

# ECONOMICS, APPLIED STATISTICS, AND INTERNATIONAL BUSINESS

## Undergraduate Program Information

The Department of Economics, Applied Statistics and International Business in the College of Business offers an economics major to Bachelor of Arts candidates in the College of Arts and Sciences. (Additional information may be found under the Economics and International Business (<https://catalogs.nmsu.edu/nmsu/business/economics-applied-statistics-international-business/>) section in the College of Business chapter).

## Degrees for the Department

- Economics - Bachelor of Arts (<https://catalogs.nmsu.edu/nmsu/arts-sciences/economics-applied-statistics-international-business/economics-bachelor-arts/>)

## Minors for the Department

- Economics - Undergraduate Minor (<https://catalogs.nmsu.edu/nmsu/arts-sciences/economics-applied-statistics-international-business/economics-undergraduate-minor/>)

## Economics Courses

### ECON 1110G. Survey of Economics

#### 3 Credits (3)

This course will develop students' economics literacy and teaches students how economics relates to the everyday life of individuals, businesses and society in general. The course will also introduce students to the roles different levels of governments play in influencing the economy. At the conclusion of the course, students will be able to identify economic causes for various political and social problems at national and international levels, and have a better understanding of everyday economic issues that are reported in media and public forums.

#### Learning Outcomes

1. Gain and demonstrate a contextual understanding of economic terms and concepts.
2. Recognize and analyze common economic issues which relate to individual markets and the aggregate economy.
3. Learn basic economic principles that influence global trading and challenges relating to globalization.
4. Outline the implications of various economic policies on individuals and on economies.
5. Demonstrate ability to use diagrams and graphs to explain economic principles, policies and their applications.
6. Appreciate and understand how individual decisions and actions, as a member of society, affect economies locally, nationally and internationally.
7. Explain the roles of governments in influencing buyer and seller behavior in the market and how government failure occurs when intervention fails to improve or actually worsens economic outcomes.
8. Be able to apply course concepts to interpret, evaluate and think critically about economic events and policies, especially as regularly reported in the media and other public forums.

### ECON 2110G. Macroeconomic Principles

#### 3 Credits (3)

Macroeconomics is the study of national and global economies. Topics include output, unemployment and inflation; and how they are affected by financial systems, fiscal and monetary policies.

#### Learning Outcomes

1. Explain the concepts of opportunity cost, comparative advantage and exchange.
2. Demonstrate knowledge of the laws of supply and demand and equilibrium and use supply and demand curves to analyze responses of markets to external events.
3. Explain the circular flow model and use the concepts of aggregate demand and aggregate supply to analyze the response of the economy to disturbances.
4. Explain the concepts of gross domestic product, inflation and unemployment and how they are measured.
5. Describe the determinants of the demand for money, the supply of money and interest rates and the role of financial institutions in the economy.
6. Define fiscal policy and monetary policies and how these affect the economy.
7. Students will be able to identify the causes of prosperity, growth, and economic change over time and explain the mechanisms through which these causes operate in the economy.

### ECON 2120G. Microeconomics Principles

#### 3 Credits (3)

This course will provide a broad overview of microeconomics.

Microeconomics is the study of issues specific to households, firms, or industries with an emphasis on the role of markets. Topics discussed will include household and firm behavior, demand and supply, government intervention, market structures, and the efficient allocation of resources.

#### Learning Outcomes

1. Explain the concept of opportunity cost.
2. Demonstrate knowledge of the laws of supply and demand and equilibrium.
3. Use supply and demand curves to analyze responses of markets to external events.
4. Use supply and demand analysis to examine the impact of government intervention.
5. Explain and calculate price elasticity of demand and other elasticities.
6. Demonstrate an understanding of producer choice, including cost and break-even analysis.
7. Compare and contrast the following market structures: perfect competition, monopoly, monopolistic competition, and oligopoly.

