Department of Agricultural Economics and Economics Agricultural Business Assessment Plan 2016

Degrees/Majors/Options Offered by Department

Bachelor of Science in Agricultural Business Bachelor of Science in Economics Bachelor of Science in Financial Engineering Masters of Science in Applied Economics

Department Education Mission Statement

To achieve excellence in undergraduate and graduate education by enabling students to develop outstanding analytical, critical thinking, and oral and written communication skills that permit them to be holistically and sustainably successful in all aspects of their adult lives.

Agricultural Business

Degree Objectives

The major in agricultural business offers students a coherent and comprehensive sequence of courses that combine a broad education with the detailed information and analytical skills that are needed to solve the complex policy and business problems that confront managers and policy makers in the agricultural sector. The program is also designed to prepare students for graduate study in business, agricultural economics, economics, or law.

Program Learning Outcomes

Our agricultural business program graduates will:

- 1. Have a solid understanding of how markets operate and the effects of extensive government policies on those markets.
- 2. Obtain basic skills in mathematical and analytical reasoning and statistical techniques.
- 3. Be able to read and comprehend general articles in business and economics journals.
- 4. Understand firm and farm level decision rules for the efficient operation of enterprises and the institutional structure and use of agricultural marketing systems.
- 5. Be able to analyze changes in market and general economic conditions in a broad array of settings and be able to determine the impact on various groups affected by those changes.
- 6. Have knowledge in supporting areas such as accounting, plant science, and animal science in order to better develop technical knowledge specific to agriculture and agricultural business.
- 7. Be able to present ideas effectively in oral and written forms to those in the agricultural and related fields.

Curriculum Outcome Matrix

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	Cr	1	2	3	4	5	6	7
WRIT 101: College Writing I	3							I
BMGT 205: Prof Comm Fundamentals	3							D
COMX 111US: Intro to Public Comm	3							I
M 161Q: Survey of Calculus	4		D					
STAT 216Q: Introduction to Statistics	3		I					
BIOB 170IN: Principles of Biological Diversity	4						I	
BIOB 110CS: Intro to Plant Biology	3						I	
ENSC 245IN: Soils	3						I	
ANSC 100: Intro to Animal Science	3						I	
AGED 105: Microcomputers in Ag	3		I					
ACTG 201: Principles of Fin. Acct.	3						I	
ACTG 202: Principles of Managerial Acct.	3						I	
ECNS 101IS: Economic Way of Thinking	3	I						
ECNS 202: Principles of Macroeconomics	3	I						
ECNS 204: Microeconomics	3	D						
ECNS 301: Intermediate Micro w/Calc	3	M						
ECNS 303: Intermediate Macro w/Calc	3	M						
ECNS 309: Managerial Economics	3			D	D	D		
ECNS 313: Money and Banking	3					D		
AGBE 210: Economics of Ag Business	3	D		I	I	I		
AGBE 315: Ag in a Global Context	3			D		D		
AGBE 321: Economics of Ag Marketing	3			D	D	D		
AGBE 337: Ag Law	3			D				
AGBE 341: Farm and Ranch Management	3				D			
AGBE 345: Ag Finance and Credit	3				D			
AGBE 353: Cooperative Principles	3				D			
AGBE 421: Advanced Ag Marketing	3				M			
AGBE 445: Agribusiness Management	3			M	M	M		M
AGBE 451R: Economics of Ag Policy	3			M		M		M

I: Introductory Level

D: Developing Level

M: Mastery Level

Specific Learning Objectives

AGBE	210	Economics of Agricultural Business	Upon completion of this course, students will: Understand how basic principles of economics are used by agribusiness for decision-making;	demonstrate knowledge of the economic foundation of agribusiness marketing, international trade, strategic business management, risk management, and financial management issues;	understand the fundamentals of production economics as it relates to cost functions and the development of supply functions;	understand price determination within the context of perfect competition, monopoly, and imperfectly competitive market structures.
AGBE	315	Agriculture in Global Context	Upon completion of this course, students will: understand issues related to international trade of grain and/or livestock products;	understand the integration of science, technology, production, product handling, marketing, transportation, and logistical structures related to international trade;	understand the importance of cultural differences in determining the structure of grain-based food products and regulation of the grain & food industry;	an opportunity for an international travel experience to study endusers of grain and/or livestock products in important export markets.
AGBE	321	Economics of Agricultural Marketing	Upon completion of this course, students will: understand economic principles with respect to agricultural commodity markets;	have complete understanding of the factors that affect agricultural commodity prices including market structures, changes in supply and demand, and supply and demand elasticities;	have a basic understanding of the role of futures and options markets for managing agricultural commodity price risk;	understand the marketing chain for agricultural commodities and the role of product differentiation in the food industry.

