

AEEC-AGRICULTURAL ECON/ ECON

AEEC 1110. Introduction to Agricultural Economics and Business 3 Credits (3)

This course is an orientation to agricultural economics and business through the discovery process for the consumer in the food, fiber, and natural resource sectors of the global economy. The course discusses the application of micro-and macro-economic principles as they relate to agricultural economics and business. May be repeated up to 3 credits.

Learning Outcomes

1. Gain a broad understanding of the role of the consumer in the market-place for agricultural commodities, producers, agencies and the global market structure.
2. Apply introductory economic principles to applied global situations.
3. Employ economic concepts in the application of production level decision making.
4. Employ economic prin
5. ciples to the basic and global agricultural community.
6. Understand relationships that exist between producers and consumers.

AEEC 1120. Careers in Food and Agribusiness 1 Credit (1)

This course provides an orientation to careers in agricultural economics and agricultural business. Students will learn about the agricultural supply chain in New Mexico, the United States, and the world. Students will be introduced to faculty and staff within the department, learn about career opportunities available to AEAB graduates, and develop a greater appreciation of current agricultural issues. Freshman status or consent of instructor required. May be repeated up to 1 credit.

Learning Outcomes

1. Become familiar with career opportunities in agricultural economics and agricultural business Understand knowledge and skills desired by employers Become acquainted with faculty and staff in the Department of Agricultural Economics and Agricultural Economics and resources available to students within the Department Refine written and verbal communication skills

AEEC 2110. Principles of Food and Agribusiness Management 3 Credits (3)

This course introduces business management theory and application of theory related to businesses within the food and fiber supply chain. Topics include management and financial principles, market planning, and organization theory. May be repeated up to 3 credits.

Learning Outcomes

1. Demonstrate, refine and expand written and oral communication skills Develop an understanding of basic financial statements, their use and analysis Understand the roles management and management styles play in modern agribusiness Learn about the history of agribusiness domestically and internationally Integrate the role of technology into modern agribusiness management

AEEC 2120. Introduction to Food and Agribusiness Accounting 3 Credits (3)

This course outlines the purpose and methods of keeping and analyzing farm and ranch records. Course topics include financial statements, efficiency measures, analysis of the business, and tax computations.

Learning Outcomes

1. Understand the terminology and principles used in modern farm and ranch financial management statements. Evaluate capital investments, analyze farm business performance, and develop tools for financial planning and analysis Evaluate farm and ranch cash flows

AEEC 2130G. Survey of Food and Agricultural Issues 3 Credits (3)

Survey of food and agricultural issues, including: geography of food production and consumption; human-agricultural-natural resource relations; agriculture in the United States and abroad; modern agribusiness; food safety; food, agriculture, and natural resources policy; ethical questions; role and impact of technology. Crosslisted with: FSTE 2130G.

Learning Outcomes

1. Understand of global agriculture including production techniques used in various geographical regions, consumption trends, and political and social constraints.
2. Synthesis information about agricultural issues and make informed arguments
3. Articulate modern issues in agriculture
4. Write coherent arguments relative to personal beliefs regarding agricultural issues

AEEC 2140. Technology and Communication for Business Management 3 Credits (2+2P)

This course helps students improve their skills related to data analysis, information management, and communication. Drawing examples from a variety of management, business, technological and research situations, students discover the versatility and functionality of modern computer software. The course emphasizes a 'hands-on' approach. May be repeated up to 3 credits.

Learning Outcomes

1. Demonstrate an understanding terms used to describe common techniques and concepts in business information systems. Demonstrate mastery of spreadsheet design and use.

AEEC 2996. Special Topics 1-4 Credits

Specific subjects and credits to be announced in the Schedule of Classes. Maximum of 4 credits per semester. No more than 9 credits toward a degree. Consent of instructor required.

Learning Outcomes

1. Varies

AEEC 300. Internship 1-4 Credits (1-4)

Professional work experience under the supervision of a faculty member. May be repeated up to 6 credits. Consent of Instructor required. Graded: S/U Grading (S/U, Audit). Restricted to Las Cruces campus only.

Prerequisite(s): Consent of instructor.

