DEPARTMENT OF AGRICULTURAL ECONOMICS

The Department of Agricultural Economics offers a Bachelor of Science degree in Agricultural Economics. The BS degree in Agricultural Economics offers students four options: Finance and Real Estate, Food Marketing Systems, Policy and Economic Analysis, and Rural Entrepreneurship. The course requirements for the freshman and sophomore years are the same for all Agricultural Economics options. In conjunction with the Bush School of Government and Public Service, the department offers a five-year program that allows a student to receive a BS in AGEC and a Master’s of Public Service and Administration degree. In addition, in conjunction with the Mays Business School, the department also offers a BS in Agribusiness.

Department of Agricultural Economics Honors Plan

The Department of Agricultural Economics at Texas A&M University offers academically talented Agricultural Economics and Agribusiness majors an opportunity to study, experience, learn, and grow. This honors plan will enrich your college experience by offering curricular challenge and stimulating your interest in research. Through the Agricultural Economics departmental honors plan, you will have an opportunity to work closely with faculty members and have in-depth conversations about class topics as well their areas of research. You will develop the vital problem solving and critical thinking skills that are valued in today’s fast-paced business culture. Honors distinctions will demonstrate your ability to handle a challenging curriculum, which can be particularly useful if you are planning to attend graduate school or law school. The challenging coursework and fascinating co-curricular activities offered through this program will enhance your academic success.

The Department of Agricultural Economics Honors Plan is administered through the Undergraduate Programs Office, located in Room 214 of the Agriculture and Life Sciences Building. For more information, contact the Undergraduate Programs Office, (979) 845-4911, or visit our website at http://agecon.tamu.edu/undergraduate/current-students/honors/ and select the Future or Current Students link.

Faculty

Bessler, David A, Professor
Agricultural Economics
PHD, University of California, Davis, 1977

Boadu, Frederick O, Professor
Agricultural Economics
PHD, University of Kentucky, 1981

Buenger, Sarah D, Lecturer
Agricultural Economics
MS, College for Financial Planning, 2015

Conner, James R, Senior Professor
Agricultural Economics
PHD, Texas A&M University, 1970

Harness, Nathaniel J, Instructional Associate Professor
Agricultural Economics
PHD, Texas Tech University, 2007

Ishdorj, Ariun, Associate Professor
Agricultural Economics
PHD, Iowa State University, 2008

Leatham, David J, Professor
Agricultural Economics
PHD, Purdue University, 1983

Litzenberg, Kerry K, Professor
Agricultural Economics
PHD, Purdue University, 1979

McCarl, Bruce A, Distinguished Professor
Agricultural Economics
PHD, The Pennsylvania State University, 1973

Menzies, Max D, Lecturer
Agricultural Economics
MS, Texas A&M University, 2004

Mjelde, James W, Professor
Agricultural Economics
PHD, University of Illinois at Urbana-Champaign, 1985

Moore, Christopher M, Lecturer
Agricultural Economics
MBA, Texas A&M University Commerce, 2013

Ng, Desmond W, Associate Professor
Agricultural Economics
PHD, University of Illinois at Urbana-Champaign, 2001

Penson, John B, Professor
Agricultural Economics
PHD, University of Illinois at Urbana-Champaign, 1973

Price, Edwin C, Professor
Agricultural Economics
PHD, University of Kentucky, 1973

Richardson, James W, Professor
Agricultural Economics
PHD, Oklahoma State University, 1978

Rister, M E, Professor
Agricultural Economics
PHD, Michigan State University, 1981

Salin, Victoria S, Professor
Agricultural Economics
PHD, Purdue University, 1996

Senarath Dharmasena, Kalu A, Instructional Assistant Professor
Agricultural Economics
PHD, Texas A&M University, 2010

Shaw, William D, Professor
Agricultural Economics
PHD, University of Colorado, 1985

