AFRICAN LANGUAGES  AFR

Department of Linguistics and
Germanic, Slavic, Asian and
African Languages
College of Arts and Letters

101A. Elementary Swahili I
Fall, 4(4-1)
Speaking, reading, and writing Swahili, with emphasis on developing oral proficiency.

101B. Elementary African Language I
Fall, 4(4-1)
African language at the elementary level. Speaking, reading, and writing, with emphasis on developing oral proficiency skills. Specific language varies.

102A. Elementary Swahili II
Spring, 4(4-1)
P: AFR 101A or approval of department.
Further work on speaking, reading, and writing Swahili, with continued emphasis on developing oral proficiency skills.

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

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

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

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.

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

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.

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

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

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

290. Independent Study
Fall, Spring, 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.
P: Open only to juniors and seniors. Approval of department.
Investigation of a particular aspect of aerospace studies.
Descriptions — Agricultural and Extension Education

302. Developing and Managing Agriscience and Natural Resources Education Programs
Fall, 3(3-0)
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.

303. Issues in Agricultural and Environmental Education Programs
Fall, 3(3-2)
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.

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 agricultural institutions such as farm organizations and land grant colleges.

401. Agricultural and Natural Resources Communications Campaigns (W)
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.

406. Program Planning and Evaluation in Agricultural and Extension Education
Spring of odd-numbered years, Summer of even-numbered years, 3(3-0)
Principles, theories, and practices in planning and evaluating programs in agricultural and extension education programs.

505. 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.

506. Program Planning and Evaluation in Agricultural and Extension Education
Spring of odd-numbered years, Summer of even-numbered years, 3(3-0)
Principles, theories, and practices in planning and evaluating programs in agricultural and extension education programs.

507. 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.

511. Education Through Extension
Fall, 3(3-0)
Function, organization, and operation of extension education programs.

521. Principles and Philosophies of Agriscience Education
Summer, 3(3-0)
Principles and philosophies for analyzing and developing agriscience education programs, courses, curricula, and programs.

522. Teaching Supervised Agriscience Experience
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.

802. Program Administration in Agricultural and Extension Education
Fall, 3(3-0)
Organizational and management concepts and practices in agricultural and extension education.

803. Instructional Strategies in Agricultural and Extension Education
Spring, 3(3-0)

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.

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.

806. Program Planning and Evaluation in Agricultural and Extension Education
Spring of odd-numbered years, Summer of even-numbered years, 3(3-0)
Principles, theories, and practices in planning and evaluating programs in agricultural and extension education programs.

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.

811. Education Through Extension
Fall, 3(3-0)
Function, organization, and operation of extension education programs.

821. Principles and Philosophies of Agriscience Education
Summer, 3(3-0)
Principles and philosophies for analyzing and developing agriscience education programs, courses, curricula, and programs.

822. Teaching Supervised Agriscience Experience
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.

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.

891. Selected Topics 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.
P: AEE 101 or AEE 401.
R: Open only to Agriscience or Agriculture and Natural Resources Communications majors. Approval of department.
Topic selected to meet student needs in agriculture and natural resource communications or agriscience and natural resources education.

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.

892. Seminar in Agricultural and Extension Education
Fall, Spring, 1 to 0 credits. A student may earn a maximum of 2 credits in all enrollments for this course.
Selected issues in agricultural and extension education.

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.

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.

899. Master's Thesis Research
Fall, Spring, Summer, 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course.
R: Open only to master's degree students in Agricultural and Extension Education.

901. International Agricultural and Extension Education Systems
Spring, 3(3-0)
P: AEE 801 or AEE 811 or AEE 821.
Systems of agricultural and extension education in different countries. Philosophical and structural differences and similarities.

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.

911. Nonformal Learning
Fall of even-numbered years, Summer of odd-numbered years, 3(3-0)
P: AEE 811.

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 practicum and applications necessary for effective management and administration within extension education.
810. Institutional and Behavioral Economics
R: Open only to Ph.D. students in Agricultural and Extension Education.

