Department of Agricultural Economics and Economics Economics 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.

Economics

Degree Objectives

The economics major offers students a flexible but coherent sequence of courses that combines the opportunity for a broad education with emphasis on economic problems. In preparing students to solve complex social and business problems using analytical tools, the program enables graduates to secure and succeed in jobs in both industry and government. Our program is also designed to prepare students for graduate study in economics, business, or law.

Program Learning Outcomes

Our agricultural business program graduates will:

- 1. Have a solid understanding of how markets operate and the effects of government policies on those markets.
- 2. Be able to analyze changes in market conditions in a broad array of settings and be able to determine the impact on the various groups most affected by the change.
- 3. Develop a set of mathematical and quantitative skills that enhances their ability to analyze and critically think about human behavior.
- 4. Be able to present their ideas both orally and through written documents.
- 5. Develop basic skills in the use of statistical analysis.
- 6. Be able to read and comprehend general articles in economics and business journals.

Curriculum Outcome Matrix

	Cr	1	2	3	4	5	6
WRIT 101: College Writing I	3				I		
WRIT 201: College Writing II	3				D		
BMGT 205: Prof Comm Fundamentals	3				I		
COMX 111US: Intro to Public Comm	3				I		
M 161Q: Survey of Calculus	4			I			
STAT 216Q: Introduction to Statistics	3					I	
STAT 217Q: Intermediate Stat Concepts	3					D	
ACTG 201: Principles of Fin. Acct.	3		I				
ECNS 101IS: Economic Way of Thinking	3	I					
ECNS 132: Economics and the Environment	3	I					
ECNS 202: Principles of Macroeconomics	3	I					
ECNS 204: Microeconomics	3	D	I				
ECNS 251: Honors Economics	3	I	I				
ECNS 301: Intermediate Micro w/Calc	3	D	D				
ECNS 303: Intermediate Macro w/Calc	3	D	D				
ECNS 305: Peer Leadership in Economics	3				M		D
ECNS 309: Managerial Economics	3	D	D	D			
ECNS 312: Labor and Human Resources Econ	3	D	D				D
ECNS 313: Money and Banking	3	D	D				
ECNS 314: International Economics	3	D	D				
ECNS 317: Economic Development	3	D	D				D
ECNS 320: Public Finance	3	D	D				D
ECNS 332: Economics of Natural Resources	3	D	D				D
ECNS 345: Economic Org, Finance, Credit	3	D	D				
ECNS 401: Microeconomic Theory	3	M	M				M
ECNS 403: Intro to Econometrics	3	M	M		M		M
ECNS 432: Cost-Benefit Analysis	3	M	M		M		M

Outcomes

I: Introductory Level

D: Developing Level

M: Mastery Level

Course Learning Outcomes

ECN S 101	The Economic Way of Thinking	Students who successfully complete ECNS 101 will appreciate the technique of economic thinking by applying the basic concepts of economics to analysis of current social issues and public policies	Understand how markets allocate resources, and be able to identify sources of market failure	Identify and analyze the role of government in resource allocation from efficiency and equity standards	Understand and demonstrate various aspects of globalization from both micro and macro perspectives,	Discern the positive from the normative in economic analyses of social issues and public policy
ECN S 105	Study in the Economic Way of Thinking	Students who successfully complete ECNS 105 will have an ability to complete supplementary economics problem sets independently and in small groups	Exposure to various methods of economics pedagogy in small versus large classroom settings			
ECN S 132	Economics & the Environment	Students who successfully complete ECNS 132 will have An understanding of how to use basic economic principles to understand a variety of environmental and natural resource issues	A foundation in the economics of renewable (fisheries, wildlife, surface water use) and non- renewable (oil, natural gas, minerals) resources	A foundation in the economics of environmental resources (public lands, resource preservation), pollution control issues, and the global environment (including climate change, biodiversity and population).		

ECN S 202	Principles of Macroeconom ics	Students who successfully complete ECNS 202 will have A solid understanding of Macroeconomi c Issues and Coordination of Economic Activity	Exposure to Aggregation Issues and basic considerations associated with Modeling an Economy, including GDP, inflation, unemploymen t, consumption, savings, investment, Aggregate Supply and Demand, etc. and the issues associated with measuring these variables	An understanding of the Monetary System and the institutions and processes that affect the money supply	An understanding of various Macroecono mic Theories and Policies, including Monetary Policy, Fiscal Policy and the Rational Expectations Model	Exposure to Open Economy Issues
ECN S 204	Principles of Microeconom ics	Students who successfully complete ECNS 204 will have a\n understanding of microeconomic theory well beyond that covered in ECNS 101.	A solid foundation in microeconomi cs, including consumer theory, firm behavior, competitive markets, monopoly, imperfect competition, and extensions of the basic theory to additional topics such as game theory, externalities, public goods, and asymmetric information.	An understanding of graphical and mathematical tools, and how they are applied to economics, at the level presented in Steven Landsburg's Price Theory textbook		
ECN S 206	Study in the Principles of Macroeconom ics	Students who successfully complete ECNS 206 will be able to explain concepts and principles of macroeconomic s	Identify existing tools and models to solve new macroeconom ic problems	Correctly complete in- lab problems comparable to those in ECNS 202	Analyze new macroeconom ic problems	Demonstrate responsibility for their own learning by seeking help from the lab instructor and other students

