. 3(3-0) AE/E 820 or approval of department.
Principles of evaluating agricultural and extension education programs.

883. Readings and Independent Study
Fall, Winter, Spring. 1 to 6 credits. May reenroll for a maximum of 6 credits. Approval of department.
Topics will be selected to meet needs of graduate students in agricultural and extension education.

889. Master's Thesis Research
Fall, Winter, Spring. Summer. 1 to 12 credits. May reenroll for a maximum of 12 credits. Approval of department.

999. Doctoral Dissertation Research
Fall, Winter, Spring. Variable credit. Approval of department.

Agricultural Economics

College of Agriculture and Natural Resources

805. Agricultural Production Economics I
Fall. 4(4-0) PAM 340 or EC 325.

809. Institutions, Behavior and Performance
Fall. 3(3-0) Approval of department.

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 resource development. Issues and case studies in budgeting, investment criteria, pricing, externalities, and coordination.

831. Food Marketing
Fall, Spring. 3(3-0) Approval of department.
Food industry adjustment to a 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 336. Interdepartmental with the Department of Economics.

836. 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.

837. Applied Operations Research II
Summer. 2(2-0) MTH 113 or MTH 228, STT 422. Approval of department.

841. Agricultural Production Economics II
Summer. 2(2-0) MTH 113 or MTH 228, STT 422. Approval of department.

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 farm manager.

851. Advanced Farm Management
Summer. 3(2-2) FSM 430 or approval of department.
Emphasis on 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. Agricultural Trade Policies
Fall of odd-numbered years. Summer of even-numbered years. 3(3-0) EC 428 or approval of department.
International trade in agricultural products, areas of competition, changes in comparative advantage, interrelationship of national and international policy regional groupings, trade and economic development, current policy proposals.

865. Rural Development Administration
Winter. 3(3-0) Approval of department.
Concepts and principles of development administration and their application in the analysis of the processes and structures through which rural development activities are formulated and implemented in less-developed countries.

868. Data Collection in Developing Countries
Spring of even-numbered years. Summer of odd-numbered years. 3(3-0) AE/E 820 or STT 825 or approval of department.
Principles for conducting household/village level studies of production and marketing in developing countries. Preparing research proposal, methodologies for data collection, processing and analysis. Field research administration.

876. Statistical Inference in Economics I
Fall. 3(3-0) EC 812A or EC 855A; STT 843 or STT 863; or approval of department. Interdepartmental with the departments of Economics, and Statistics and Probability. Administered by the Department of Economics.

877. Statistical Inference in Economics II
Winter. 3(3-0) EC 876 or approval of department. Interdepartmental with the departments of Economics, and Statistics and Probability. Administered by the Department of Economics.