AEEC 305. Marketing and Food Agricultural Products**3 Credits (3)**

This course provides a review of marketing principles and techniques used throughout the food and fiber supply chain. The course introduces a broad variety of marketing topics including marketing strategy, consumer behavior, market segmentation, market research, competitive analysis, and the marketing mix. The course serves as a foundation for advanced courses in agricultural marketing. May be repeated up to 3 credits.

Crosslisted with: MKTG 305.

Prerequisite(s): ECON 1110G or ECON 2120G.

Learning Outcomes

1. Articulate how agricultural commodities move through the food and fiber supply chain. Understand the importance of strategic marketing and how organizations within the food and fiber supply chain identify consumers and their preferences Understand key marketing concepts used by agribusiness marketers, including SWOT analysis, the marketing mix, advertising and public relations Know the basic outline and components of a marketing plan

AEEC 311. Financial Derivative Markets**3 Credits (3)**

This course explores the role of financial derivatives in modern business, including income generation, risk management, and price discovery. Derivatives markets covered in the course include futures, options, and swaps. Course content focuses on the fundamentals of trading and hedging in a wide variety of markets, e.g., agriculture, interest rates, exchange rates. Students participate in simulated futures and options trading. Same as AEEC/BFIN 511 with additional coursework required at the graduate level. Cannot receive credit for both AEEC/BFIN 311 and AEEC/BFIN 511. Same as BFIN 311.

Learning Outcomes

1. Understand and explain the concept of risk, list various sources of risks observed in businesses, and identify common methods used to manage risk Demonstrate an understanding of the vocabulary associated with derivatives and derivative markets Articulate the role that derivative markets play in reducing risk and illustrate how they can be used in practice to reduce risk Illustrate how derivative markets can be used to generate income and manage risk through hedging

AEEC 313. Food and Agricultural Sales**3 Credits (3)**

This course reviews the techniques of salesmanship. Course topics include identification and classification of buyer type and different approaches to sales based on client base. Improving oral communication skills through individual and/or group sales presentations. Students must be in Junior or above standing to enroll.

Learning Outcomes

1. Analyze sales situations and effectively identify pathways to closing the sale Demonstrate execution of the sales process – prepare, learn, communicate, evaluate Conduct product and customer analysis to build a sales strategy Exhibit enhanced relationship management and communication skills

AEEC 314. Agricultural and Natural Resource Law**3 Credits (3)**

This course discusses the relationship of common-law principles, statutory law and regulatory law to problems involving agriculture with an emphasis on New Mexico issues. Legal problems relevant to agribusiness, torts, fencing laws, liability for agricultural pollution, irrigation water rights, corporations and partnerships, land tenure, farm and ranch tenancy, agricultural labor, farm and ranch management, and taxation.

Learning Outcomes

1. Understand the complexity of law as it relates to agriculture and natural resources Develop a basic understanding of the legal system in the U.S. including the role of federal and state agencies responsible for agricultural and natural resource regulation Articulate at a layperson's level, the roles of the legislative, judicial, and executive branches of the government as they relate to agriculture and natural resources.

AEEC 315V. World Agriculture and Food Problems**3 Credits (3)**

This course examines key concepts and issues relevant to the world's food production systems. Topical highlights include the causes and consequences of hunger, agriculture's economic and environmental significance, sustainable development, biotechnology, and globalization of agricultural markets. As students learn about these issues from both local and global perspectives they are engaged in the development of both their literacy of economic concepts and their core research and communication skills. We do this through a combination of relevant course readings, in-class discussion exercises, and focused writing assignments on current issues of relevance. Same as GEOG 315V. May be repeated up to 3 credits.

Learning Outcomes

1. Demonstrate conceptual and systems thinking and design Assess the nutrition and healthfulness of food choices Describe the structure and function of food and agricultural systems Analyze roles of and relationships between food producers, consumers, and policymakers Apply basic economic concepts to describe and interpret food and agricultural issues Explain the environmental context and role of agriculture Articulate key arguments that favor and oppose food biotechnology Recognize several of the benefits and barriers in international trade of food and agricultural products

AEEC 337V. Natural Resource Economics**3 Credits (3)**

This course helps students gain insight into important natural resource problems of our time. Apply economic principles to problems in the preservation, use, and development of agricultural, range, mineral, water, forestry, fishery, and environmental resources. Understand the use of cost-benefit analysis for government natural-resource projects, policies, and programs. Same as ECON 337V. May be repeated up to 3 credits.

