

# Economics

## Economics Degrees and Certificates

### The Economics Major (BA)

Associate Professors: Mahbubul Kabir and Radek Szulga

Assistant Professor: Peter Staples

Economics is the science of choice in the face of scarcity and different consumption options. Limited resources, time, labor supply, energy, knowledge—such factors as these define the boundaries of possibilities and require human beings and societies to make choices. Economic theory is an attempt to capture the essence of that decision-making process, free of the details of particular situations.

Students in the economics major learn to use this theoretical foundation to analyze decision-making throughout society, from an individual's decision to purchase a car to a state's decision to raise or lower taxes. In the classic sense of a liberal arts education, students learn to use the tools of economics as a key to understanding the human experience and as a guide to individual, business, and societal action. This understanding of the forces underlying our economy—and, to a great degree, our society—provides a strong foundation for a range of professions and business careers. The economics major is a solid preparation for graduate studies in economics, business administration, finance, law, and public policy.

#### NOTES

\* Students may use ECO 101 and BUS 323 to satisfy core requirements.

\* Students may substitute MTH 210 (Calculus I) for ECO 208.

**NOTE: To graduate with a Bachelor of Arts or Bachelor of Science degree from Lyon College, students must successfully complete a minimum of 120 semester credit hours comprised of our required Core curriculum (44-48 hours), the requirements of at least one major (credit hours vary per major), and a selection of our Liberal Arts electives. They must also earn at least a 2.00 cumulative grade point average for all work taken at Lyon College and a 2.00 cumulative grade point average in their major, minor, and concentration.**

**Program:** Economics

### Summary of Requirements for a Major in Economics

Item #	Title	Credits
ECO 101	Principles of Economics I	3
ECO 102	Principles of Economics II	3
ACC 210	Financial Accounting	3
ACC 211	Managerial Accounting	3
ECO 208	Quantitative Methods in Business, Economics, and Decision Science	3
BUS 323	Statistical Applications to Business Decision Making	3
ECO 301	Intermediate Macroeconomics	3
ECO 302	Intermediate Microeconomics	3
ECO 390	Money and Banking	3
	Economics Electives (12 credits)	12

# CORE CURRICULUM

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
	Core Curriculum Requirements (In addition to Major hours)	44-48
	<b>Total credits:</b>	<b>83-87</b>

## Category Descriptions

### Economics Electives (12 credits)

Select four Economics courses at the 300 level or above to satisfy this requirement.

### Core Curriculum Requirements (In addition to Major hours)

#### **Developmental requirements (up to 6 credits):**

**Taken in the first semester, if placed into it:**

- ENG 001 College English

**Taken in the first year, if placed into it:**

- MTH 001 Intermediate Algebra

#### **Proficiency requirements (15 credits):**

**Taken in the first two years, if not placed out of it:**

- MTH 101 College Algebra **or**
- MTH 103 College Algebra w/Lab **or**
- MTH 105 Mathematics for Liberal Arts

**Taken in the first year (depending on placement):**

- ENG 101 English Composition I (taken immediately if placed into it or immediately following completion of ENG 001 with a grade of 'C' or better)
- ENG 102 English Composition II (taken immediately following successful completion of ENG 101 with a grade of 'C' or better)

**Recommended but not required in the first year:**

- First year of a foreign language

#### **Common Core requirements (13-14 credits):**

**Taken in the first year (or within one year of completing any pre-requisite coursework):**

- COR 100 Year One
- COR 101 Strategies for College Success

**Taken anytime in the first TWO years:**

- ENG 105 World Literature
- POL 105 The American Experience

**Taken anytime prior to graduation:**

- HIS 110 World Civilization
- HIS 112 World Civilization II

**Distribution requirements:**

**One fine arts course (3 credits)**

**Select from the following:**

- ART 101 Introduction to Visual Arts
- ART 201, 202 World Art I and II
- MUS 105 Language of Music
- MUS 110 Music Theory
- THE 101 Introduction to Theatre

