

# AGRICULTURAL ECONOMICS (AGEC)

## AGEC 1101 Agricultural Economics and Agribusiness Experience

**Description:** Developing connections between the student's major curriculum, career goals specific to agricultural economics or agribusiness, and networking with other students, faculty and alumni.

**Credit hours:** 1

**Contact hours:** Lecture: 1

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

## AGEC 1113 Introduction to Agricultural Economics (S)

**Description:** Economic theory of production, marketing, and consumption of agricultural products and natural resources. The role and structure of agricultural sciences and natural resources within the American economy. Policies to achieve efficiency and welfare goals in agriculture. No general education credit for students also taking ECON 1113 or ECON 2103. Previously offered as AGECE 1114.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**General Education and other Course Attributes:** Social & Behavioral Sciences

## AGEC 2303 Food Marketing to a Diverse Population (D)

**Description:** Food and beverage demand and preferences of socially and ethnically constructed groups in American Society. Real life issues of marketing to a diverse population, including Native, Asian, African and Hispanic Americans, and low-income populations.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**General Education and other Course Attributes:** Diversity

## AGEC 2313 Case Studies in Agricultural Trade and Development

**Prerequisites:** A course in economics or marketing.

**Description:** Real world issues in international trade and development of agricultural and food products. Development of an understanding of issues facing policymakers, producers, consumers, and other groups in examining the costs and benefits of various trade and development programs.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

## AGEC 2990 Problems in Agricultural Economics and Agribusiness

**Description:** Directed study on topics related to agricultural economics or agribusiness. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Other: 1

**Levels:** Undergraduate

**Schedule types:** Independent Study

**Department/School:** Agricultural Economics

## AGEC 3010 Internship in Agricultural Economics

**Prerequisites:** Approval of internship committee and advisor.

**Description:** Supervised work experience with approved public and private employers in agricultural economics, including banks, farm credit services, agriculture chemical firms, Soil Conservation Service, congressional offices and other opportunities. Credit will not substitute for required courses. Graded on a pass-fail basis. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.

**Credit hours:** 1-3

**Contact hours:** Other: 1

**Levels:** Undergraduate

**Schedule types:** Independent Study

**Department/School:** Agricultural Economics

## AGEC 3023 Farm to Fork

**Description:** Survey of agriculture and natural resources and their relationships to society. Role of advanced scientific technologies in alternative systems of food production and distribution.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

## AGEC 3101 Professional Career Development

**Prerequisites:** Junior standing and agricultural economics or agribusiness major status.

**Description:** Overview of the various areas of specialization within agricultural economics and agribusiness and their associated career opportunities and obligations. Development and improvement of written communication, oral communication and leadership skills. Previously offered as AGECE 4902.

**Credit hours:** 1

**Contact hours:** Lecture: 1

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

## AGEC 3183 Agribusiness Accounting and Taxation

**Prerequisites:** 60 semester credit hours, including ENGL 1113 and MATH 1513 or equivalent.

**Description:** Development of the ability to read, analyze, and use accounting information to improve decision-making and tax planning. Same course as ACCT 3183.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

## AGEC 3213 Quantitative Methods in Agricultural Economics

**Prerequisites:** AGECE 1113 or ECON 2103, and STAT 2023 or equivalent.

**Description:** Indices, graphics, budgeting, interest calculations, compounding and discounting, basic statistic measures, regression, optimization and computer applications.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Agricultural Economics

**AGEC 3323 Agricultural Product Marketing and Sales**

**Prerequisites:** AGEC 1113 or ECON 2103, and ENGL 1113.

**Description:** Fundamentals of agricultural marketing management and planning applied to specific agricultural product (input and output) marketing problems. Institutional differences between agricultural and non-agricultural marketing environments. The role of the individual sales representative in a marketing and sales organization. Written and oral presentations of marketing and sales information required of all students. Previously offered as AGEC 4313.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 3333 Agricultural Marketing and Price Analysis**

**Prerequisites:** AGEC 3213.

**Description:** Supply, demand, and price determination within the institutional environment of agricultural commodity markets. Roles provided by government intervention, marketing agreements, and cooperatives in agricultural markets. Includes graphical, mathematical, and statistical analysis of commodity markets. Fundamentals of futures markets applied to agriculture. Previously offered as AGEC 3303.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 3403 Agricultural Small Business Management**

**Prerequisites:** AGEC 1113 or ECON 2103, and ACCT 2103 or ACCT 3183 or AGEC 3183.

**Description:** The essentials of operating an agricultural small business. An introduction to the planning, organizing, marketing, managing, financing, controlling and operating an agricultural small business. Not recommended for agricultural economics or agribusiness majors. No credit for students with prior credit in 4423.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 3423 Farm and Agribusiness Management**

