

# Agricultural Economics (AGEC)

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## Courses

### AGEC 5000V. Special Problems. 1-3 Hour.

Individual reading and investigation of a special problem in agricultural economics not available under regular courses, under the supervision of the graduate faculty. Prerequisite: Graduate standing. (Typically offered: Fall, Spring and Summer)

### AGEC 50101. Seminar. 1 Hour.

Presentation and discussion of graduate student research. Formal presentations are made by all graduate students. Consideration given to research design, procedures, and presentation of results. Prerequisite: Graduate standing. (Typically offered: Fall and Spring)

### AGEC 5020V. Special Topics. 1-3 Hour.

Advanced studies of selected topics in agricultural economics not available in other courses. Prerequisite: Graduate standing. (Typically offered: Irregular) May be repeated for degree credit.

### AGEC 5030V. Internship in Agricultural Economics. 1-3 Hour.

On-the-job application of skills developed in the M.S. program. (Typically offered: Fall, Spring and Summer)

### AGEC 50403. Agricultural Finance. 3 Hours.

Methods and procedures whereby agricultural firms acquire and utilize funds required for their successful operation. Emphasis is placed upon role of finance and financial planning and consideration is given to an understanding of financial firms serving agriculture. Graduate degree credit will not be given for both AGECE 41403 and AGECE 50403. Prerequisite: (AGECE 11003 or ECON 22003) and (AGECE 21003 or ECON 21003) and (AGECE 21403 or ACCT 20103). (Typically offered: Fall)

### AGEC 50503. Advanced Farm Business Management. 3 Hours.

Principles and procedures of decision making as applied to the allocation of resources in the farm business for profit maximization. Emphasis is placed on use of principles of economics and their application to the decision making process. Includes exercises on the application of principles to specific farm management problems. Graduate degree credit will not be given for both AGECE 44003 and AGECE 50503. Prerequisite: AGECE 34003 and ASTM 29003 or equivalent. (Typically offered: Fall)

### AGEC 50703. Basis Trading: Applied Price Risk Management. 3 Hours.

This course provides students an opportunity to gain a detailed working knowledge of how basis trading concepts and practices are applied to agricultural markets and to develop a skill set that can be put immediately into practice in any basis trading operation. Graduate degree credit will not be given for both AGECE 43703 and AGECE 50703. Prerequisite: AGECE 33703 or consent of instructor. (Typically offered: Spring and Summer)

### AGEC 50803. Basis Trading: Case Study. 3 Hours.

This course provides an opportunity to apply principles learned in AGECE 43703 to grain merchandising using the case study approach. The course will involve in-class meetings supplemented with faculty-directed group-based learning experiences involving professional grain merchandisers. Group activities will follow the traditional case study method. Graduate degree credit will not be given for both AGECE 43803 and AGECE 50803. Prerequisite: AGECE 43703 or AGECE 50703. (Typically offered: Fall)

### AGEC 51003. Agricultural Microeconomics. 3 Hours.

Masters-level training in agricultural microeconomic theory and its application to food, agriculture and the environment. The course covers behavior of firms, households and markets, in more depth and rigor than encountered in undergraduate courses. Theories are explained and then applied to relevant food, agricultural, environment and resource issues. (Typically offered: Fall)

### AGEC 51103. Agricultural Prices and Forecasting. 3 Hours.

Price theory and techniques for predicting price behavior of general economy and price behavior of individual agricultural products will be analyzed. Provides practice in the application of economics and statistics to agricultural price analysis. Graduate degree credit will not be given for both AGECE 41103 and AGECE 51103. Prerequisite: Graduate Standing. (Typically offered: Spring)

### AGEC 51303. Agricultural and Environmental Resource Economics. 3 Hours.

An economic approach to problems of evaluating private and social benefits and costs of altering the environment. Emphasis given to the interaction of individuals, institutions, and technology in problems of establishing and maintaining an acceptable level of environmental quality. Prerequisite: Minimum of 3 hours Agricultural Economics or Economics at 3000 level or higher or PhD standing. (Typically offered: Spring)

### AGEC 51403. Financial Management in Agriculture. 3 Hours.

Covers advanced topics in agricultural finance. The general focus of the course is the financial management of non-corporate firms. Covers the basic tools of financial analysis including financial arithmetic, asset evaluation under risk, and financial analysis and planning using econometric models. Such topics covered include management of current assets, capital budgeting, capital structure, and institutions involved in agricultural finance. Prerequisite: Graduate standing. (Typically offered: Fall)

### AGEC 51503. The Economics of Public Policy. 3 Hours.

This class will examine the impact of public policy on agricultural and other business sectors as well as households and individuals, particular in rural areas. Emphasis will also be placed on analyzing the potential impact of future policy changes. The course will focus on the application of welfare criteria and economic analyses to the problems and policies affecting resource adjustments in agriculture and rural communities. Prerequisite: Graduate standing. (Typically offered: Spring)