Siebert, John W, Professor
Agricultural Economics
PHD, University of California, Berkeley, 1978
Stebbins, Richard A, Professor
Agricultural Economics
JD, Texas Tech School of Law, 2005
MS, Texas Tech University, 2005

Stevens, Reid, Assistant Professor
Agricultural Economics
PHD, University of California, Berkeley, 2015

Vedenov, Dmitry, Associate Professor
Agricultural Economics
PHD, The Ohio State University, 2010

Wu, Ximing, Professor
Agricultural Economics
PHD, University of Wisconsin - Madison, 1997

Woodward, Richard T, Professor
Agricultural Economics
PHD, Purdue University, 1981

Williams, Gary W, Professor
Agricultural Economics
PHD, The Ohio State University, 2001

Woodward, Richard T, Professor
Agricultural Economics
Bachelor of Science in Agricultural Economics and Master of Agribusiness Entrepreneurship Minor
Bachelor of Science in Agricultural Economics, Policy and Economic Analysis Option
Bachelor of Science in Agricultural Economics, Finance and Real Estate Option
Bachelor of Science in Agricultural Economics, Food Marketing Systems Option
Bachelor of Science in Agricultural Economics, Agribusiness Management Option

Zhang, Yu, Assistant Professor
Agricultural Economics
PHD, Texas A&M University, 2010

Major

Agribusiness

- Bachelor of Science in Agribusiness (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-economics/agribusiness-bs)

Agricultural Economics

- Bachelor of Science in Agricultural Economics, Finance and Real Estate Option (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-economics/bs-finance-real-estate-option)
- Bachelor of Science in Agricultural Economics, Food Marketing Systems Option (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-economics/bs-food-marketing-systems-option)
- Bachelor of Science in Agricultural Economics, Policy and Economic Analysis Option (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-economics/bs-policy-economic-analysis-option)
- Bachelor of Science in Agricultural Economics, Rural Entrepreneurship Option (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-economics/bs-rural-entrepreneurship-option)
- Bachelor of Science in Agricultural Economics and Master of Public Service and Administration, 5-Year Degree Program (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-economics/bs-mpsa)

Minors

- Agricultural Economics Minor (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-economics/minor)
- AgriFood Sales Minor (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-economics/agrifood-sales-minor)

Certificates

- International Trade and Agriculture Certificate (http://catalog.tamu.edu/undergraduate/agriculture-life-sciences/agricultural-economics/international-trade-agriculture-certificate)

Courses

AGEC 105 Introduction to Agricultural Economics
Credits 3. 3 Lecture Hours.
(AGRI 2317) Introduction to Agricultural Economics. Characteristics of our economic system and basic economic concepts; survey of the farm and ranch firm and its organization and management; structure and operation of the marketing system; functional and institutional aspects of agricultural finance; government farm programs.

AGEC 216 Fundamentals of the AgriFood Sales Industry
Credit 1. 1 Lecture Hour.
Fundamentals of professional business to business sales in AgriFood firms; opportunities to interact with successful salespeople in AgriFood firms; focus on career development, exploration of undergraduate internships in professional sales and identification of basic sales theories currently in use in AgriFood firms; learning to network extensively with AgriFood industry professionals and developing a mentor relationship.

AGEC 217 Fundamentals of Agricultural Economics Analysis
Credits 3. 1 Lecture Hour. 4 Lab Hours.
Relates contemporary agribusiness issues to economic and financial management, illustrating their integration toward pragmatic applications in the agricultural industry; lab focuses on the integration of mathematics and economics with computer skills directed toward spreadsheets, databases, web pages, and communications software; emphasis is on writing as a critical communication skill.
Prerequisites: AGEC 105; ENGL 103 or 104; MATH 141; MATH 142; and sophomore or junior agricultural economics or agribusiness majors; or approval of department head.