AGBE	337	Agricultural Law	Upon completion of this course, students will: Have a solid understanding of legal principles related to the ownership and operation of a farm and ranch business;	have a basic understanding of the legal relationships between farms and ranches with other agribusiness, government agencies, and citizens;	understand legal issues related to natural resources and personal property;	have a basic understanding of criminal, civil, and liability issues related to farm and ranch business.
AGBE	345	Agriculture Finance and Credit Analysis	Upon completion of this course, students will: Understand various options available to farms and ranches for acquiring and maintaining control over financial resources;	demonstrate the ability to determine credit worthiness, repayment capacity, financial performance, and amortization schedules under a variety of loan terms;	fully understand capital investment decision making as it relates to agribusiness.	
AGBE	341	Farm and Ranch Management	Upon completion of this course, students will: Use basic calculus and other quantitative tools for making economic decisions on farms and ranches;	use basic statistical methods for making economic decisions;	demonstrate rigorous understanding of the basic economic tools used by farm and ranch managers;	understand the role of risk management in farm and ranch operations.
AGBE	421	Advanced Agricultural Marketing	Upon completion of this course, students will: understand the economic analyses of current agricultural commodity marketing issues including	demonstrate thorough understanding of the role and mechanics of commodity futures markets in terms of managing agricultural commodity price risk;	demonstrate thorough understanding of the role and mechanics of commodity options markets in terms of managing agricultural commodity price risks;	understand the role of global markets and international finance as they relate to agricultural commodity and food product marketing.

			market structures, price risk management, agricultural insurance, efficiency, and price determination;			
AGBE	445	Agribusiness Management	Upon completion of this course, students will: Understand risk, production, marketing, financial, human resource, and strategic management functions of agribusiness firms;	successfully compete in an agribusiness environment;	demonstrate their solid foundation of oral and written communication skills, logical thought processes, and the critical evaluation of issues;	demonstrate the use of case studies as a means for experiential learning.
AGBE	451	Economics of Agricultural Policy	Upon completion of this course, students will: Understand economic problems and alternatives related to U.S. agriculture;	demonstrate rigorous understanding of the causes and consequences of agricultural government programs;	apply economic principles as a means for understanding economic consequences of governmental agricultural programs on consumers, taxpayers, markets, and producers;	demonstrate rigorous understanding of international agricultural trade policy issues.
AGBE	467	Quantitative Methods in Agricultural Economics	Upon completion of this course, students will: Understand static and dynamic economic optimization models;	understand nonlinear and dynamic programming models;	demonstrate basic ability to formulate economic and management problems in terms of quantitative models;	demonstrate basic understanding of constrained optimization techniques and their economic applications.

Assessment Methods

Feedback from Current Students

The Department conducts extensive individual exit interviews with all graduating seniors. These interviews are administered on a confidential basis (online or in person) by the Department Head. In addition to general questions about coursework, instructors, and advising, the interviews are designed to ascertain whether the student felt adequately prepared for upper division courses and whether the student felt that the curriculum was relevant to their future objectives beyond their undergraduate university experiences. The Department Head meets at least once per semester with a Student Advisory Group for feedback and input into the Departmental courses, instruction, and curriculum. The Department also administers detailed student evaluations of each course offered in its programs. In addition to playing a role in individual faculty annual productivity evaluations, summaries of the aggregate mean scores from these evaluations (by course level and type) across the Department are shared and discussed with all Department faculty at least once per year to assess levels and trends in these data.

Feedback from Outside Constituencies

The Department maintains extensive contacts with former students who provide updated assessments of the education provided by the Department. The Department maintains extensive contacts with employers who also provide frank assessments of the Department's programs in the context of the competencies of the graduates they have hired out of the program. The Department also maintains contacts and communication with graduate programs enrolling our alumni, who provide assessment of the degree of preparation our students have for advanced study.

Evaluation of Teaching

In addition to the Department Head, the Department uses an elected Departmental Advisory Committee and a Departmental Resident Instruction Committee to assess Departmental teaching. The Department Head's Advisory Committee advises the Department Head on most matters facing the Department including personnel, resource allocation, and communication with upper-administration. The Advisory Committee also serves as the Department's faculty annual review committee. The Advisory Committee is composed of four elected faculty members. Three members are elected by the faculty from within each of the three ranks (Assistant, Associate, and Full Professors). An additional "at large" member is elected by all faculty members and serves as the Chair of the Advisory Committee. Only tenured or tenure-track faculty may vote for Advisory Committee members. Members are elected for two-year terms. The terms are staggered so that two members are elected each year. The Resident Instruction Committee is responsible for matters related to undergraduate education including assessment, curriculum changes, and new course proposals. The committee is comprised of two elected members and a Chair who is appointed by the Department Head. The elected members are tenured or tenure-track faculty members who serve staggered two-year terms. All faculty members are required to distribute student evaluation forms at the end of the semester in all of their classes. Detailed data from student evaluations are submitted to the Department Head and the Departmental Advisory Committee. In addition, the Department Head shares detailed information

from the senior exit interviews, feedback from alumni, and feedback from employers with the Department Advisory Committee and the Department Resident Instruction Committee. The Department Head and the Department Advisory Committee use this comprehensive data set to review each faculty member's instructional program on an annual basis. The Department also uses a peer review process for all tenure track faculty at the assistant and associate professor level in which a senior faculty member is assigned to a junior member. The senior faculty member attends classroom sessions of the junior member, examines course outlines and other materials, and shares their findings with both the faculty member and the Department's Advisory Committee with the goal of enhancing teaching quality.