### AGEC 52003. Agribusiness Marketing Management. 3 Hours.

Marketing concepts will be developed and applied to the global food and fiber system. The course will use both commodity and product marketing principles and economic theory to analyze varied marketing situations. Case studies will be used to demonstrate the role that demand analysis and consumer behavior play in market management. Graduate degree credit will not be given for both AGECE 43003 and AGECE 52003. Prerequisite: Graduate Standing. (Typically offered: Fall and Summer)

### AGEC 52103. Agricultural Business Management. 3 Hours.

The planning, organizing, leading and controlling functions of management as they relate to agricultural business firms. Marketing of value-added products, budgeting, organizational structure, cost control, financial statements, capital budgeting and employee supervision and motivation. Case studies are used to teach communication and decision-making skills. Graduate degree credit will not be given for both AGECE 43103 and AGECE 52103. Prerequisite: (AGECE 21403 or ACCT 20103) and AGECE 23003 or equivalent. (Typically offered: Fall)

### AGEC 52203. International Agricultural Trade and Commercial Policy. 3 Hours.

Analysis of agricultural market competition and performance in a global economy. The impact of domestic and international agricultural policies on domestic and international markets and welfare. Economic principles applied to the interaction of economic events in the world food economy. Graduate degree credit will not be given for both AGECE 46203 and AGECE 52203. Prerequisite: (AGECE 11003 or ECON 22003) and (AGECE 21003 or ECON 21003). (Typically offered: Spring)

### AGEC 52303. Political Economy of Agriculture and Food. 3 Hours.

Agricultural and food policies are studied from domestic and international perspectives. Laws, regulations, decisions and actions by governments and other institutions are examined in terms of rationale, content, and consequences. Economic and political frameworks are used to assess policies in terms competitive structure, operation, and performance of farming and food systems. Graduate degree credit will not be given for both AGECE 46103 and AGECE 52303. Prerequisite: (AGECE 11003 or ECON 22003) and (AGECE 21003 or ECON 21003) and (PSYC 20003 or SOCI 10103 or HDFS 26003). (Typically offered: Fall)

**AGEC 53003. Agricultural Marketing Theory. 3 Hours.**

Survey of the structure of agricultural product and factor markets including a critique of theoretical analyses of industry structure, conduct and performance; and a review of market structure research in agricultural industries. Prerequisite: Graduate standing. (Typically offered: Fall)

**AGEC 54003. Quantitative Methods for Agribusiness. 3 Hours.**

Application of quantitative techniques used to support managerial decision-making and resource allocation in agricultural firms. Provides exposure to mathematical and statistical tools (regression analysis, mathematical programming, simulation) used in economic analysis in agriculture. Emphasis is placed on computer applications with conceptual linkage to economic theory. Prerequisite: Graduate standing. (Typically offered: Fall)

**AGEC 56003. Food Economics and Health. 3 Hours.**

This course provides an advanced overview of selected topics in food economics, food and nutrition policy and the interface between nutrition programs and health policy. Students will develop an understanding of economic and policy concepts of food, nutrition, and health. The course emphasizes analytical tools that can be applied to study issues in food, nutrition, and health facing the US and world populations. Prerequisite: Graduate standing. (Typically offered: Spring)

**AGEC 56103. Econometrics. 3 Hours.**

Use of economic theory and statistical methods to estimate economic models. The single equation model is examined emphasizing multicollinearity, autocorrelation, heteroskedasticity, binary variables and distributed lags and model specification. Prerequisite: MATH 22003 and knowledge of matrix methods, (which may be acquired as a corequisite), and (AGEC 11003 or ECON 22003) and (AGEC 24003 or MATH 21003 or BUSI 10303). (Typically offered: Spring)

**AGEC 56203. Quantitative Food and Agricultural Policy Analysis. 3 Hours.**

Introduction to applied analysis of domestic and international food and agricultural policies using quantitative tools. This course will provide hands-on experience with simulation modeling in microeconomics. An emphasis is placed on policy analysis through computer applications with theoretical underpinnings. Prerequisite: Graduate Standing. (Typically offered: Fall)

**AGEC 56403. Agricultural Data Science. 3 Hours.**

Agricultural and environmental data gathering, wrangling, analysis, and visualization with emphasis on applied programming, version control, and analytical skills. This course provides students foundational and applied skills in constructing diverse cross-sectional and panel data sets for econometric investigation. Students should expect to learn and demonstrate competency in programming for data gathering, wrangling, analysis, and visualization. The course will cover common data sources, descriptive analysis, and econometric techniques used in agricultural and production economics. Prerequisite: Graduate standing. (Typically offered: Spring)

**AGEC 57103. Food Safety Law. 3 Hours.**

This course provides students with an introduction to food law and policy, history of food regulation, the organization of federal food law and regulatory agencies, government inspection and enforcement powers, food safety standards, food labeling, food advertising and product liability. Web-based course. (Typically offered: Fall Odd Years)

**AGEC 6000V. Master's Thesis. 1-6 Hour.**

Master's Thesis. Prerequisite: Graduate standing. (Typically offered: Fall, Spring and Summer) May be repeated for degree credit.

**AGEC 7000V. Doctoral Dissertation. 1-18 Hour.**

Doctoral Dissertation. Prerequisite: Candidacy. (Typically offered: Fall, Spring and Summer) May be repeated for degree credit.