Prerequisite: ECON 1110G or ECON 2120G or ECON 2120H.

Learning Outcomes

1. Demonstrate knowledge of economic principles to better understand natural resource issues Document understanding of current and emerging natural resource issues Apply economic principles to guide selected natural resource policy debates Demonstrate the application of economic principles to inform policy debates addressing current water resources issues

AEEC 340. Economics of Food and Agricultural Markets
3 Credits (3)

This course focuses on the analysis of supply and demand characteristics of commodities with particular attention to agricultural products. Pays special attention to empirical analysis. Includes institutional aspects of pricing, temporal and spatial price relationships, price forecasting, and the economic consequences of pricing decisions.

Prerequisite: ECON 2120G, MATH 1430G, and A ST 311 or MATH 1350G.

Learning Outcomes

1. Become familiar with commonly used data analysis methods and tools
 Develop an understanding of the factors that influence agricultural prices
 Use data to analyze and solve real-world problems related to agricultural prices

AEEC 342. Economic Analysis of Food and Agribusiness
3 Credits (3)

This course uses economic and business theory to analyze business decision making. The course includes a discussion of economic, managerial, and financial considerations relevant to modern agribusinesses.

Prerequisite: ECON 2110G, ECON 2120G.

Learning Outcomes

1. Understand the role of managers within the food and fiber supply chain
 Develop an understanding of the applications of managerial economics as they related to businesses within the food and fiber supply chain
 Analyze market conditions and assess the position of a business within the market
 Identify and articulate optimal business decisions by analyzing economic and business information

AEEC 350. Spreadsheet Applications in Food and Agriculture
3 Credits (2+2P)

This course is an advanced course in electronic spreadsheets. Concepts and tools of data analysis and database management within a spreadsheet, emphasizing agricultural applications, are presented.

Prerequisite: AEEC 2140 or consent of instructor.

Learning Outcomes

1. Ability to effectively utilize some of the advanced features in Microsoft Excel by course end
 Transforming agricultural and agribusiness problems into spreadsheet models for analysis
 Increase critical thinking capacity with respect to solving problems/tasks
 Develop creativity in solving problems/tasks

AEEC 384V. Water Resource Economics
3 Credits (3)

This course uses economic principles to evaluate current and emerging issues in water resources. Applications focus on the use of economic methods of analysis to current policy decisions surrounding agricultural, municipal, industrial, and environmental uses of water. Same as ECON 384V. May be repeated up to 3 credits.

Prerequisite: AEEC 1110 or ECON 2120G or ECON 2120H.

Learning Outcomes

1. Demonstrate knowledge of economic principles to better understand water resource issues
 Show understanding of current and emerging water issues
 Apply economic principles to guide selected water resource policy debates
 Demonstrate the application of economic principles to inform policy debates addressing current water resources issues

AEEC 385. Applied Production Economics
3 Credits (3)

This course introduces students to fundamental economic theories and analytical tools required for managing an agricultural operation. In particular, the principles of microeconomics will be reviewed and applied to the problems faced by farms and ranches. The course focuses only on economic making at the farm or ranch level.

Prerequisite: (ECON 2120G or ECON 2120H) and (MATH 1430G) and (A ST 311 or MATH 1350G).

Learning Outcomes

1. Analyze production function and calculate the total, average, and marginal products
 Derive profit-maximizing input and output combinations
 Evaluate the relationship between production, revenue, and profit functions
 Analyze crop budgets and determine optimal acreage allocation
 Measure the impact of risk and uncertainty on agricultural production

AEEC 400. Senior Seminar
1 Credit (1)

This course focuses on current topics and cases in the agribusiness literature stressing rigorous qualitative analysis of current problems and policy issues. During the course, students provide feedback about their experience within the Department and help identify ways in which the Department can improve. Restricted to: AEAB; NREP majors. Must be Senior standing to enroll.

