Agricultural and Applied Economics

Harvey James, Chair
Agricultural and Applied Economics
College of Agriculture, Food and Natural Resources
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The Agricultural and Applied Economics Program offers a BS degree with a major in Agribusiness Management and MS and PhD degrees with a major in Agricultural and Applied Economics. A minor in Agricultural Economics is also available. Agricultural and Applied Economics is home to several programs and research centers where students can seek on-campus work experience.

- Contracting and Organizations Research Institute (CORI): An interdisciplinary research institute, CORI is dedicated to studying how economic enterprises organize and structure themselves and determining the effects of legal, political, social and economic institutions on the structure and performance of economic organizations.
- Food Equation Institute (FEI): The Food Equation Institute formed to determine how data collected throughout the food and agricultural products value chain and related innovation make the greatest impact on society.
- Economics and Management of Agrobiotechnology Center (EMAC): A research institute devoted to studying the effects of biotechnology on agriculture, food production and value chains, EMAC provides rigorous, data-based analysis of economic, management and policy issues affecting decision-making in agricultural biotechnology.
- Food and Agricultural Policy Research Institute (FAPRI): To estimate how different policy options affect prices and quantities, producers, consumers and government costs, FAPRI staff use economic models of key commodity markets. FAPRI works with collaborators at MU and other institutions so that the analysis can estimate impacts on crop, livestock and biofuel markets in the U.S. and other countries.
- McQuinn Center for Entrepreneurial Leadership (MCEL): The center dedicates its focus to researching and promoting entrepreneurship in the food and agriculture sector.
- Missouri Institute of Cooperatives (MIC): Coordinates information and leadership training for cooperatives serving Missouri.
- Graduate Institute of Cooperative Leadership (GICL): Annually, the institute trains mid-level cooperative managers to develop leadership and management skills required by the evolving global agricultural marketplace. As emerging leaders, these participants also benefit from the institute’s focus on facilitating their personal career growth.

Our Extension Programs

- Agricultural Business and Policy Extension: The Agricultural Business and Policy Extension group serves rural Missouri by helping farms, agribusinesses and communities understand their opportunities and challenges and make informed decisions. The team has four focuses: sharing how market risks may shift market outlook; studying relevant industry issues; communicating potential effects of domestic and trade policy decisions; and assessing diversification and new business opportunities for farms, businesses and commodity groups.
- Community Regional Economic and Entrepreneurial Development Program (ExCEED): ExCEED, An MU Extension program, works to build vibrant communities with informed leaders, resilient economies, ready access to food and health resources, entrepreneurial mindsets, financial preparedness and inclusive environments.

Faculty

Associate Professor S. A. Low**, M. J. Monson*, K. C. Moore*, M. E. Sykuta**, W. Thompson**
Assistant Professor M. Segovia*, T. Skevas**
Extension Professor R. Massey**
Extension Associate Professor D. S. Brown**, J. Kruse
Assistant Teaching Professor J. Palacios Rivera
Research Assistant Professor J. Binfield, J. Grashuis
Instructor M. Foreman, J. Moreland, L. F. Sowers
Adjunct Faculty H. Gedikoglu, D. Miller

Graduate

Undergraduate

While MU does not offer an undergraduate degree specifically in agricultural and applied economics, the University does offer a bachelor's degree in the closely related area of Agribusiness Management (http://catalog.missouri.edu/undergraduategraduate/collegeofagriculturefoodandnaturalresources/agribusinessmanagement/#undergradutetext), as well as other related areas both within the College of Agriculture, Food and Natural Resources, and in the other Schools and Colleges that make up the University. The catalog provides a complete list of these degree options (http://catalog.missouri.edu/degreesanddegreeprograms/).

