

102B. Elementary African Language II
Spring, 4(4-1)
R: Approval of department.
Further work on speaking, reading, and writing an African language, with continued emphasis on developing oral proficiency skills.
QP: AFR 101 QA: AFR 102, AFR 103

151. Beginning Individualized African Language I
Fall, 4(4-1)
R: Approval of department.
Individualized study of an African language at the elementary level. Speaking, reading, and writing, with emphasis on developing oral proficiency skills.
QA: AFR 101, AFR 102

152. Beginning Individualized African Language II
Spring, 4(4-1)
R: Approval of department.
Further individualized work on speaking, reading, and writing an African language, with continued emphasis on developing oral proficiency skills.
QP: AFR 101 QA: AFR 102, AFR 103

201A. Second Year Swahili I
Fall, 4(4-1)
P: AFR 102A or approval of department.
Intermediate-level work on speaking, reading, and writing Swahili, with emphasis on developing oral proficiency skills.
QP: AFR 103 QA: AFR 201, AFR 202

201B. Second Year African Language I
Fall, 4(4-1)
R: Approval of department.
Intermediate-level work on speaking, reading, and writing an African language, with continued emphasis on developing oral proficiency skills.
QP: AFR 103 QA: AFR 201, AFR 202

202A. Second-Year Swahili II
Spring, 4(4-1)
P: AFR 201A or approval of department.
Further intermediate-level work on speaking, reading, and writing Swahili, with continued emphasis on developing oral proficiency skills.
QP: AFR 201 QA: AFR 202, AFR 203

202B. Second-Year African Language II
Spring, 4(4-1)
R: Approval of department.
Further intermediate-level work on speaking, reading, and writing an African language, with continued emphasis on developing oral proficiency skills.
QP: AFR 201 QA: AFR 202, AFR 203

251. Intermediate Individualized African Language I
Fall, 4(4-1)
R: Approval of department.
Intermediate-level individualized work on speaking, reading, and writing an African language, with emphasis on developing oral proficiency skills.
QP: AFR 103 QA: AFR 201, AFR 202

252. Intermediate Individualized African Language II
Spring, 4(4-1)
R: Approval of department.
Further intermediate-level individualized work on speaking, reading, and writing an African language, with continued emphasis on developing oral proficiency skills.
QP: AFR 201 QA: AFR 202, AFR 203

290. Independent Study
Fall, Spring, 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.
R: Approval of department.
Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

450A. Advanced Swahili
Fall, Spring, 1 to 5 credits. A student may earn a maximum of 20 credits in all enrollments for this course.
P: AFR 202A or approval of department.
Advanced study of Swahili. Speaking, reading, and writing, with emphasis on developing oral proficiency skills.
QP: AFR 203 QA: AFR 450

450B. Advanced African Language
Fall, Spring, 1 to 5 credits. A student may earn a maximum of 24 credits in all enrollments for this course.
R: Approval of department.
Advanced study of an African language. Speaking, reading, and writing, with emphasis on developing oral proficiency skills. Language varies.
QP: AFR 203 QA: AFR 450

490. Independent Study
Fall, Spring, 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.
R: Not open to freshmen and sophomores. Approval of department.
Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

491. Special Topics in African Studies
Fall, Spring, 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.
R: Approval of department.
Special topics supplementing regular course offerings proposed by faculty on a group study basis.

AGRICULTURAL AND EXTENSION EDUCATION AEE

Department of Agricultural and Extension Education College of Agriculture and Natural Resources

101. Introduction to Education and Communications in Agriculture and Natural Resources
Fall, 3(3-0)
R: Open only to freshmen and sophomores in the College of Agriculture and Natural Resources.
Historical and philosophical foundations of agriscience education and Agriculture and Natural Resources communications. Theories and principles of learning, inductive teaching, communication, and leadership in the context of the land-grant system.