ECN S 251	Honors Economics	Students who successfully complete ECNS 251 will have a highly rigorous introduction to economic principles, at the level appropriate for students in the honors program	An understanding of how economics can be applied to a wide range of contemporary and historical problems, including legal, environmental , resource, health, taxation, poverty, economic development, and macroeconom ic policy issues	A solid foundation in microeconomi cs, including consumer theory, firm behavior, competitive markets, monopoly, imperfect competition, and extensions of the basic theory to additional topics such as game theory, externalities, public goods, and asymmetric information	Sufficient preparation in economic theory to go on to upper division courses in microeconom ics and macroeconom ics	
ECN S 301	Intermediate Microeconom ics with Calculus	Students who successfully complete ECNS 301 will have A solid foundation in calculus-based microeconomic s, including consumer theory, firm behavior, competitive markets, monopoly, imperfect competition, and extensions of the basic theory to additional topics such as game theory, externalities, public goods, and asymmetric information	The ability to apply mathematical tools (e.g., partial derivatives) they have learned in calculus courses to a variety of problems	The ability to use mathematics and graphs, in conjunction with good writing, to explain economic phenomena	The ability to use calculus-based microeconom ics to reason their way through abstract problems and real policy issues, and to explain how abstract problems can provide insight into the real world	The preparation necessary to do well in field courses that have calculus-based microeconom ics as a prerequisite

ECN S 303	Intermediate Macroeconom ics with Calculus	Students who successfully complete ECNS 303 will have A solid foundation in calculus-based macroeconomic s, including the economic theory of economy-wide aggregates such as national income, levels of employment, income distribution; the determinants of the performance of entire economies: nations, groups of nations, and the world	The ability to apply mathematical tools (e.g., partial derivatives) they have learned in calculus courses to a variety of problems	The ability to use mathematics and graphs, in conjunction with good writing, to explain macroeconom ic phenomena	The ability to use calculus-based macroeconom ics to reason their way through abstract problems and real policy issues, and to explain how abstract problems can provide insight into the real world	
ECN S 305	Peer Leadership in Economics	Students who successfully complete ECNS 305 will have an ability to lead independent study sections in economics, including designing problem sets and tracking student performance	An understanding of the research on economics pedagogy and an ability to apply various pedagogical methods in their own leadership roles	An understanding of various pedagogical and leadership methods in higher education, particularly in economics	An understanding of the economics of higher education	An ability to conduct independent research on economics pedagogy
ECN S 309	Managerial Economics	Students who successfully complete ECNS 309 will have An understanding of how various principles and concepts from different areas of economics can be integrated and applied to topics in managerial economics	An understanding of economic decision making at the firm level	A deeper understanding of managerial economics than is covered in the producer theory section of intermediate microeconomi cs		

ECN S 311	Intermediate microeconomi cs with economic education applications	Students who successfully complete ECNS 311 will have An understanding of microeconomic theory with selected applications in the area of the economics of education	An understanding of how education issues can be illuminated by economic theories of consumers, firms, nonprofit organizations, and government agencies	The ability to apply welfare economics to education issues	An understanding of policy issues as they relate to a variety of topics, such as the labor market for primary and secondary school teachers, the effects of voucher programs on the quality of public and private education, and the returns to primary and secondary education	
ECN S 312	Labor and Human Resources Economics	Students who successfully complete ECNS 312 will have An understanding of labor markets at a level that builds on a prerequisite foundation basic microeconomic theory and household behavior	An understanding of how economists model and study human capital	Familiarity with the conclusions, and ongoing debates, in the economics literature that examines the factors determining wages	An understanding of how economists assess the role of discrimination in determining labor market outcomes, including career paths and wage rates	An understandin g of how economists study the ways that economic policies affect labor markets
ECN S 313	Money and Banking	Students who successfully complete this course will have an understanding of the principles and problems of money, banking, and credit	an understanding of monetary and banking history	an understanding of monetary theory and policy	an understanding of the structure and operation of the financial system	

ECN S 314	International Economics	Students who successfully complete ECNS 314 will have an understanding of international economics at a level that builds on a prerequisite foundation in basic microeconomic and macroeconomic principles	An understanding of the concept of comparative advantage and how it informs modern trade theory	Familiarity with trade policies, including tariffs, quotas, and other barriers, and how these may affect net gains from trade	An understanding of the debates over protectionism and trade agreements	A basic knowledge of the balance of payments and factors that determine exchange rates and international capital flows
ECN S 317	Economic Development	Students who successfully complete ECNS 317 will have an understanding of development economics at a level that builds on a prerequisite foundation basic microeconomic and macroeconomic principles	An understanding of how economists study and explain persistent poverty, as well as the factors leading to economic growth	Familiarity with domestic policies in developing countries and how they may affect poverty and economic development	Familiarity with the ways developed countries have attempted to assist developing countries, and the debate over what types of policy are likely to be effective	An appreciation of the roles that political systems and social characteristic s may play in promoting or hindering development
ECN S 320	Public Finance	Upon successful completion of this course, students will understand the analysis of public expenditure programs	understand and model government behavior and public decision making	understand issues related to topics such as health care and welfare programs	understand the economics of taxation	
ECN S 332	Economics of Natural Resources	upon successful completion of this course, students will understand the economic principles regarding the allocation and use of natural resources and the impact of institutional factors within which these decisions are implemented	understand the importance of property rights, economic rents, and economic regulation	understand issues surrounding the economics of renewable and nonrenewable resources		