### ECON 2120H. Principles of Microeconomics Honors

#### 3 Credits (3)

Microeconomic theory and public policy: supply and demand, theory of the firm, market allocation of resources, income distribution, competition and monopoly, governmental regulation of businesses and unions. Must be a Crimson Scholar.

#### Learning Outcomes

1. Explain the concept of opportunity cost.
2. Demonstrate knowledge of the laws of supply and demand and equilibrium.
3. Use supply and demand curves to analyze responses of markets to external events.

4. Use supply and demand analysis to examine the impact of government intervention.
5. Explain and calculate price elasticity of demand and other elasticities.
6. Demonstrate an understanding of producer choice, including cost and break-even analysis.
7. Compare and contrast the following market structures: perfect competition, monopoly, monopolistic competition, and oligopoly.

**ECON 304. Money and Banking**

**3 Credits (3)**

Income measurement and determination, monetary and fiscal policies. May be repeated up to 3 credits.

**Prerequisite:** ECON 2110G or ECON 2110H or equivalent.

**Learning Outcomes**

1. Understand the role of the financial system in the economy.
2. Identify the components of the financial system.
3. Understand the related concepts of net present value and yield to maturity.
4. Understand the structure and role of the federal reserve system.
5. Understand the role of monetary policy in determining economic activity.

**ECON 311. Intermediate Macroeconomic Theory**

**3 Credits (3)**

Analysis of gross domestic product, the Classical, Keynesian, and Neo-Keynesian theories of income, employment, inflation and growth.

**Prerequisite:** ECON 2110G or ECON 2110H.

**Learning Outcomes**

1. Learn the uses and abuses of macroeconomic data
2. Learn the role of economic theory in understanding economic issues and forecasting economic behavior
3. Learn the causes and consequences of short-run economic fluctuations and long-run economic growth
4. Learn the role of government in the macroeconomy
5. By the end of the class, you should be able to describe the state of the macroeconomy and analyze the consequences of economic policy actions from several perspectives

**ECON 312. Intermediate Microeconomic Theory**

**3 Credits (3)**

Contemporary economic theory with emphasis upon value and distribution.

**Prerequisite:** ECON 2120G or ECON 2120H or equivalent.

**Learning Outcomes**

1. Gain an understanding of the language of Intermediate Microeconomics.
2. Know the underlying structure of economic models such as supply and demand, consumer theory, producer theory and market structure.
3. Understand the assumptions of economic models.
4. Be able to solve a supply and demand model.
5. Demonstrate critical thinking skills by applying economic models to a wide variety of policy questions.

**ECON 324V. Developing Nations**

**3 Credits (3)**

Economic analysis of problems related to development of developing nations. Issues such as growth, industrialization, poverty, population, international trade, foreign debt, and international economic relations.

**ECON 325V. Economic Development of Latin America**

**3 Credits (3)**

Economic analysis of problems related to development in Latin America, including the agrarian problem, debt and austerity programs, industrialization, inflation and unemployment, the drug trade, U.S.-Latin American relations, development strategies. Also individual countries problems. May be repeated up to 3 credits.

**Learning Outcomes**

1. Identify the basic components of economic growth and development
2. Understand how Latin America fell behind other regions in terms of economic development
3. Compare various policies implemented to support economic development in Latin America, as well as the successes and failures of these policies
4. Gain a basic understanding of how to conduct independent research to be demonstrated by the completion of a term paper addressing an issue related to economic development in a nation or region of Latin America

**ECON 332. Public Finance**

**3 Credits (3)**

This course will examine the roles of government in modern, market-oriented, mixed economies. It will examine justifications for government participation in resource allocation, income distribution, and economic stabilization focusing primarily on the fiscal functions of government, taxation and public expenditure. Students will apply basic microeconomic analysis to analyze the impacts of public taxation and expenditures on economic decisions made elsewhere in the economy. In this course the emphasis will be on understanding the workings of public finance in fiscal federalist systems like the United States, but the principles taught will be applicable across other economic systems. Prerequisites: ECON 2120G or ECON 2120H

**ECON 335V. Business and Government**

**3 Credits (3)**

Relation of government to business through regulation; political, legal, and social implications. Crosslisted with: MGMT 335G

**ECON 337V. Natural Resource Economics**

**3 Credits (3)**

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 AECC 337V.