AGEC 223 Establishing Agribusiness Entrepreneurship Networks I
Credit 1. 1 Lecture Hour.
Introduction to successful entrepreneurs and other professionals, identifying suggested strategies and tactics in starting and sustaining viable rural and metropolitan business ventures; emphasis on importance of and how to develop relationships with a broad spectrum of mentors.
Prerequisite: Open to all majors.

AGEC 285 Directed Studies
Credits 0 to 4. 0 to 4 Other Hours.
Directed study of selected problems in agricultural economics.
Prerequisites: AGEC 105; freshman or sophomore classification in agricultural economics, agribusiness, or approval of instructor and department head; 2.5 GPR in major, overall, and CBK courses, if applicable; see an academic advisor in Room 214 AGLS.
AGEC 289 Special Topics in...  
Credits 1 to 4. 1 to 4 Lecture Hours.  
Selected topics in an identified area of agricultural economics. May be repeated for credit.  
**Prerequisites:** Freshman or sophomore classification and approval of department head.

AGEC 291 Research  
Credits 0 to 4. 0 to 4 Other Hours.  
Research conducted under the direction of faculty member in agricultural economics. May be repeated 3 times for credit.  
**Prerequisites:** Freshman or sophomore classification and approval of department head; see an academic advisor in Room 214 AGLS.

AGEC 314 Marketing Agricultural and Food Products  
Credits 3. 3 Lecture Hours.  
Operations involved in movement of agricultural commodities from farmer to consumer via several intermediaries; functions involve buying, selling, transportation, storage, financing, grading, pricing and risk bearing; agricultural supply chain or value chain is studied in detail; marketing aspects of commodities and differentiated goods.  
**Prerequisites:** AGEC 105 or 3 hours of economics; and junior or senior classification.

AGEC 315 Food and Agricultural Sales  
Credits 3. 3 Lecture Hours.  
Principles of professional sales techniques used in food and agricultural firms; develop a professional sales presentation; study current agribusiness industry professional salespersons.  
**Prerequisite:** Junior or senior classification.

AGEC 316 Building Customer Relationships in AgriFood Selling  
Credits 3. 3 Lecture Hours.  
Use of emotional intelligence factors in developing business-to-business customer relationships for AgriFood, real estate, finance and other industrial products and services; developing customer relationships with regard to the unique aspects of technical products and services in these industries.  
**Prerequisite:** AGEC 315.

AGEC 317 Economic Analysis for Agribusiness Management  
Credits 3. 3 Lecture Hours.  
Quantitative methods used to address managerial problems, specifically calculus-based optimization, marginal analysis, elasticities, statistical and forecasting techniques, linear programming, and risk analysis; emphasis on theoretical aspects and applied analysis of managerial problems faced by agricultural firms.  
**Prerequisites:** AGEC 217; ECON 322 or ECON 323; SCMT 303 or STAT 301 or STAT 302 or STAT 303; and junior or senior classification; agricultural economics, agribusiness majors only; or approval of department head.

AGEC 324 Agribusiness Entrepreneurship – Budgeting  
Credits 3. 2 Lecture Hours. 2 Lab Hours.  
Case study approach to demonstrate a process for evaluating the economic feasibility of a single-enterprise rural or metropolitan business venture; relevant production, marketing and financing costs, in combination with capital ownership and overhead costs; computer spreadsheets including attention to deterministic sensitivity analyses; computer capabilities are essential.  
**Prerequisites:** AGEC 105 or ECON 202; ACCT 209 or ACCT 210 or ACCT 229 or ACCT 230 or AGEC 330 or FINC 341 or FINC 409; junior or senior classification or approval of instructor.

AGEC 325 Principles of Farm and Ranch Management  
Credits 3. 2 Lecture Hours. 2 Lab Hours.  
Agribusiness managerial decision making and analysis in different market environments; emphasis is on profit maximization; lab focuses on using computerized methods for evaluating management alternatives for farming and ranching problem situations.  
**Prerequisites:** AGEC 105 or ECON 202; junior or senior non-agricultural economics, nonagribusiness majors only; and knowledge of Excel.