Graduate

- MS in Agricultural and Applied Economics (http://catalog.missouri.edu/undergraduategraduate/collegeofagriculturefoodandnaturalresources/agappliedeconomics/ms-ag-applied-economics/)
- PhD in Agricultural and Applied Economics (http://catalog.missouri.edu/undergraduategraduate/collegeofagriculturefoodandnaturalresources/agappliedeconomics/phd-ag-applied-economics/)

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138A Mumford Hall; Columbia, MO 65211
policy. Behavioral economics is an emerging research area that can be applied productively to environmental and development issues. You will apply theory from economics and other social sciences, use rigorous analytical tools for translational research to analyze real-world problems and policies that can address them.

Public Policy Analysis (MS, PhD)
The Public Policy Analysis (https://dass.missouri.edu/graduate-studies/public-policy-analysis) area seeks knowledge about how agricultural and food policy and innovation influence markets and, ultimately, human well-being. The program relies on a rigorous approach to agricultural economics that underpins applied analysis, including experimental and behavioral economic models, strategic interaction models, structural economic models, investment or firm models, systems simulation, mathematical programming and econometrics. It relies on coursework and research with widely recognized centers for agricultural economics, such as the Food and Agricultural Policy Research Institute (FAPRI) (https://www.fapri.missouri.edu/), Agricultural Markets and Policy (AMAP) (https://amap.missouri.edu/), the Economics and Management of Agrobiotechnology Center (EMAC) (https://emac.missouri.edu/) and the Food Equation Institute (FEI).

Application Process
You need to submit the following to the Division of Applied Social Sciences:

- Application for Admissions Form (https://dass.missouri.edu/wp-content/uploads/sites/20/2019/02/Grad_AppForm.pdf) (PDF)
- Recommendation Form
- Short essay explaining why you want to study at the University of Missouri
- Official transcripts
- GRE score report (required for Agricultural and Applied Economics)
- TOEFL score, if applicable

Apply online through the University of Missouri Graduate School:

- Online University of Missouri graduate studies application (https://gradschool.missouri.edu/admissions/apply/)

Application Deadlines
For priority consideration for assistantships, fellowships and scholarships, applications should be submitted by Jan. 15 for Fall enrollment and Sept. 1 for Spring enrollment.

Financial Assistance
Requests for financial assistance should be made at the time students apply for admittance into the program.

AAE 7223: Professional Solution Selling
(cross-leveled with ABM 4223). This course will reinforce the sales education students gained in AAB 2223, Agricultural Sales. This course will focus on strategic and conceptual selling which are techniques geared toward complex B2B sales. In this course, we will discuss myriad career opportunities in the sales profession. Students will have the opportunity to interact with sales professionals.

Credit Hours: 3
Prerequisites: ABM 2223
AAE 7240: Microeconomics Theory and Applications
(cross-leveled with ABM 4240). This course extends the learning from
principles of microeconomics for students of applied economics. The
topics in this course prepare students for further study in finance,
business management, policy analysis, economic development, and
other applications of economic theory. The course stresses development
of theoretical models of consumer choice, firm behavior, perfect and
imperfect markets, and externalities, balanced by investigation of
the assumptions behind these models. Applications of the models to
management and policy issues will be assigned throughout the semester.
Credit Hours: 3
Prerequisites: ABM 1041 or ECONOM 1014

AAE 7251: Agricultural Prices
(cross-leveled with ABM 4251). Variations in prices of agricultural
products; underlying factors.
Credit Hours: 3
Prerequisites: ABM 2123 and ABM 2225 or STAT 2500

AAE 7295: Agricultural Risk Management
(cross-leveled with ABM 4295). This class will examine the range of risks
businesses face and explore ways of characterizing and evaluating those
risks.
Credit Hours: 3
Prerequisites: ABM 2183 and ABM 2225 or STAT 2500

AAE 7301: Topics in Agricultural and Applied Economics
Current and new topics not currently offered in applied and/or theoretical
areas in Agricultural and Applied Economics.
Credit Hour: 1-6