**Prerequisites:** AGEC 1113 or ECON 2103, and ACCT 2103 or ACCT 3183 or AGEC 3183.

**Description:** Fundamentals of managerial functions as applied to agricultural firms. Organization and management of human, financial, and physical assets for the profitable operation of an agricultural business. An introduction to business planning, enterprise budgeting, financial statements and record keeping. Previously offered as AGEC 3413.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Other: 1

**Levels:** Undergraduate

**Schedule types:** Discussion, Combined lecture & discussion, Lecture

**Department/School:** Agricultural Economics

**AGEC 3463 Agricultural Cooperatives**

**Prerequisites:** AGEC 1113 or ECON 2103.

**Description:** An evaluation of the fundamental principles, objectives, structure, finance, and management associated with the cooperative organization. An analysis of the cooperative business organization within the modern economy: history, legislation and evolution. An examination of careers related to cooperatives. Previously offered as AGEC 3313.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 3503 Natural Resource Economics**

**Prerequisites:** AGEC 1113 or ECON 2103.

**Description:** Framework for analyzing natural resource management decisions. Applications of microeconomic theory to the management of soil, water, and other resources, with special emphasis on the institutions having an impact on management opportunities. Supply of and demand for natural resources, resource allocation over time, rights of ownership, public issues of taxation, police power and eminent domain.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 3603 Agricultural Finance**

**Prerequisites:** AGEC 3213 and AGEC 3423.

**Description:** Analyze farm and agribusiness financial statements. Understand the relationship between firm growth and financial leverage. Time value of money concepts and their application to capital budgeting. Discuss how agricultural lenders acquire and use funds.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 3703 Issues in Agricultural Policy**

**Prerequisites:** AGEC 1113 or ECON 2103.

**Description:** Emerging issues related to agricultural policy in the United States.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 3713 Agricultural Law**

**Prerequisites:** AGEC 1113 or ECON 2103.

**Description:** Survey of law with emphasis on agricultural problems, applications, and strategies for managing legal risk in the agribusiness setting. Contract law, tort law, property law, real estate transactions, business organization, estate planning, debtor/creditor law, environmental law and water/resources law. Previously offered as AGEC 4413.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 3810 Domestic Agricultural Economics Tour**

**Prerequisites:** Consent of instructor.

**Description:** An integrated approach to the cultural, agricultural, historical, technological, political and economic backgrounds of an agricultural region of the United States. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.

**Credit hours:** 1-3

**Contact hours:** Lecture: 1

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 3990 Special Problems in Agricultural Economics**

**Description:** Directed study of selected agricultural economics topics. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.

**Credit hours:** 1-3

**Contact hours:** Other: 1

**Levels:** Undergraduate

**Schedule types:** Independent Study

**Department/School:** Agricultural Economics

**AGEC 4101 Agricultural Economics Seminar**

**Prerequisites:** Senior standing and agricultural economics or agribusiness major status.

**Description:** Contemporary problems in agricultural economics. Previously offered as AGECE 4911.

**Credit hours:** 1

**Contact hours:** Lecture: 1

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 4213 Advanced Quantitative Methods in Agricultural Economics**

**Prerequisites:** AGECE 3213, AGECE 3333 and MATH 2103.

**Description:** Quantitative analysis of agricultural supply and demand in situations involving risk and uncertainty within the institutional setting of agricultural markets. Use of spreadsheets to perform regression analysis and simulation of potential market outcomes. Analysis of specific agricultural market cases with written and oral presentation of the results. Previously offered as AGECE 3203.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 4243 Researching Consumer Food Preferences**

**Prerequisites:** AGECE 1113 and ANSI 1124 or FDSC 1133 and STAT 2013 or STAT 2023 or STAT 4013.

**Description:** Design, implementation, and interpretation of research in consumer food preferences. Includes design of consumer surveys, conducting consumer interviews, preparing food and questionnaires for taste-test experiments, targeting and recruiting scientifically valid samples, the statistical analysis of data, and communication of results. Previously offered as FDSC 4243.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 4333 Commodity Futures Markets**

**Prerequisites:** AGECE 3213 and AGECE 3333.

**Description:** The economics of commodity futures markets. The vocabulary of futures markets and the mechanics of trading and hedging. Basis and producer marketing strategies. Fundamental analysis and statistical analysis of data. Technical analysis, behavioral finance, efficient market hypothesis and basics of option pricing.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 4343 International Agricultural Markets and Trade (I)**