201. Visual Communications in Agriculture and Natural Resources
Spring, 3(2-2)
P: AEE 101. R: Open only to students in the College of Agriculture and Natural Resources.
Understanding, use, design, and production of visual communications in agriculture and natural resources. Posters, print advertisements, and presentation graphics.
QA: AEE 230

203. American Agrarian Movements
Spring, 3(3-0)
Historical perspectives of America by pioneers, farmers, ranchers and others who cultivated the land from 1700s to 1930. Agricultural movements, trends and development.
QA: AEE 203

301. Exploring World Agriculture and Natural Resources
Fall, 3(3-0)
P: AEE 101 or CSS 101 or FSM 200 or RD 201. R: Not open to freshmen and sophomores.
International dimensions of agriculture and natural resources. Social, economic, geographic, natural and political constraints.
QP: CSS 101, FSM 200, FW 203 QA: ANR 275

302. Developing and Managing Agriscience and Natural Resources Education Programs
Fall, 3(2-2)
P: AEE 101 or TE 150.
Development, management and relationships of key components in effective agriscience and natural resources education programs. Community resource use, leadership development, program evaluation.
QP: TE 323, AEE 360 QA: AEE 360, AEE 361, AEE 362

303. Issues in Agricultural and Environmental Education Programs
Fall, 3(2-2)
P: AEE 101 or TE 150; FW 203. R: Not open to freshmen and sophomores.
Assessment and analysis of current issues and their impact on agricultural and environmental education programs.
QP: FW 203, TE 200, TE 322

312. American Agricultural Development and the Land-Grant System
Fall, 3(3-0)
P: AEE 203. R: Not open to freshmen.
Historical overview of the evolution of American agricultural development and the land-grant system. Relationship between federal legislation and agrarian institutions such as farm organizations and land grant colleges.
QA: ANR 280

401. Agricultural and Natural Resources Communications Campaigns
Fall, Spring, Summer, 3(3-0)
R: Open only to juniors or seniors in the College of Agriculture and Natural Resources or College of Communication Arts and Sciences.
Planning and execution of agricultural and natural resource communication campaigns. Emphasis on theories, strategies and techniques using mass and controlled media channels.
QP: JRN 201 QA: AEE 401

403. Agricultural and Natural Resources Leadership and Education
Fall, Spring, Summer, 3(3-0)
R: Open only to juniors or seniors.
Characteristics of leadership, group dynamics, and development of personal leadership skills. Educational methods and learning styles.
QP: AEE 360, AEE 361, AEE 362

490. Independent Study
Fall, Spring, Summer, 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.
P: AEE 401. R: Open only to Agriscience or Agriculture and Natural Resources Communications majors. Approval of department; application required.
Individual study in areas of agriscience, extension education, or agricultural and natural resources communications.
QP: AEE 401, AEE 360 QA: AEE 483

491. Selected Topics
Fall, Spring, Summer, 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.
P: AEE 101 or AEE 401. R: Open only to Agriscience or Agriculture and Natural Resources Communications majors. Approval of department.
Topics selected to meet student needs in agriculture and natural resources communications or agriscience and natural resources education.
QP: AEE 401, AEE 360

801. Global Development through Agricultural and Extension Education
Fall, 3(3-0)
Application of education theories: principles and practices in planning, conducting, and evaluating formal and nonformal education programs on international development.
QA: AEE 802

**Descriptions—Agricultural and Extension Education
of
Courses**

- 802. Program Administration in Agricultural and Extension Education**
Fall. 3(3-0)
Organizational and management concepts and practices in agricultural and extension education.
QA: AEE 851
- 803. Instructional Strategies in Agricultural and Extension Education**
Spring. 3(3-0)
Assessment of learning needs. Development, selection, use and evaluation of teaching strategies. Emphasis on agriscience education and adult learners.
QA: AEE 824
- 804. Communication Strategies in Agricultural and Extension Education**
Fall. 3(3-0)
R: Open only to seniors and graduate students in College of Agriculture and Natural Resources. Information delivery systems and presentation techniques for varied agricultural and extension audiences.
QA: AEE 830
- 805. Leadership Development in Agricultural and Extension Education**
Spring. 3(3-0)
Assessment of values, style, behavior, principles. Philosophical and sociological bases for leadership development. Applications.
QA: AEE 858
- 806. Program Planning and Evaluation in Agricultural and Extension Education**
Spring of even-numbered years, Summer of even-numbered years. 3(3-0)
Principles, theories, and practices in developing and evaluating state and local agricultural and extension education programs.
QA: AEE 810, AEE 860
- 807. Research in Agricultural and Extension Education**
Fall. 3(3-0)
R: Open only to graduate students in College of Agriculture and Natural Resources. Planning, designing, conducting, and reporting research in agricultural and extension education.
QA: AEE 881
- 811. Education Through Extension**
Fall. 3(3-0)
Function, organization, and operation of extension education programs.
QA: AEE 806
- 821. Principles and Philosophies of Agriscience Education**
Summer. 3(3-0)
Principles and philosophies for analyzing and developing agriscience education courses, curricula, and programs.
QA: AEE 820
- 822. Teaching Supervised Agriscience Experiences**
Summer of odd-numbered years. 3(3-0)
R: Open only to graduate students in Agricultural and Extension Education. Principles and practices of agriscience laboratory teaching in high schools.
QA: AEE 826, AEE 822
- 890. Independent Study in Agricultural and Extension Education**
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.
QA: AEE 883