Learning Outcomes

1. Illustrate an understanding of economic and business concepts as illustrated and applied in case analyses
 Articulate ways in which the Department can improve academically
 Prepare future steps in careers, e.g., resumes, cover letters, mock interviews
 Develop interpersonal communication skills

AEEC 420. Special Problems
1-3 Credits

Special problems in agricultural economics or agricultural business of particular interest to the individual student. Maximum of 3 credits per semester. No more than 6 credits toward degree. Consent of instructor required.

AEEC 425. Food and Agribusiness Financial Management
3 Credits (3)

This course provides a description and application of techniques and principles of financial management to problem situations faced by agricultural businesses, including financial statement development and analysis, capital budgeting, sources and costs of capital.

Prerequisite: ECON 2120G or ECON 2120H and ACCT 2110.

Learning Outcomes

1. Understand the time value of money and perform capital investment analysis for agricultural firms
 Interpret financial statements used by agricultural firms
 Comprehend farm financial risks and returns
 Discuss financing options for U.S. farm businesses

AEEC 445V. Agricultural Policy**3 Credits (3)**

This course provides a historical and cultural background of food and agricultural policy in the United States. Analysis of food and agricultural problems, policy-making, and implementation. Economic evaluation of specific U.S. food and agricultural policy instruments, their domestic and international impacts.

Prerequisite: (ECON 2110G or ECON 2110H) and (ECON 2120G or ECON 2120H).

Learning Outcomes

1. Apply economic concepts to deepen understanding of agricultural policy, particularly with regard to macroeconomic importance to agriculture Describe inherent tradeoffs and opportunity costs in policy Identify the global impacts of U.S. agricultural policy Explain and describe important agricultural policy issues for a lay audience

AEEC 451. Food and Agribusiness Market Assessment**3 Credits (3)**

This course is an application course in which self-managed teams develop and present marketing plans for agribusiness firms. Emphasis on integrating the marketing mix, particularly promotional elements. May be repeated up to 3 credits. Crosslisted with: MKTG 451.

Prerequisite(s): AEEC 305 or MKTG 305 or consent of instructor.

Learning Outcomes

1. Identify, organize and conduct market research specific to the project Develop an understanding of primary and secondary research collection and analysis Exhibit enhanced relationship management, communication skills, and team building Develop written communication with final deliverable for implementation into the business world

AEEC 452. Food and Agribusiness Marketing Plan Development**3 Credits (3)**

This course focuses on learning marketing research methods applicable to developing new food and agricultural products and repositioning existing products for new markets. Students will be required to prepare precise written and oral marketing plans to industry standards and will have opportunities to present written and oral plans at national competitions.

Learning Outcomes

1. Illustrate abilities to make decisions based on market research and analysis, including financial analysis, analysis of consumer trends, and the business environment Create professional marketing and business presentation Build effective teams to analyze and present real-world marketing opportunities Practice business decision making founded on evidence from market research

AEEC 456. Case Studies in Food and Agribusiness Management**3 Credits (3)**

This course integrates production, marketing, accounting, finance, agricultural policy, human behavior, and business environment concepts in the management of agricultural businesses using a decision case approach. Student must be in Senior standing to enroll in this course.

Learning Outcomes

1. Exhibit an ability to understand complex and varying business and resource issues, including financial analysis, natural resource issues, and business operations Provide reasoning and rationale for decision making, identifying the best options from many potential decisions Practice business writing and communication skills

AEEC 458. Economics of Making and Marketing Wine**3 Credits (3)**

This course is designed to provide a basic knowledge of the principles of winemaking with emphases on wine production and economics for small wineries and home winemaking. The course also focuses on the investment costs of starting small wineries and the costs of making wine and successful market strategies for small wineries. The class includes a hands-on lab that includes selecting, crushing, fermenting grapes, and all the steps required through bottling the wine. Students must be 21 to enroll in the class. Consent of instructor required.

Learning Outcomes

1. Identify and evaluate production costs, economics, and marketing strategies for small wineries Identify current technologies used in the production of wine for home and in a small winery Identify the processes required to make high-quality wine using hands-on winemaking techniques, sensory analysis, and testing Learn the basics of Viticulture (wine grape growing) practices

AEEC 470. Real Estate Appraisal**3 Credits (2+2P)**

This course addresses issues influencing the value of real estate with some emphasis upon rural properties. Topics include courthouse records, property taxes, appraisal methodology, expert courtroom testimony, condemnation, and legal issues. Students will take field trips and write appraisals. Course material is relevant to students in Finance, Accounting, and Pre-Law, as well as Agriculture. Accredited for hours to apply to both pre-licensing and continuing education requirements of the New Mexico Real Estate Commission for both Appraisers and Real Estate Brokers. Students must be Junior or above to enroll.