**Prerequisites:** AGECE 1113 or ECON 2103.

**Description:** Contemporary international agricultural trade theory and applications. Tools to identify, evaluate critically, and seek solutions to complex international trade and development problems, such as gains from trade, comparative advantage, impacts of trade barriers on social welfare, export promotion effectiveness, trade impacts on environment and land degradation, free trade areas and impacts of genetically modified crops on trade.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**General Education and other Course Attributes:** International Dimension

**AGEC 4403 Advanced Farm and Ranch Management**

**Prerequisites:** AGECE 3603 or concurrent.

**Description:** The development of problem solving and risk management skills needed on the modern farm or ranch. Use of spreadsheets to perform production planning and analysis of farm and ranch problems with linear programming, simulations, and other tools. Analysis of the acquisition of resources and the use of information systems in managing the individual farm or ranch business.

**Credit hours:** 3

**Contact hours:** Lecture: 1 Other: 2

**Levels:** Graduate, Undergraduate

**Schedule types:** Discussion, Combined lecture & discussion, Lecture

**Department/School:** Agricultural Economics

**AGEC 4423 Advanced Agribusiness Management**

**Prerequisites:** AGECE 3333, AGECE 3603, or FIN 3113 or concurrent.

**Description:** Application of modern decision theory in the uncertain environment that the agricultural business operates. Planning, organizing, implementing, coordinating, and controlling problems associated with establishing an agricultural business, achieving firm growth and operating the firm through time. Use of spreadsheets to perform production planning and analysis related to agricultural business operation with linear programming, simulations, and other tools. Analysis of the interaction of resources, prices and production alternatives. Previously offered as AGECE 4323.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 4503 Environmental Economics and Resource Development**

**Prerequisites:** AGEC 3503 or ECON 3023 or ECON 3113 or consent of instructor.

**Description:** Economic, social, and political factors relating to conservation, natural resource development, and environmental quality. Valuation of priced and non-priced natural and environmental resources. Analysis of environmental and natural resource policy and the role of public and private agencies in conservation and development.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 4513 Farm Appraisal**

**Prerequisites:** AGEC 3423.

**Description:** Estimating the market value of agricultural real estate using the three approaches to value - sales comparison, cost and income approaches. Analysis of sales to value the different characteristics of the farm.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2

**Levels:** Graduate, Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Agricultural Economics

**AGEC 4613 Advanced Agricultural Finance**

**Prerequisites:** AGEC 3603 or FIN 3113 with a grade of "B" or better, ECON 3023 or ECON 3113, and STAT 2023 or equivalent.

**Description:** Advanced time value of money and financial management concepts as applied to the management of agricultural firms. Incorporating risk into agricultural investment and financial management decisions. Introduction to risk modeling. May not be used for degree credit with AGEC 5603.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 4703 American Agricultural Policy**

**Prerequisites:** AGEC 3333, MATH 2103, and ECON 3023 or ECON 3113.

**Description:** Economic characteristics and problems of agriculture; evolution and significance of programs and policies.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 4723 Rural Economics Development**

**Prerequisites:** AGEC 1113 or ECON 2103.

**Description:** Concepts, theories, and applications of regional and community economics, including the theories of economic development, analytic techniques, infrastructure and community services, targeted development and associated policies. Focus on domestic rural areas.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Graduate, Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 4803 International Agricultural Economics Tour (I)**

**Prerequisites:** Consent of instructor.

**Description:** A two-three week international travel component. An integrated approach to the cultural, agricultural, historical, technological, political, economic and religious backgrounds of the region. Comparison of the agricultural business environment of the region to that of the US.

**Credit hours:** 3

**Contact hours:** Lecture: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**General Education and other Course Attributes:** International Dimension

**AGEC 4990 Problems of Agricultural Economics**

**Prerequisites:** Consent of instructor.

**Description:** Research on special problems in agricultural economics. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Other: 1

**Levels:** Graduate, Undergraduate

**Schedule types:** Independent Study

**Department/School:** Agricultural Economics

**AGEC 5000 Master's Thesis/Report**

**Description:** For students working on an MS degree in agricultural economics. Independent research and thesis under the direction and supervision of a major professor. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Other: 1

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Agricultural Economics

**AGEC 5010 Professional Experience in Agricultural Economics or Agribusiness**

**Prerequisites:** Approval of internship committee and advisor.

**Description:** Supervised professional experience with approved public and private employers in agricultural economics or agribusiness. Designed for Master of Agriculture program. Graded on pass-fail basis. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Other: 1

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Agricultural Economics

**AGEC 5101 Research Methodology**

**Prerequisites:** Selection of a thesis advisor and a thesis topic.

**Description:** Using the scientific method to solve problems related to agriculture. Preparation of a thesis proposal required.