AGEC 330 Financial Management in Agriculture  
Credits 3. 3 Lecture Hours.  
Principles of financial management of farms, ranches, and other agribusiness firms; financial statements, financial statement analysis, time value of money, investment analysis, firm growth, risk management, credit analysis and best business management practices.  
**Prerequisites:** AGEC 105 or 3 hours of economics; ACCT 209 or ACCT 229; and junior or senior classification.

AGEC 340 Agribusiness Management  
Credits 3. 3 Lecture Hours.  
Survey of management practices throughout the food marketing chain; focuses on farm and ranch suppliers, farmers and ranchers, first handlers, food processors, food distributors, and restaurants, food retailers and institutions; use of case studies and models for the purpose of evaluating firm management success.  
**Prerequisites:** AGEC 105 or 3 hours of economics; and junior or senior classification.

AGEC 344 Food and Agricultural Law  
Credits 3. 3 Lecture Hours.  
Legal principles relevant to the farm family and business; characteristics of legal decisions and rules on property rights, and fencing laws; analysis of global, national, state, and local legal issues in contracts, torts, water, pollution, and natural resources.  
**Prerequisite:** Junior or senior classification.

AGEC 350 Environmental and Natural Resource Economics  
Credits 3. 3 Lecture Hours.  
Inspection of issues such as environmental degradation, population growth, recycling, water use and depletion, natural habitat protection, water and air pollution, acid deposition, fishery management, and global warming using economically derived principles and tools.  
**Prerequisite:** Junior or senior classification.

AGEC 401 Global Agri-Industries and Markets: Study Abroad  
Credits 3. 3 Lecture Hours.  
Understanding agriindustries and markets; analysis of production; importing; exporting; provides classroom experience with an exposure to a variety of global cultures in an international setting. Course may be repeated 3 times for credit.  
**Prerequisites:** AGEC 105 or 3 hours of economics; junior or senior classification or approval of department head.

AGEC 402 Survey of International Agricultural Economics: Study Abroad  
Credits 3. 3 Lecture Hours.  
Examine, from an international setting, the shape of international agriculture; how culture, history, politics and geography in foreign countries affect the production and management of agricultural products; agricultural policy formation; countries’ natural resources and competitive strategies; may be taken 3 times for credit.  
**Prerequisites:** AGEC 105 or 3 hours of economics; junior or senior classification or approval of department head.
AGEC 408 Economics of Foreign Intervention, Conflict and Development
Credits 3. 3 Lecture Hours.
Economic models of conflict and development; dynamic socio-political models of conflict; conflict and vulnerable groups; quantitative techniques and methods in conflict and development research; interaction between poverty, natural resources and conflict in developing countries; role of multilateral, bilateral, and strategic stakeholders in conflict resolution and promotion of economic development. Prerequisites: AGEC 105 or ECON 202 or equivalent; ENGL 104; or approval of instructor.

AGEC 413 Agricultural Cooperatives
Credits 3. 3 Lecture Hours.
Historical development and principles of cooperative associations in our economic system; organizational and operational aspects of cooperatives; legal considerations, financing, management, and member relations; and future role of cooperatives. Prerequisites: AGEC 105; AGEC 314; and junior or senior classification.

AGEC 414 Agribusiness and Food Market Analysis
Credits 3. 3 Lecture Hours.
Application of economic and marketing principles to contemporary food and agribusiness marketing; practical marketing management for agribusiness firms; market analysis; and marketing strategy and planning as related to the emerging trends in the global food and agribusiness sector of the economy. Prerequisites: AGEC 317; FINC 341; MKTG 321; and junior or senior agribusiness majors only.