Learning Outcomes

1. Distinguish between the Income Approach, Cost Approach, and Sales Comparison Approach Identify market abstracted influences on value Apply proper appraisal methodology Demonstrate appraisal knowledge by writing a residential appraisal and a farm appraisal

AEEC 499. Senior Thesis**3 Credits (3)**

Develop a thesis project with a faculty advisor. The senior thesis requires students to work creatively to apply business and economic principles to address a problem of concern. Restricted to AEAB majors.

Prerequisites: consent of department head and have senior standing.

AEEC 501. Microeconomic Theory**3 Credits (3)**

A rigorous re-examination of the pricing mechanism in the goods and factor markets. Development of theoretical tools of general applicability.

Prerequisite(s): ECON 371 and ECON 457, or consent of instructor.

AEEC 502. Macroeconomic Theory**3 Credits (3)**

This course provides contemporary aggregative theory regarding the interrelationships among national income, employment, the price level, money supply and interest rates, and implications of this theory for public policy in a mixed economy. May be repeated up to 3 credits.

Learning Outcomes

1. Develop an in-depth understanding of the IS/LM model Understand how fiscal and monetary policy affect output, employment, interest rates and prices Develop and use mathematical models of the economy Derive the effect of a change in tax rates, government spending, or a change in the money supply, on the nation's output through expenditure multipliers Understand how fiscal and monetary policy work in an Open economy
2. Understand the basics of Exogenous and Endogenous Growth Theory

AEEC 503. Introduction to Quantitative Methods**3 Credits (3)**

Introduce students to quantitative tools widely used in applied economic analysis such as regression analysis, statistical tests, and mathematical programming. Restricted to: Agricultural Economics and Business (Masters) majors.

AEEC 506. Economic and Financial Analysis of Agribusiness**3 Credits (3)**

This course focuses on common analytical tools used to evaluate the economic and financial performance of businesses operating in the food and fiber supply chain. The course uses a combination of course discussions, assignments, and case studies to present the material critical to the successful management of agribusinesses. Topics include financial statements and analysis, financial planning/modeling, financial risk and risk management, the time value of money, and capital budgeting methods used in agribusiness.

Learning Outcomes

1. Read, understand, and create financial statements used in agribusiness, including income statements, balance sheets, cash flow statements, and owner's equity statements. Describe and conduct financial analysis including comparative analysis, change analysis, and common-size analysis, and ratio analysis. Describe and understand credit in agricultural production and agribusiness. Understand the importance of capital budgeting within agribusiness and be able to conduct capital budgeting. Describe, calculate, and use standard measures of investment return including net present value, internal rate of return, discounted payback period, and simple payback period.

AEEC 511. Advanced Derivative Markets**3 Credits (3)**

This course examines advanced futures and options strategies for income generation and risk management. Coverage includes a variety of markets, e.g., interest rates, stock indexes, metals, currencies, livestock, and grains. Both technical and fundamental trading strategies are identified and discussed. Same as AEEC/BFIN 311 with additional coursework required at the graduate level. Cannot receive credit for both AEEC/BFIN 311 and AEEC/BFIN 311. Crosslisted with: BFIN 511. May be repeated up to 3 credits.

Learning Outcomes

1. Define risk and identify methods of managing risk Demonstrate understanding of vocabulary associated with derivatives and derivative markets Identify the role that derivative markets play in reducing risk Demonstrate a basic understanding of derivative markets including their use in risk management and income generation

AEEC 520. International Agricultural Trade Theory and Policy**3 Credits (3)**

This course provides a review and analysis of international trade models. Analysis of the effects of trade instruments such as tariffs, quotas, and subsidies on welfare and income distribution. Analysis of bilateral, regional, and multilateral trade agreements and their effect on the agricultural sector from both country-specific and global perspectives. May be repeated up to 3 credits.

Prerequisite: ECON 371.