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 Resourcs.

800. 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.

800A. Mathematical Applications in Agricultural Economics
Fall. 1(1-0)
C: AEC 800 concurrently.
Basic mathematical tools for use in agricultural economics applications.

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.

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.

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

820. Econometrics I
Spring. 3(3-0) Interdepartmental with Economics and Statistics and Probability. Administered by Economics.
P: EC 801, STT 430.

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

822. Econometrics III
Spring. 3(3-0) Interdepartmental with Economics and Statistics and Probability. Administered by Economics.
P: EC 820, STT 442.
Dynamic models and time series data. ARMA models. ARCH models. Unit roots, cointegration and error correction. Rational expectations models.

829. The Economics of Environmental Resources
Fall. 3(3-0) Interdepartmental with Resource Development, Forestry, Park, Tourism and Recreation Resources, Environmental Economics.
Economic principles related to environmental conflicts and public policy alternatives. Applications to water quality, land use, conservation, development, and global environmental issues.

831. Food Marketing Management
Spring. 3(3-0) Interdepartmental with Marketing and Supply Chain Management. Administered by Marketing and Supply Chain Management.
P: MBA 820 or MSC 805.
Marketing management decisions in food firms. Consumer orientation, computer technologies, food system cost reduction, global opportunities, environmental and social issues.

832. Agricultural Production Economics
Spring. 3(3-0) Interdepartmental with Resource Development, Forestry, Crop and Soil Sciences, and Geography. Administered by Resource Development.
P: RD 430.
Agriculture and food production in low- and middle-income countries. Theories of agricultural growth. Policy issues. Case studies.

833. Agricultural Markets
Spring. 3(3-0) Interdepartmental with Resource Development, Forestry, Crop and Soil Sciences, and Geography. Administered by Resource Development.
P: RD 430.
Agricultural applications of static production economics, including study of capital inputs that yield services over several time periods. Investment and disinvestment models. Methods for incorporating risk and technological change.

834. Agricultural Policy Analysis
Fall. 3(3-0)

835. Introductory Econometrics
Summer. 5(5-0)
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.

836. Water Law
Spring. 3(3-0) Interdepartmental with Resource Development and Forestry. Administered by Resource Development.
P: RD 430.
Legal principles applicable to surface water and groundwater, private and public water rights, and controls over water resources. Cases, statutes, and administrative procedures.

837. Land Use Law
Spring. 3(3-0) Interdepartmental with Resource Development, Forestry, and Urban Planning. Administered by Resource Development.
P: RD 430.
Public and private land use controls in the U.S. Civil rights, housing, energy problems, growth management, waste management, and land conservation. Cases, statutes and other regulations.

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.

845. Commodity Market Analysis
Fall. 3(3-0)
P: AEC 835.

851. Agricultural Firm Management
Summer. 3(3-0)
Managerial problems in 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.

855. Agricultural Production Economics
Spring. 3(3-0)
P: EC 801, EC 805.
Agricultural applications of static production economics, including study of capital inputs that yield services over several time periods. Investment and disinvestment models. Methods for incorporating risk and technological change.

861. Agricultural Law
Fall. 3(3-0)

865. Agricultural Benefit-Cost Analysis
Spring. 3(3-0)
Benefit-cost analysis of agricultural and natural resource projects, including financial and economic analysis. Case studies in project design and appraisal in low and high income countries.

890. Independent Study
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course.
R: Open only to graduate students in Agricultural Economics. Approval of department. Independent study of selected topics in agricultural economics.

891. Topics in Agricultural Economics (MTCJ)
Fall, Spring, Summer. 2 to 3 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
R: Open only to graduate students in College of Agriculture and Natural Resources, Social Science and Business.
Selected topics such as agribusiness management, applied operations research, or rural development policy.

896. Master's Research
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 Economics. Approval of department. Master's degree Plan B research.