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

**ECON 345. Energy Economics**

**3 Credits (3)**

Examines the economics of energy production including oil, coal, natural gas, renewables, and conservation as a substitute for energy production. Emphasis is on federal and state regulatory framework, and resulting public policy issues from a regional and national perspective.

**Prerequisite(s):** (ECON 2110G or ECON 2110H), (ECON 2120G or ECON 2120H).

**ECON 384V. Water Resource Economics**

**3 Credits (3)**

Use of economic principles to evaluate current and emerging issues in water resources. Applications focus on use of economic methods of analysis to current policy decisions surrounding agricultural, municipal, industrial, and environmental uses of water. Same as AECC 384V.

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

**ECON 405. Introductory Econometrics****3 Credits (3)**

Multiple regression and correlation applied to economics and business; inference techniques; significance tests; simultaneous equations, estimation, and problems.

**Prerequisite:** MATH 1350G or A ST 311 (or equivalent).

**Learning Outcomes**

1. Demonstrate knowledge of probability and statistics and basic expected value theory.
2. Define the relationship between population statistics and sample statistics.
3. Explain the method of ordinary least squares.
4. Understand multiple regression, correlation, inference techniques, and significance tests.
5. Interpret basic econometric results.

**ECON 445. Oil and Natural Gas Economics****3 Credits (3)**

Examines the economics of oil and gas production. Topics covered include transportation, refining, federal and state regulatory framework, and resulting public policy issues from a regional and national perspective.

**Prerequisite:** (ECON 2110G or ECON 2110H), (ECON 2120G or ECON 2120H).

**Learning Outcomes**

1. Oil and Natural Gas Production
2. Oil and Natural Gas Transportation and Storage
3. Advanced oil and gas market analysis
4. Economic analysis of government energy policy and regulation

**ECON 449. Open Economy Macroeconomics****3 Credits (3)**

This course studies theoretical and empirical macroeconomics in international dimension. It covers from the fundamental concepts of national income and growth, monetary/fiscal and exchange rate policies, foreign exchange markets, international trade and finance, and regionalization/economic integration to the impact analysis of these macroeconomic fundamentals in the open economy. Crosslisted with: IB 449.

**Prerequisite(s):** BFIN 341 OR ECON 311.

**ECON 450. International Economics****3 Credits (3)**

Trade and capital flows between countries, international payments, government policy in balance-of-payments and tariff matters, international organizations. Crosslisted with: IB 450

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

**ECON 457. Mathematical Economics****3 Credits (3)**

Application of mathematical tools, especially the calculus, to economic theory.

**Prerequisite(s):** MATH 1430G or equivalent.

**ECON 461. Environmental Economics****3 Credits (3)**

Economic foundations for public decision-making about environmental resources utilizing tools from intermediate microeconomic theory. Emphasis on the welfare economic approach for the provision of public goods with specific emphasis on market failure, externalities, benefit-cost analysis, and methods for valuing environmental resources and human health.

**Prerequisite:** ECON 2120G Principles of Microeconomics.

**Learning Outcomes**

1. Students will develop an understanding of environmental economics and interactions between the natural environment, markets, and politics and regulation.
2. Students will develop familiarity with the tools of economic analysis and will develop marketable skills in benefit-cost analysis, non-market valuation, natural resource management and valuation, program evaluation, survey research and applied data analysis.

**ECON 471. Electricity Economics****3 Credits (3)**

Regulatory policy and economic analysis related to the Electric Industry. Topics include characteristics of a utility and legal justification for regulation; characteristics and functions of a regulatory commission; history and structure of the industry; technology and network design; revenue requirements; cost allocation; and basic retail rate design. Crosslisted with: ECON 571.

**Prerequisite(s):** ECON 345.

**ECON 490. Selected Topics****1-3 Credits**

Current topics in economics. Subject matter to be designated for each semester.