**Credit hours:** 1

**Contact hours:** Lecture: 1

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Agricultural Economics

**AGEC 5103 Mathematical Economics****Prerequisites:** Differential calculus and ECON 3113.**Description:** Mathematical tools necessary for formulation and application of economic theory and economic models.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5113 Applications of Mathematical Programming****Description:** The application of concepts and principles of existing linear and nonlinear programming techniques to agricultural problems.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5203 Advanced Agricultural Prices****Prerequisites:** AGECE 5103, STAT 4043.**Description:** Demand and price structures, price discovery, time series and agricultural price research methods.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5213 Econometric Methods****Prerequisites:** AGECE 5103 and ECON 4213 or STAT 4043.**Description:** Application of econometric techniques to agricultural economic problems, theory and estimation of structural economic parameters.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5233 Primary Data Analysis in Economic Research****Prerequisites:** AGECE 5213 or ECON 5243 or concurrent enrollment.**Description:** Development and analysis of surveys and experiments designed to collect primary data for economic research. Basics of survey and experimental design, survey delivery and sampling. Methods, economics, and econometrics of valuation methods including contingent valuation, experimental auctions, factor analysis, cluster analysis and structural equations modeling, including limited dependent variable models such as the logit, probit, ordered probit, multinomial logit, tobit and intervalcensored regression.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5311 Agricultural Marketing: Concepts and Tools****Prerequisites:** ECON 3113, MATH 2103 or MATH 2144 and STAT 2023 or equivalent.**Description:** Role of markets and prices in the food system. Price variation across space, time, and form. Previously offered as AGECE 5303.**Credit hours:** 1**Contact hours:** Lecture: 1**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5321 Agricultural Marketing and Economic Development****Prerequisites:** AGECE 5311.**Description:** Role of marketing in economic development, focusing on international economics; role of institutions in a market economy.**Credit hours:** 1**Contact hours:** Lecture: 1**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5331 Agricultural Marketing: Advanced Concepts****Prerequisites:** AGECE 5311.**Description:** Advanced topics in price variation across space, time, and form. Market and firm efficiency. Market structure, conduct and performance; role of information in a market economy; and other selected topics.**Credit hours:** 1**Contact hours:** Lecture: 1**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5343 International Agricultural Markets and Trade****Description:** Contemporary international agricultural trade theory and applications. Broaden students' understanding of contemporary cultural and economic issues outside the U.S. that affect global demand. Gains from trade and the theory of comparative advantage. No credit for students with credit in AGECE 4343.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5403 Production Economics****Prerequisites:** AGECE 5103.**Description:** Analysis of micro-static production economics problems; factor-product, factor-factor and product-product relationships; functional forms for technical unit and aggregate production functions; maximizing and minimizing choice rules; firm cost structure; scale relationships.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics

**AGEC 5423 Agribusiness Management****Prerequisites:** Consent of instructor.**Description:** Application of quantitative analysis to the evaluation of business plans for agribusiness firms. Preparation of business plans, including mission statements, financial analyses, marketing plans, personnel and organization requirements of the firm, production and operations plans as well as a contingency plan. Analysis of risk factors associated with agriculturally-based companies. No credit for students with credit in AGEC 4423.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5463 Advanced Agricultural Cooperatives****Prerequisites:** AGEC 3463 or consent of instructor.**Description:** Advanced understanding of cooperative business model and management skills. Advanced cooperative finance including profit center analysis, equity management, working capital management, budgeting and capital budgeting.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5483 Bio-Energy Feasibility and Commercialization****Prerequisites:** AGEC 1113 or ECON 2103.**Description:** Feasibility and commercialization of bio-fuel and bio-based projects. Issues and processes in transitioning a project from pilot scale into commercialization.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate, Undergraduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5503 Economics of Natural and Environmental Resource Policy****Prerequisites:** AGEC 4503, ECON 3113, or ECON 3023; and MATH 2103.**Description:** Economics of long-term resource use with particular emphasis on agricultural and environmental problems. Methods for estimation of nonmarket prices. Cost benefits analysis of long-term natural resource use and environmental policy. Elementary computer simulation of long-term resource use and environmental policy.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5603 Advanced Agricultural Finance****Prerequisites:** AGEC 3603 or FIN 3113, ECON 3023 or ECON 3113 and STAT 2023 or equivalent.**Description:** Advanced investment and financial management concepts applied firms that operate in the agricultural sector. Incorporating uncertainty and risk into financial modeling and decision making via stochastic simulation and other tools. Risk/return tradeoff for stocks, portfolio management and business investments. May not be used for degree credit with AGEC 4613. Same course as AGEC 4613.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5703 Economics of Agriculture and Food Policy****Prerequisites:** AGEC 4703 and AGEC 5103.**Description:** Application of welfare criteria and economic analysis to agricultural, food, and rural development problems and policies.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5713 Rural Regional Analysis****Prerequisites:** AGEC 5103.**Description:** Concepts of market and nonmarket based rural welfare; theories of regional growth as applied to rural areas; methods of regional analysis including computable general equilibrium; analysis of policies and programs for improving welfare of rural population groups.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5723 Plan & Pol Devlpmnt****Prerequisites:** Master's-level microeconomics, macroeconomics and regression analysis.**Description:** Economics of market-based planning and policy analysis for developing countries, topics and tools in macro- and microeconomics of development, and social cost-benefit and project analysis with emphasis on agricultural and public policy. Hands-on application of econometrics, input-output analysis and cost-benefit analysis using econometric software.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5733 Food Import Demand and Trade Policy****Description:** Global welfare analysis of national food and agricultural trade and development policies of developed and developing countries. Analysis of import demand systems using real world data and incorporating economic and demographic variables.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics

**AGEC 5783 Bio-Energy Economics and Sustainability****Prerequisites:** AGECE 1113 or ECON 2103.**Description:** Economic issues related to supply chains producing bio-energy and bio-based products. Economic, sustainability and social dimensions of these industries. Triple bottom line objectives, life cycle analysis and the principles of feasibility analysis.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate, Undergraduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 5990 Advanced Studies****Prerequisites:** Consent of instructor.**Description:** Investigation in designated areas of agricultural economics. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.**Credit hours:** 1-6**Contact hours:** Other: 1**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Agricultural Economics**AGEC 6000 Doctoral Dissertation****Description:** Open to students pursuing graduate study in agricultural economics beyond the requirements for a master's degree. Independent research and thesis under the direction and supervision of a major professor. Offered for variable credit, 1-15 credit hours, maximum of 24 credit hours.**Credit hours:** 1-15**Contact hours:** Other: 1**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Agricultural Economics**AGEC 6102 Teaching Practicum in Agricultural Economics****Prerequisites:** Two semesters of graduate study in agricultural economics.**Description:** Philosophies of resident and nonresident teaching, general tasks performed, review, evaluation and lecture organization, preparation and presentation.**Credit hours:** 2**Contact hours:** Other: 2**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Agricultural Economics**AGEC 6103 Advanced Applications of Mathematical Programming****Prerequisites:** AGECE 5103, AGECE 5113.**Description:** General presentation of nonlinear optimization theory and methods followed by applications of nonlinear programming. Use of GAMS/MINOS optimization software package.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 6213 Advanced Econometrics****Prerequisites:** AGECE 5213 or ECON 5243; STAT 4203 and AGECE 4213 recommended.**Description:** Using advanced econometric techniques in applied research. Linear and nonlinear hypothesis testing; non-nested hypothesis tests; Monte Carlo hypothesis testing; stochastic simulation; misspecification testing. Extensive use of SAS statistical software package.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 6300 Agricultural Marketing Seminar****Prerequisites:** Consent of instructor.**Description:** Current developments in theory, techniques for evaluating marketing behavior, market legislation and market development. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.**Credit hours:** 1-6**Contact hours:** Lecture: 1**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 6303 Advanced Agricultural Marketing****Prerequisites:** AGECE 5303.**Description:** Marketing theory, market structure and performance, governmental regulation and policy and bargaining in agricultural markets.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics**AGEC 6400 Seminar in Farm Management and Production Economics****Prerequisites:** AGECE 5403 or consent of instructor.**Description:** Scientific research methodology applied to problems of resource efficiency. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.**Credit hours:** 1-6**Contact hours:** Other: 1**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Agricultural Economics**AGEC 6403 Advanced Production Economics****Prerequisites:** AGECE 5403.**Description:** Formulating and solving applied economic optimization problems in agricultural production economics. Expected profit maximization; analyzing data from agronomic experiments; credit scoring; risk models such as stochastic dominance and expected utility.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Agricultural Economics

**AGEC 6700 Agricultural Policy and Rural Resource Development Seminar**

**Description:** Frontier issues in agricultural policy, natural resources and rural development. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Other: 1

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Agricultural Economics