Learning Outcomes

1. Understand and be able to describe the importance of international trade to U.S. agriculture. Familiar with commonly used trade models to describe impacts of trade barriers, for example tariffs, quotas, and subsidies. Analyze trade agreements and their impact on economies of different trade partners.

AEEC 522. Public Sector Economics I**3 Credits (3)**

Introduction to the economic rationale for government intervention in the economy and the effects of that intervention on economic agents and the economy in general. Emphasis on the expenditure side of government policies. Same as POLS 522.

AEEC 540. Econometrics I**3 Credits (3)**

An integration of quantitative and statistical techniques for research and management in economics and business.

Prerequisite(s): ECON 457 and ECON 405 or A ST 505.

AEEC 545. Advanced Agricultural Policy**3 Credits (3)**

Historical and cultural background of food and agricultural policy in the United States. Analysis of food and agricultural problems, policy-making and implementation. Economic evaluation of specific U.S. food and agricultural policy instruments, their domestic and international impacts. Same as AEEC 445V with additional work required at the graduate level. Cannot receive credit for both AEEC 445V and AEEC 545.

Prerequisite: consent of instructor.

AEEC 550. Advanced Microcomputer Applications in Agriculture**3 Credits (2+2P)**

An advanced course in electronic spreadsheets and the concepts and tools of database management emphasizing agricultural applications. Taught with AEEC 450 with additional coursework required at the graduate level. Cannot receive credit for both AEEC 450 and AEEC 550.

Prerequisite(s): AEEC 2140G or consent of instructor.

AEEC 551. Advanced Agribusiness Marketing**3 Credits (3)**

Applications course in which self-managed teams apply marketing theory in the development and presentation of marketing plans for food and agribusiness firms. Course includes analysis of marketing problems with emphasis on strategic marketing issues changing trade policies, and global competitiveness.

Prerequisite: consent of instructor.

AEEC 556. Advanced Agribusiness Management**3 Credits (3)**

Integration of production, marketing, accounting, finance, agricultural policy, human behavior, and business environment concepts in management of agricultural businesses using a decision case approach.

AEEC 575. Economics of Water Resource Management and Policy**3 Credits (3)**

Focuses on issues, approaches and methods used in the assessment of water resource management and policy problems. Extends and further develops student understanding and comprehension of specific economic concepts and methods that are useful in the assessment and management of water resources, including cost-benefit analysis, welfare economics, non-market valuation, watershed management, and consideration of equity and ethical concerns. Students will develop critical reasoning, communication and analytic skills through active class discussions and assignments that emphasize both quantitative and written products.

AEEC 585. Production Economics**3 Credits (3)**

Application of microeconomic theory to problems and decisions of food and agricultural firms. The theoretical foundation of production economics and the theory of the firm are developed. May be repeated up to 3 credits.

Prerequisite(s): MATH 1430G, ECON 312, and ECON 457.

AEEC 590. Special Topics**3 Credits (3)**

Seminars in selected current topics in the various areas of agricultural economics and economics. Offerings will carry a subtitle.

Prerequisite: consent of instructor.

AEEC 593. Internship**1-6 Credits**

Supervised professional on-the-job training experience in policy analysis.

AEEC 594. Internship**1-6 Credits**

One semester to six months internship with a regulated firm or public utility commission. A faculty member will direct and evaluate the internship. For AEEC regulatory option students only.

AEEC 595. Internship**3 Credits (3)**

Supervised professional on-the-job learning experience.

Prerequisite(s): Consent of instructor.

AEEC 596. Individual Study**1-3 Credits**

Individual study programs. Each offering will carry a subtitle. Maximum of 3 credits in a semester and 6 credits in a program.

Prerequisite: consent of instructor.

AEEC 597. Non-Thesis Research Project**1-3 Credits (1-3)**

Individual investigations, either analytical or experimental. Maximum of 3 credits per semester. No more than 3 credits toward a degree.

AEEC 598. Creative Component Project**3-6 Credits (3-6)**

Individual investigations, either analytical or experimental. A minimum of 3 to 6 credits per semester. No more than 6 credits toward degree.

Consent of instructor required. Restricted to AEEC majors.

Prerequisite(s): Consent of Instructor.

AEEC 599. Master's Thesis**1-15 Credits**

Thesis.