**ECON 498. Independent Study****1-3 Credits**

Individual studies directed by consenting faculty with the prior approval of the department head. May be repeated for a maximum of 3 credits.

**Prerequisite:** junior or above standing and consent of instructor.

**ECON 503. Managerial Economics****3 Credits (3)**

Theory and application of microeconomics to the management of organizations. May be repeated up to 3 credits.

**Prerequisite:** Graduate students only.

**Learning Outcomes**

1. Apply and explain economic and business concepts and terminology.
2. Develop critical thinking skill to solve economic- and business-related problems.
3. Solve economic- and business-related problems using quantitative information.
4. Apply and relate ethical implication in economic and business contexts.
5. Analyze economic and business case studies.
6. Demonstrate critical and efficient course engagement between/ among peers in the traditional/online environment.

**ECON 511. The Economics of Imperfect Markets****3 Credits (3)**

A rigorous course in microeconomics covering uncertainty and information, game theory, general equilibrium, market power and market failures.

**Learning Outcomes**

1. Students should be able to demonstrate an understanding of the microeconomic underpinnings of general equilibrium theory, as well as welfare economics.
2. Students should be able to examine externalities, and be able to examine decision making under cases of risk and uncertainty.
3. Further, students will have a good understanding of the theory behind economic impact analysis, and a grasp of modern economic impact analysis software.

**ECON 545. Econometrics II**

**3 Credits (3)**

Application of statistical techniques to estimation of economic relationships: demand functions, production and cost functions, and macroeconomic equations.

**Prerequisite:** AEEC 5240.

**Learning Outcomes**

1. To learn and use statistical techniques to estimate economic relationships: demand functions, production and cost functions, and macroeconomic equations.

**ECON 550. Special Topics**

**1-3 Credits**

Seminars in selected current topics in the various areas of economics.

Prerequisites vary according to the topic being offered.

**ECON 571. Regulatory Policy and Industry Analysis: Electricity I**

**3 Credits (3)**

Regulatory policy and economic analysis related to the Electric Industry.

Topics include: characteristics of a utility and legal justification for regulation; characteristics and functions of a regulatory commission; history and structure of the industry; technology and network design; revenue requirements; cost allocation; and basic retail rate design.

**ECON 572. Regulatory Policy and Industrial Analysis: Water and Natural Gas**

**3 Credits (3)**

Regulatory policy and economic analysis related to the Natural Gas and Water industries. Topics include: history and structure of the industry;

technology and network design; revenue requirements; cost allocation; and retail rate design.

**ECON 573. Regulatory Policy and Industry Analysis: Electricity II**

**3 Credits (3)**

Regulatory policy and economic analysis related to the Electric industry. Topics include: optimal generation mix; ancillary services; environmental policies; rate case procedures and strategies for effective testimony; advanced retail rate design; wholesale exchanges; unbundled transmission tariffs; market institutions and how different markets function; state and federal deregulation policies; Federal Energy Regulatory Commission orders and policies; demand-side management; and regulatory treatment of non-traditional retail services. Consent of instructor required.

**Prerequisite(s):** ECON 571 or consent of instructor.

**ECON 574. Advanced Seminar Regulatory Policy and Industry Analysis**

**3 Credits (3)**

Advanced seminar and writing course specializing in regulatory policy and regulatory casework. Topics Include: special policy & regulatory issues in telecommunications, electricity, natural gas, and water; preparation of written testimony; expert witness effectiveness including cross-examination; and contested case management. This course involves extensive reading and writing assignments. Consent of instructor required.

**Prerequisite(s):** ECON 571 or consent of instructor.

**ECON 596. Independent Study**

**3 Credits (3)**

Individual study program. Each offering will cover a subtitle. Maximum of 3 credits in a semester and 6 credits in a program. Consent of instructor required.

**Website:** <https://business.nmsu.edu/academic-departments/easib/index.html> (<https://business.nmsu.edu/academic-departments/easib/>)