AGEC 415 Food and Agribusiness Strategic Market Planning
Credits 3. 3 Lecture Hours.
Development of a market plan targeting the food and agribusiness market sector; market analysis; business propositions; action plans for executing the 4 P’s (Product, Price, Place, Promotion); monitoring and measurement. Prerequisites: AGEC 314 or MKTG 321 or MKTG 409; AGEC 315; junior or senior classification or approval of instructor.

AGEC 416 Sales Management and Advanced Techniques in Professional Technical Selling for AgriFood Firms
Credits 3. 3 Lecture Hours.
Principles and practices of sales management in food and agricultural firms; focus on business-to-business selling situations, theoretical and practical information about sales management for AgriFood firms; application of principles. Prerequisite: AGEC 315.

AGEC 420 Food Security, Climate and Conflict
Credits 3. 3 Lecture Hours.
Economic models of food production and consumption in conflict regimes; the micro-economics of violence; the dynamic relationships of climate and agricultural production; potential impacts of climate change on food and socio-political security; food security among insurgent groups; conflict resistant food systems; and the shifting relationships between poor and rich nations in relationship to climate, food and conflict. Prerequisites: AGEC 105 or ECON 202, junior or senior classification, or approval of instructor.

AGEC 422 Land Economics
Credits 3. 3 Lecture Hours.
Economic, institutional, and physical factors involved in the use and control of natural resources; includes elements of introductory land economics as a discipline, economic foundations of land economics, institutional influences on land use, and the effects of public policy on land use. Prerequisites: AGEC 105 or 3 hours economics; and junior or senior classification.

AGEC 423 Establishing Agribusiness Entrepreneurship Networks II
Credit 1. 1 Lecture Hour.
Engagement opportunities with successful agri/metropolitan entrepreneurs and other professionals, focusing on strategies and tactics for starting and sustaining viable rural and metropolitan business ventures; emphasis on importance of, and how to, develop relationships with a broad spectrum of mentors. Prerequisites: Concurrent enrollment in AGEC 424; junior or senior classification or approval of instructor. May not enroll in AGEC 223 and AGEC 423 during the same semester.

AGEC 424 Agribusiness Entrepreneurship -- Economic Analysis
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Strategic planning regarding economic feasibility of a single-enterprise rural or metropolitan business venture; emphasis on processes for developing a comprehensive enterprise budget and construction and evaluation of risk management alternatives; exchanges with "real-world" entrepreneurs, financial experts and other management personnel; computer capabilities essential. Prerequisites: AGEC 105 or ECON 202; ACCT 209 or ACCT 210 or ACCT 229 or ACCT 230 or AGEC 324 or AGEC 330 or FINC 341 or FINC 409; junior or senior classification or approval of instructor.

AGEC 425 Agribusiness Entrepreneurship -- Financial Analysis
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Strategic planning regarding rural and metropolitan business ventures; emphasis on processes for developing comprehensive economics and financial prospectuses, including enterprise budgets, risk management planning, cash flow budgeting, net worth statements, income budgets, reconciliation statements and shock analysis; mentoring exchanges with "real-world" entrepreneurs, financial experts and other management personnel. Prerequisites: AGEC 424; and junior or senior classification.

AGEC 429 Agricultural Policy
Credits 3. 3 Lecture Hours.
Analysis of the causes, nature, and effects of government participation in agriculture; and interrelationship of the American agriculture and agribusiness sector with the political and economic system, public administration, and interest group representation. Prerequisites: AGEC 105, ECON 202 or ECON 203; ENGL 103 or ENGL 104; and junior or senior classification.

AGEC 430 Macroeconomics of Agriculture
Credits 3. 3 Lecture Hours.
Basic functioning of U.S. economy and relationship to agriculture; the differential effects of macroeconomic policy on disposable income, interest rates, unemployment, inflation and exchange rates; impact on agricultural commodity prices, farm input costs, net farm income, farmland values and key financial indicators. Prerequisites: AGEC 105 or 3 hours of economics; AGEC 317 or concurrent enrollment; AGEC 429; AGEC 330 or FINC 341 or FINC 409; and junior or senior classification.
AGEC 431 Cases in Agribusiness Finance
Credits 3. 3 Lecture Hours.
Financial management of agribusiness firms; advanced topics in financial statement analysis, liquidity management, investment analysis, and capital structure illustrated through examination of agribusiness cases.
Prerequisites: AGEC 317; AGEC 340; FINC 341; and junior or senior agribusiness majors only.