Curriculum Review

The Department holds formal meetings throughout the year, and the Resident Instruction Committee (RIC, which serves as the Department's curriculum Advisory Committee) is assigned the task of continually evaluating course offerings and requirements. The committee regularly reviews the Department's course offerings, carries out reviews of course offerings at comparable higher education institutions, and makes recommendations to the faculty about curriculum innovations. This process ensures that the curriculum is vibrant, relevant, and at the cutting edge of baccalaureate agricultural business education. Over the period 2011-2016, the DAEE RIC has completely evaluated the agricultural business program.

Curriculum Outcome Review Matrix

				Reviev	v Year		
	C	2015-	2016-	2017-	2018-	2019-	2020-
	r	16	17	18	19	20	21
WRIT 101: College Writing I	3	X		X		X	
BMGT 205: Prof Comm Fundamentals	3	X		X		X	
COMX 111US: Intro to Public Comm	3	X		X		X	
M 161Q: Survey of Calculus	4	X		X		X	
STAT 216Q: Introduction to Statistics BIOB 170IN: Principles of Biological Diversity	3	X		X		X	
BIOB 110CS: Intro to Plant Biology	3	X		X		X	
ENSC 245IN: Soils	3	X		X		X	
ANSC 100: Intro to Animal Science	3	X		X		X	
AGED 105: Microcomputers in Ag	3	X		X		X	
ACTG 201: Principles of Fin. Acct.	3	X		X		X	
ACTG 202: Principles of Managerial Acct.	3	X		X		X	
ECNS 101IS: Economic Way of Thinking ECNS 202: Principles of	3	X		X		X	
Macroeconomics	3	X		X		X	
ECNS 204: Microeconomics	3	X		X		X	
ECNS 301: Intermediate Micro w/Calc	3	X		X		X	
ECNS 303: Intermediate Macro w/Calc	3	X		X		X	
ECNS 309: Managerial Economics	3	X		X		X	
ECNS 313: Money and Banking	3	X		X		X	
AGBE 210: Economics of Ag Business	3	X		X		X	
AGBE 315: Ag in a Global Context	3	X		X		X	
AGBE 321: Economics of Ag Marketing	3	X		X		X	
AGBE 337: Ag Law	3	X		X		X	
AGBE 341: Farm and Ranch Management	3	X		X		X	
AGBE 345: Ag Finance and Credit	3	X		X		X	
AGBE 353: Cooperative Principles	3	X		X		X	
AGBE 421: Advanced Ag Marketing	3	X		X		X	
AGBE 445: Agribusiness Management	3	X		X		X	
AGBE 451R: Economics of Ag Policy	3	X		X		X	

Discipline-Specific Knowledge

For assessment purposes, heavy reliance is placed on student performance in required 300-level and 400-level courses, including the capstone courses. These 300-level theory and 400-level theory and applied classes are designed to provide a rigorous screening device that enables faculty to carefully evaluate student competencies. Minimum competencies are guaranteed by the requirement that students achieve a C minus or better in all courses in the major in order to graduate. In addition, the Department conducts an annual scholarship exam that requires students to demonstrate their knowledge of theoretical and applied models of firm and market behavior.

Communication Skills

Agricultural business majors are required to take 9 hours in writing and public communications, and many agricultural business classes require student papers and oral presentations. The final assessment of these skills takes place in capstone courses that require the integration of technical and communication skills and the completion of a major project.

Problem-Solving Skills

Students are required to take a series of classes in mathematics and statistics early in their program. Use of analytical tools to solve real world problems is an integral part of all agricultural business and economics courses. The capstone class challenges the student to come up with a real world problem and to apply appropriate analytical techniques to its analysis; that is, the student is required to do academic research.

Course Learning Outcomes

Assessment in each course is linked directly to course learning objectives. Under its assessment plan, the department has developed the following protocol:

- Each instructor will identify clearly all major learning objectives in the syllabus for each course.
- These learning objectives will be reviewed periodically for appropriateness (in terms of level of difficulty and in ways that in no degree impinge on academic freedom) and, in freshman and sophomore courses that form building blocks and prerequisites for subsequent courses, scope of content, by the Department's Resident Instruction Committee (an elected three person faculty committee responsible for monitoring and managing the Department's undergraduate programs in concert with the Department Head). Reviews will be carried out at a minimum of once every four years for any given course.
- Each instructor will clearly identify the methods used to assess the extent to which students have achieved progress towards the courses learning objectives, and which evaluation tools will be used to assess each of the learning objectives.
- The Department Head and the Department's Resident Instruction Committee will review course syllabuses on a periodic basis to ensure the above requirements are being met.

• Each instructor's effectiveness in accomplishing learning objectives will be assessed annually by the Department Head and the Department's Advisory Committee (four-person faculty committee elected by the faculty that works directly with the Department Head in carrying out annual performance reviews and provides key inputs to the Department Head on all issues of major concern to the Department) in the Department's annual performance review process.

Schedule for Reviewing Assessment Plan Elements

Each element of the assessment plan will be reviewed and updated as necessary at the beginning of each academic year.