ECN S 345	Economic Organization, 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.		
ECN S 371	Economic History of the United States	Students who successfully complete ECNS 372 will have an adequate understanding and appreciation of the following The effect of institutions on human behavior, in particular the sources of U.S. economic growth, entrepreneurshi p, inventiveness, and technical/indust rial development in our constitutional government, free economy, relatively low taxes over much of our history, etc	The economic aspects of a. American independence (roots of the American Revolution) b. southern slavery c. the westward movement d. the Great Depression and e. other major historical events	The sources agricultural productivity growth and consequences of the transformatio n of the U.S. from a primarily agricultural to a service sector and industrial economy with enormous specialization and division of labor, and a large scale industrial/service sector labor force	The entrepreneuri al transformatio n of manufacturin g and industry from small scale artisanship production to interchangeab le parts and assembly line production in large firms for mass markets	The entrepreneuri al transformatio n of retailing and marketing and the growth of professions as the economy grew and the division of labor extended over U.S. history

ECN S 403	Introduction to Econometrics	Students who successfully complete ECNS 403 will have an understanding of the set of statistical techniques used to measure and analyze economic relationships, test predictions	experience with the appropriate interpretation of quantitative data in economics and on estimating economic relationships and conducting	experience with use of statistical software and real data to apply economic methods to problems in business, economics, and public policy	experience with formulating economic hypotheses and techniques for examining those hypotheses empirically	
		of economic models, and forecast economic trends	hypothesis testing in economics			
ECN S 406	Industrial Organization	Students who successfully complete ECNS 406 will have an understanding of industrial organization at a level that builds on a solid foundation in microeconomic theory	The ability to apply a set of models ranging from perfect competition through monopoly, and including duopoly, oligopoly, and monopolistic competition	An understanding of the potential benefits and costs (to society) resulting from different firm practices, including efforts to collude and/or deter entry.	A working knowledge of the arguments commonly used in antitrust cases and in debates over the proper scope of regulation	Familiarity with some important real world events, such as court cases involving alleged anti- competitive practices
ECN S 432	Cost-Benefit Analysis	Students who successfully complete ECNS 432 will have Experience writing a research paper of the quality appropriate for a senior capstone course	An understanding of applied welfare economics and methods and criteria for evaluating benefits and costs of public policies and investment	Exposure to a variety of applications of cost-benefit analysis, including environmental and natural resource issues		
ECN S 401	Microeconom ic Theory	Students who successfully complete ECNS 401 will have An understanding of advanced price theory at the level necessary to do a masters thesis	An understanding of comparative statics, as used in consumer and producer theory	A thorough understanding of pricing in competitive and non- competitive product and factor markets.		

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 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 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 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 (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 economics education.

Curriculum Outcome Review Matrix

	Review Year						
	Cr	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
WRIT 101: College Writing I	3	X		X		X	
WRIT 201: College Writing II	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	3	X		X		X	
STAT 217Q: Intermediate Stat Concepts	3	X		X		X	
ACTG 201: Principles of Fin. Acct.	3	X		X		X	
ECNS 101IS: Economic Way of Thinking	3	X		X		X	
ECNS 132: Economics and the Environment	3	X		X		X	
ECNS 202: Principles of Macroeconomics	3	X		X		X	
ECNS 204: Microeconomics	3	X		X		X	
ECNS 251: Honors Economics	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 305: Peer Leadership in Economics	3	X		X		X	
ECNS 309: Managerial Economics	3	X		X		X	
ECNS 312: Labor and Human Resources Econ	3	X		X		X	
ECNS 313: Money and Banking	3	X		X		X	
ECNS 314: International Economics	3	X		X		X	
ECNS 317: Economic Development	3	X		X		X	
ECNS 320: Public Finance	3	X		X		X	
ECNS 332: Economics of Natural Resources	3	X		X		X	
ECNS 345: Economic Org, Finance, Credit	3	X		X		X	
ECNS 401: Microeconomic Theory	3	X		X		X	
ECNS 403: Intro to Econometrics	3	X		X		X	
ECNS 432: Cost-Benefit Analysis	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 course. These classes are designed to provide a rigorous screening device that enables faculty to carefully evaluate student competencies in both economic theory and its application. 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

Economics majors are required to take 12 credits in writing and public communications, and many economics classes require student papers and oral presentations. The final assessment takes place in our capstone class, which requires 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 statistics and mathematics early in their academic careers. Use of analytical tools to solve real world problems is an integral part of all economics classes. The capstone class challenges the student to come up with a real problem and demonstrate how economics can be applied to that problem.

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.