AGEC 432 Rural Real Estate and Financial Analysis
Credits 3. 3 Lecture Hours.
Advanced topics in investment analysis; financial intermediation in agriculture; real estate markets and market analysis; and appraisal valuation.
Prerequisites: AGEC 317 (waived for nonmajors); AGEC 330 or FINC 341 or FINC 409; AGEC 422; ACCT 210 or ACCT 230; and junior or senior classification.

AGEC 434 Rural Financial Markets and Financial Planning
Credits 3. 3 Lecture Hours.
Organization, structure, conduct and regulation of lending institutions serving commercial agriculture and rural borrowers; borrower financial statement analysis, business forecasting, investment analysis and loan application process; lender credit application underwriting standards, credit scoring and loan decision making process; agricultural loan portfolio analysis.
Prerequisites: ACCT 209 or ACCT 229; ACCT 210 or ACCT 230; AGEC 330 or FINC 341 or FINC 409; junior or senior classification.

AGEC 435 Financial Planning for Professionals
Credits 3. 3 Lecture Hours.
Financial planning from a professional perspective; applying basic financial, economic and institutional concepts to advise individuals, families and small businesses in achieving their financial goals; tools and topics include financial analysis, budgeting, credit management, time value of money, investment strategies, income taxes, risk management, and retirement and estate planning.
Prerequisites: AGEC 330, FINC 409 or FINC 341; junior or senior classification.

AGEC 436 Insurance and Estate Planning
Credits 3. 3 Lecture Hours.
Insurance and estate planning for individuals, families and small businesses; applies risk management principles to evaluate various insurance products, including life, disability, long-term care, health, homeowners, auto and liability; estate planning process, tools and considerations.
Prerequisites: AGEC 330, AGEC 435, FINC 409 or FINC 341; junior or senior classification.

AGEC 437 Tax Planning
Credits 3. 3 Lecture Hours.
Applies the principles of income, gift and estate tax planning to enhance household income after taxes; understanding tax laws, reporting requirements and opportunities for planning; identify and implement useful tax planning strategies; focus on practical application for financial planning.
Prerequisites: AGEC 330, AGEC 435, FINC 409 or FINC 341; junior or senior classification.

AGEC 438 Investment Planning
Credits 3. 3 Lecture Hours.
Applying investment principles considering families’ goals, time horizons, risk tolerance and tax implications to build investment portfolios; attributes of various asset classes; asset allocation, selecting securities and portfolio management; developing successful investment programs for personal investors and financial planners.
Prerequisites: AGEC 435 and junior or senior classification.

AGEC 439 Retirement Planning
Credits 3. 3 Lecture Hours.
Retirement planning basics, qualified and nonqualified retirement plans, Social Security provisions and government healthcare plans along with the basics of employee benefits; focus on both quantitative (i.e., calculating retirement needs and plan limits) and qualitative (i.e., retirement age decisions, retirement income management) aspects of retirement.
Prerequisite: AGEC 435 and junior or senior classification.

AGEC 440 Agribusiness Strategic Analysis
Credits 3. 3 Lecture Hours.
Strategic management and economic principles for the agribusiness system; problem recognition and applied managerial/economic decision making with related considerations in marketing, production, or finance for agribusiness firms.
Prerequisites: AGEC 317; AGEC 340; FINC 341; MGMT 363; MKTG 321; and junior or senior agribusiness majors only.