AAE 7400: Environmental Law, Policy, and Justice
(same as ENV_SC 7400; cross-leveled with ENV_SC 4400). This course
will examine the intersection of environmental law, policy, and justice.
We will first cover the building blocks of U.S. environmental law, including
common law and statutes such as the Clean Air Act and the Clean Water
Act. We will then turn to international environmental policy issues such
as climate change, marine pollution, and the hazardous waste trade.
We will approach these laws and treaties through the lens of equity
and environmental justice. The course will use a variety of teaching
methods, including lecture and classroom discussion using cold calling
and the Socratic Method. We will also have student presentations, guest
speakers, a moot court, a negotiation simulation, and a field trip in the
Columbia, Missouri area. Graded on A-F basis only.
Credit Hours: 3

AAE 7490: Economic Analysis of Policy and Regulation
(cross-leveled with ABM 4990). Apply economic concepts and tools
to analyze the policy-making process and the implications of policy for
individuals, firms, markets and society. Policy topics include, among other
things, agricultural support programs, environmental policy, international
trade, international development, and agribusiness regulation.
Credit Hours: 3
Prerequisites: ABM 4251
Recommended: ECONOM 4351

AAE 7962: Planning the Farm Business
(cross-leveled with ABM 4962). Economic analysis and planning of
the farm business and its organization. Applications of computerized
management techniques to farm business including resource acquisition,
tax management, enterprise analysis, and business analysis through farm
records and budgets.
Credit Hours: 3
Prerequisites: ABM 3260

AAE 7971: Agribusiness Management Strategy
(cross-leveled with ABM 4971). Analysis of industry forces in agriculture
and food sector. Assessing risks and firms capabilities. Development of
firm's competitive strategy, including vertical integration, diversification,
international business option, and financial planning and performance
measurement.
Credit Hours: 3
Prerequisites: ABM 4971 and ABM 3286 or MANGMT 3000

AAE 7972: Agri-Food Business and Cooperative Management
(cross-leveled with ABM 4972). Risk management in the global agrifood
chain, including managing the unique uncertainties of biological
production processes, global market analysis, and government
intervention, of risk management tools and institutions unique to strategic
decision making in agribusiness and cooperative firms.
Credit Hours: 3
Prerequisites: ABM 4971 and ABM 3286 or MANGMT 3000
Recommended: ABM 3256

AAE 7983: Strategic Entrepreneurship in Agri-Food
(cross-leveled with ABM 4983). Strategic entrepreneurship is the
search for opportunities to generate income streams from innovation,
development of new markets, and altering the rivalry positions in existing
markets. Graded on A-F basis only.
Credit Hours: 3
Prerequisites: Graduate standing and one course at the level of
intermediate microeconomics

AAE 7990: Economic Analysis of Policy and Regulation
(cross-leveled with ABM 4990). Apply economic concepts and tools
to analyze the policy-making process and the implications of policy for
individuals, firms, markets and society. Policy topics include, among other
things, agricultural support programs, environmental policy, international
trade, international development, and agribusiness regulation.
Credit Hours: 3
Prerequisites: ABM 4251
Recommended: ECONOM 4351

AAE 7995: Economics of Agricultural Production and Distribution
(cross-leveled with ABM 4995). Applies economic principles to
agricultural production including price theory, linear programming and
uncertainty.
Credit Hours: 3
Prerequisites: ECONOM 3251 and ABM 2225 or STAT 2500
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>AAE 8001</td>
<td>Advanced Topics in Agricultural and Applied Economics</td>
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<tr>
<td>AAE 8050</td>
<td>Economics of Institutions and Organizations</td>
<td>ECONOM 7351 or equivalent</td>
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<td>AAE 8060</td>
<td>Quantitative Tools for Decision Making and Performance Evaluation</td>
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<tr>
<td>AAE 8085</td>
<td>Masters Problems in Agricultural and Applied Economics</td>
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<td>1-99</td>
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<tr>
<td>AAE 8090</td>
<td>Masters Thesis Research in Agricultural and Applied Economics</td>
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<tr>
<td>AAE 8265</td>
<td>Agricultural and Food Policy</td>
<td>ECONOM 7351 or equivalent, AAE 9220, AAE 9230</td>
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<tr>
<td>AAE 8350</td>
<td>Regional Development Issues and Analysis</td>
<td>ECONOM 7351 or PUB_AF 8190 or equivalent</td>
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<tr>
<td>AAE 8410</td>
<td>Natural Resource and Environmental Economics</td>
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<td>AAE 8430</td>
<td>International Agricultural Development Policy</td>
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<tr>
<td>AAE 8450</td>
<td>Masters Non Thesis Research</td>
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<td>AAE 8510</td>
<td>Research Methods and Design</td>
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<tr>
<td>AAE 8520</td>
<td>Economics of Transaction and Contracting</td>
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<td>AAE 8560</td>
<td>Economic and Sociological Approaches to Collective Action</td>
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<td>AAE 8860</td>
<td>International Comparative Rural Policy</td>
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Prerequisites:
- AAE 7972