- 891. Selected Topics in Agricultural and Extension Education**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
R: Open only to graduate students in Agricultural and Extension Education. Contemporary issues and problems in agricultural and extension education.
QA: AEE 881
- 892. Seminar in Agricultural and Extension Education**
Fall, Spring. 1(1-0) A student may earn a maximum of 2 credits in all enrollments for this course. Selected issues in agricultural and extension education.
QA: AEE 885
- 893. Professional Field Experience in Agricultural and Extension Education**
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.
R: Open only to graduate students in Agricultural and Extension Education. Practice, observation, and analysis through field experiences.
QA: AEE 812A, AEE 812B
- 898. Master's Research**
Fall, Spring, Summer. 1 to 5 credits. A student may earn a maximum of 5 credits in all enrollments for this course.
R: Open only to master's degree students in Agricultural and Extension Education. Master's Plan B Research.
QA: AEE 889
- 899. Master's Thesis Research**
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 99 credits in all enrollments for this course.
R: Open only to master's degree students in Agricultural and Extension Education.
QA: AEE 899
- 901. International Agricultural and Extension Education Systems**
Spring. 3(3-0)
P: AEE 801 or AEE 811 or AEE 821. R: Open only to graduate students in Agricultural and Extension Education. Systems of agricultural and extension education in different countries. Philosophical and structural differences and similarities.
QA: AEE 899
- 907. Research Project Design and Implementation**
Spring. 3(3-0)
P: AEE 807 or approval of department. Selection and development of research instruments. Quantitative and qualitative data analysis in agricultural and extension education.
QP: AEE 881
- 911. Nonformal Learning**
Fall of even-numbered years, Summer of odd-numbered years. 3(3-0)
P: AEE 811. Theories and philosophies of learning in out-of-school settings. Alternative strategies.
QP: AEE 806
- 912. Advanced Extension Administration**
Spring. 3(3-0)
P: AEE 802. R: Open only to graduate students in College of Agriculture and Natural Resources. Advanced practices and applications necessary for effective management and administration within extension education.
- 999. 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 and Extension Education.
QA: AEE 999

AGRICULTURAL ECONOMICS **AEC**

**Department of Agricultural Economics
College of Agriculture and Natural Resources**

- 810. Institutional and Behavioral Economics**
Fall. 3(3-0) Interdepartmental with Economics and Resource Development. Relationships among institutions, individual and collective actions, and economic performance. Public choice, property rights, and behavioral theories of firms and bureaucracies.
QA: AEC 810, AEC 809
- 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. Concepts and issues in welfare economics with application to agricultural development, policy and trade, marketing and finance, and environmental policy.
QP: EC 480, EC 805A, EC 812A, EC 805B, 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. Concepts of policy analysis and decision. Agricultural sector problems, behavior, and policy in the development process. Macroeconomic and trade impacts. International policies affecting trade and development. Current policy issues.
QP: EC 805A, EC 812A, EC 805B, EC 813A QA: AEC 860, AEC 861
- 829. The Economics of Environmental Resources**
Fall. 3(3-0) Interdepartmental with Resource Development, Forestry, Park and Recreation Resources, and Economics. Economic principles related to environmental conflicts and public policy alternatives. Applications to water quality, land use, conservation, development, and global environmental issues.
- 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.
QP: STT 422 QA: EC 835
- 841. Organization and Performance of Agricultural Markets**
Spring. 3(3-0)
R: Open only to graduate students in College of Agriculture and Natural Resources. Analytical approaches. Institutions and processes for coordinating food and agricultural systems. Issues of organization, control and public policy.
QA: AEC 841
- 845. Commodity Market Analysis**
Fall. 3(3-0)
P: AEC 835. Applied econometric analysis of commodity markets. Emphasis on specification and estimation of demand and supply models for forecasting. Modeling for policy evaluation. Futures and options markets. Microcomputer applications.
QP: AEC 835 QA: AEC 843
- 851. Agricultural Firm Management**
Summer. 3(3-0)
Managerial processes for planning and controlling agricultural firms. Applications of financial concepts, budgets, simulations, and cognitive and information systems to developed and developing countries. Predictive and prescriptive analysis.
QA: AEC 851