AGEC 441 Financial Planning Capstone
Credits 3. 3 Lecture Hours.
Financial planning process, data gathering, approaches to financial planning, analysis of financial statements and client presentation; case analysis, ethics and professional conduct, use of financial planning software, advanced financial calculator usage, and Microsoft Excel applications.
Prerequisites: AGEC 435, AGEC 436, AGEC 437, AGEC 438 and AGEC 439; junior or senior classification.

AGEC 447 Food and Agricultural Price Analysis
Credits 3. 3 Lecture Hours.
Factors influencing the level of food and agricultural prices; price trends and seasonal variation; methods of forecasting demands and prices; and futures trading.
Prerequisites: AGEC 314; AGEC 317; and junior or senior classification.

AGEC 448 Agricultural Commodity Futures
Credits 3. 3 Lecture Hours.
Activities of commodity futures exchanges; the mechanics of trading futures contracts; the use of futures trading for hedging and forward pricing; and options, basis behavior, and hedging strategies for selected commodities.
Prerequisites: AGEC 105 or 3 hours of economics; AGEC 314; AGEC 317 or concurrent enrollment; and junior or senior classification; or approval of department head.

AGEC 452 International Trade and Agriculture
Credits 3. 3 Lecture Hours.
Changing role of U.S. agriculture in a dynamic world economy; national and international policies and institutions affecting agriculture; and exchange rates, tariffs, and non-tariff barriers.
Prerequisites: AGEC 105 or 3 hours of economics; and junior or senior classification.
AGEC 453 International Agribusiness Marketing  
**CREDITS**: 3  3 Lecture Hours.  
Basic competencies in international marketing of agri-foods; and market entry, pricing, payment, finance, and promotion.  
**Prerequisites**: AGEC 105 or 3 hours of economics; and junior or senior classification.  

AGEC 460 Cross-Cutting Issues in Agricultural Economics  
**CREDITS**: 3  3 Lecture Hours.  
Examination of economic theory and its history; emphasis on the areas of agricultural business, finance, macroeconomics, management, marketing, microeconomics, quantitative analysis, resources, and economics policy; emphasis on the ability to properly analyze economic problems.  
**Prerequisites**: AGEC 317; AGEC 314 or MKTG 321 or MKTG 409; AGEC 330 or FINC 341 or FINC 409; AGEC 429; agricultural economics and agribusiness majors only; junior or senior classification or approval of instructor.  

AGEC 481 Ethics in Agribusiness and Agricultural Economics  
**Credit**: 1  1 Lecture Hour.  
Examination of the principals of ethical business behavior; context created through assigned readings, guest speakers from various law enforcement branches and private industry; student written reports about their own experiences relative to this context; attention given to establishing personal principles for an ethical business career.  
**Prerequisites**: AGEC 217; junior or senior classification; and agricultural economics or agribusiness majors only.  

AGEC 484 Internship  
**Credits**: 0 to 6  0 to 6 Other Hours.  
Supervised experience program conducted in the area of the student’s interest in agricultural economics and agribusiness. May be taken two times.  
**Prerequisite**: See an advisor in Room 214 AGLS Building.  

AGEC 485 Directed Studies  
**Credits**: 0 to 6  0 to 6 Other Hours.  
Special problems not covered by other courses. Content will depend upon problem studied.  
**Prerequisite**: See an advisor in Room 214 AGLS Building.  

AGEC 489 Special Topics in...  
**Credits**: 1 to 4  1 to 4 Lecture Hours.  
Selected topics in an identified area of agricultural economics. May be repeated for credit.  
**Prerequisite**: Junior or senior classification.  

AGEC 491 Research  
**Credits**: 0 to 6  0 to 6 Other Hours.  
Research conducted under the direction of faculty member in agricultural economics. May be repeated 3 times for credit. Registration in multiple sections of this course are possible within a given semester provided that the per semester credit hour limit is not exceeded.  
**Prerequisites**: Junior or senior classification and approval of department head; see an advisor in Room 214 AGLS Building.