210. The Development and Employment of Aerospace Forces
Development of flight from our first efforts to war and peace. Leadership laboratory.

211. The Development and Employment of Aerospace Forces
Winter. 3(1-1)
Continuation of A S 210. Leadership laboratory.

212. The Development and Employment of Aerospace Forces
Spring. 1(1-1)
Continuation of A S 211. Leadership laboratory.

213. The Development and Employment of Aerospace Forces
Winter. 3(1-1)
Continuation of a/s/c. Leadership laboratory.

214. The Development and Employment of Aerospace Forces
Spring. 1(1-1)
Continuation of A S 213. Leadership laboratory.

320. U.S. Air Force Communication and Management
Fall. 3(3-1) Approval of department. Application of communication and management skills for Air Force officers. Leadership laboratory.

Winter. 3(3-1) Approval of department. Leadership theory, functions, and practices. Applications of leadership concepts by junior officers. Leadership laboratory.

322. U.S. Air Force Management and Leadership
Spring. 3(3-1) Approval of department.
Traditional Air Force management functions and current practices. Emphasizes need for leadership and professionalism in modern officer corps. Leadership laboratory.

420. The Military and American Society
Fall. 3(3-1) Approval of department. Role of the professional officer in a democratic society; socialization process with the Armed Services; political economic and social constraints upon the national defense structure. Leadership laboratory.

421. Strategy and the Management of Conflict
Winter. 3(3-1) Approval of department. The formation and implementation of defense policy and strategy. The bureaucratic interplay and impact of nuclear technology. An investigation of limited and insurgency warfare. Leadership laboratory.

422. National Defense Policy and Military Justice
Spring. 3(3-1) Approval of department.
Broad range of American civil-military relations and the environmental context in which defense policy is formulated. Military justice and the laws of war. Leadership laboratory.

499. Independent Study
Fall, Winter, Spring, Summer. 1 to 3 credits. May enroll 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.

AGRICULTURAL AND EXTENSION EDUCATION AEE
College of Agriculture and Natural Resources

203. American Agrarian Movements
Spring. 3(2-2)
Historical perspectives of America by pioneers, farmers, ranchers, and others who cultivated the land from 1700's to 1930. Film screenings of agricultural movements, trends, and development are reviewed and analyzed.

230. Agriculture and Natural Resources-Visual Communications
Winter. 2(2-2)
Basic principles governing the use, and design of visual communications in agriculture and natural resources. Fosters, publications, presentations and computer graphics.

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 agriculture and natural resources education students.

361. FFA in Agriculture 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 agriculture 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 agriculture and natural resources education program.

401. Agriculture and Natural Resources Communications
Fall, Winter, Spring. 3(2-2) 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
Fall, Winter, Spring, Summer. 1 to 6 credits. May enroll 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 enroll 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.

502. Agricultural Education in Rural Development
Winter. 3(3-0) Approval of department. Agricultural education at various levels and in different forms for rural development. Formal and non-formal education: planning, conducting and evaluating. Case studies from selected developing countries.

506. Education Through Cooperative Extension
Winter. 3(3-0) AEE 928 or EAD 860 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.

510. 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.

512A. Externship: Beginning Professionals in Agricultural and Extension Education
Fall, Winter, Spring. 1 to 3 credits. May enroll 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.

512B. Externship: Experienced Professionals in Agricultural and Extension Education
Fall, Winter, Spring. 1 to 3 credits. May enroll for a maximum of 3 credits. AEE 910, AEE 912A.
Current assignments of experienced professionals for identifying problems and proposing possible solutions; review of trends in society and technology with application to local programs.

520. 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.

522. 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.

524. 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 other. Application of learning theory.
Agricultural and Extension Education

Courses

**Agricultural Economics**

- **AEC 805. Agricultural Production Economics I**
  - Fall, 4(4-0) EC 324, PAM 370
  - Economic principles of production. Analysis of inputs yielding services over several periods. Principles underlying present value models. Welfare economic concepts. Aggregation of farm results. Deriving production functions and process models.

- **AEC 830. Economic Policy and Administration of Agricultural Production**
  - Winter, 3(3-0) Approval of department
  - Topics will be selected to meet needs of government and industry. Emphasis on policy and administration of agricultural production. Examination of international trade, agricultural, and economic development, current policy proposals.

- **AEC 837. Applied Operations Research**
  - Fall, Winter, 4(4-0) EC 812B or EC 836
  - Principles and techniques applied to food processing and distribution. Student interaction with industry, labor and government representatives.

- **AEC 838. Food Marketing Management**
  - Fall, Spring, 4(4-0) May reenroll for a maximum of 9 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.

- **AEC 839. Topics in Dynamic Agricultural Economics**
  - Winter, 3(3-0) Approval of department

- **AEC 850. Economic Analysis of Natural Resources**
  - Fall of odd-numbered years, 3(3-0) FSM 430; not open to students with credit in EC 324.
  - Interdependence of resource and property rights, natural resources. Public goods, externalities, non-marginal change, welfare criteria, and power distribution. Economic models of the agricultural development process.

- **AEC 850. Environmental Economics**
  - Fall, Spring, 3(3-0) FSM 421, EC 324, EC 326; or approval of department

- **AEC 851. Agricultural Policy in Developing Countries**
  - Winter, 3(3-0) FSM 430 or AEC 850 or AEC 851 recommended
  - Development and design of information systems. Database and modelbase systems with emphasis on decision maker/infomation systems interfaces. Analyses of systems using case studies.

- **AEC 852. Agricultural Trade Policies**
  - Fall of odd-numbered years, Summer of even-numbered years, 3(3-0) EC 324, EC 326; 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.

- **AEC 852. Agricultural Policy in Developing Countries**
  - Winter, 3(3-0) EC 324, EC 326, PAM 462; or approval of department
  - Development and design of information systems. Database and modelbase systems with emphasis on decision maker/infomation systems interfaces. Analyses of systems using case studies.