Recommended:
- AAE 8220

Graded on A-F basis only.
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<th>Prerequisites</th>
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<tbody>
<tr>
<td>AAE 9001</td>
<td>Advanced Topics in Economics II</td>
<td>Analyzes economic logic problems. Current agricultural economic problems.</td>
<td>3</td>
<td>Instructor's consent</td>
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<tr>
<td>AAE 9040</td>
<td>Advanced Microeconomics Theory and Applications I</td>
<td>First semester course that rigorously examines the microeconomic theory of producer and consumer behavior, combined with applications of the theoretical concepts to empirical economic research on agricultural, business, development, and environmental issues. Graded on A-F basis only.</td>
<td>3</td>
<td>ECONOM 7351 or instructors consent</td>
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<tr>
<td>AAE 9042</td>
<td>Advanced Microeconomics Theory and Applications II</td>
<td>Second semester advanced micro theory covering choice under uncertainty, industry structure, game theory, information econ, and political economy of regulation. Includes applications of micro models to issues in agricultural, natural resource, and development sectors.</td>
<td>3</td>
<td>AAE 9040</td>
</tr>
<tr>
<td>AAE 9085</td>
<td>Doctoral Problems in Agricultural and Applied Economics</td>
<td>Supervised study, research in specialized phases of agricultural and applied economics.</td>
<td>1-99</td>
<td>Instructor's consent</td>
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<tr>
<td>AAE 9220</td>
<td>Price and Market Analysis</td>
<td>Applies economic theory and quantitative methods to analyze agricultural prices and markets. Examines problem formulation, estimation, and model evaluation applied to the concepts of demand, supply, and prices.</td>
<td>3</td>
<td>ECONOM 8451 or ECONOM 8472; STAT 4510</td>
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<tr>
<td>AAE 9230</td>
<td>Welfare and Consumption Economics</td>
<td>Introduces welfare economic principles; application to problems of resource allocation. Appraises economic policies, programs; consumers' choice; measurement of consumption; living standards; household decisions and markets relation.</td>
<td>3</td>
<td>ECONOM 8451 or instructor's consent</td>
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<tr>
<td>AAE 9265</td>
<td>Food, Agricultural and Rural Policy</td>
<td>Application of welfare economics theory to food, agricultural and rural development policy analysis. Historical perspective and economics analysis of contemporary issues in national and international policy and institutions.</td>
<td>3</td>
<td>ECONOM 7351 and AAE 9230</td>
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<tr>
<td>AAE 9510</td>
<td>Organizational Economics I</td>
<td>This course builds on transaction cost-based theories and tools to study the economic underpinnings of intra-firm organization, firm boundaries, and the structure of inter-firm transactions.</td>
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<td>AAE 8050</td>
</tr>
<tr>
<td>AAE 9520</td>
<td>Organizational Economics II</td>
<td>Relationships of neoclassical and new institutional economics to designing organizational strategy and structure. Internal coordination and structure, organizational boundaries, inter-firm rivalry and cooperation, and competitiveness of food system organizations.</td>
<td>3</td>
<td>AAE 8050</td>
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</tbody>
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