**One social science course (3 credits)**

**Select from the following:**

- ANT 101 Introduction to Cultural Anthropology
- ECO 101 Principles of Economics I
- PSY 101 Introduction to Psychology

**One mathematics course (3-4 credits)**

**Select from the following:**

- MTH 105 Mathematics for Liberal Arts
- MTH 110 Elementary Functions
- MTH 115 Discrete Mathematics **or** MTH 290 Foundations of Modern Mathematics
- ECO 208 Quantitative Methods in Business, Economics, and Decision Science
- MTH 210 Calculus I
- BUS 323 Statistical Applications to Business Decision Making
- PSY 235 Statistics for the Behavioral Sciences

**One lab science course (4 credits)**

**Select from the following:**

- BIO 100, 100L Biology in Context
- BIO 110, 110L Principles of Biology I
- CHM 105, 105L Introduction to Chemistry
- CHM 110, 110L General Chemistry I
- PHY 210, 211 General Physics
- PHY 240, 241 Fundamentals of Physics
- SCI 100, 100L Physical Science for Liberal Arts

**One religion/philosophy course (3 credits)**

**Select from the following:**

- RPH 110 Old Testament
- RPH 120 New Testament
- RPH 130 Introduction to Christian Theology
- RPH 140 Introduction to World Philosophies

- RPH 150 World Religions
- RPH 205 Introduction to Ethics

## **Two physical education courses (0-2 credits)**

Select from the following:

- PED courses with designations from 101 to 130
- OLP courses with designations from 120 to 130

**NOTE: Only one activity (specified PED/OLP) course can be taken per semester. Additionally, only seven activity credits can be counted toward the graduation requirement.**

## The Economics Minor

The economics minor is a course of study designed as a second field for students seeking an understanding of the tools of economic theory and their use in analyzing the decision-making process on both an individual and a societal level.

NOTES

\* Students may use ECO 101 to satisfy core requirements.

\* Students may substitute MTH 210 (Calculus I) for ECO 208.

**Program:** [Economics](#)

## Summary of Requirements for a Minor in Economics

Item #	Title	Credits
ECO 101	Principles of Economics I	3
ECO 102	Principles of Economics II	3
ECO 208	Quantitative Methods in Business, Economics, and Decision Science	3
BUS 323	Statistical Applications to Business Decision Making	3
	ECO 301 OR ECO 302	3
	Economics Electives (6 credits)	6
	<b>Total credits:</b>	<b>21</b>

## Category Descriptions

### ECO 301 OR ECO 302

Item #	Title	Credits
ECO 301	Intermediate Macroeconomics	3
ECO 302	Intermediate Microeconomics	3

### Economics Electives (6 credits)

Select two Economics courses at the 300 level or above to satisfy this requirement.

# Economics (ECO) Classes

## ECO 101: Principles of Economics I

An introduction to economics with an emphasis on the fundamentals of economic principles and current economic policy issues. Topics include scarcity of resources, production and consumption, international trade, supply and demand, taxes, welfare state, poverty, income inequality, economic output of an economy, price level, inflation, unemployment, long-run determinants of economic growth, and financial systems.

**Credits:** 3

**Prerequisites:**

MTH 101

Or MTH 103

## ECO 102: Principles of Economics II

Continuation of ECO 101. Students will apply the demand and supply model to analyze the effects of market intervention and understand market efficiency and the consequences of market failure, explore different market paradigms with analytical tools (microeconomics), review long-run determinants of economic growth and the role of monetary institutions in the economy (macroeconomics), and employ the aggregate demand and supply model to understand short-run economic fluctuations and the effectiveness of monetary and fiscal policy tools.

**Credits:** 3

**Prerequisites:**

ECO 101

## ECO 208: Quantitative Methods in Business, Economics, and Decision Science

Development of essential mathematical tools for business, economics, and other decision sciences. Topics include applications of algebra and differential calculus, including optimization techniques.

**Credits:** 3

**Prerequisites:**

MTH 101

Or MTH 103

## ECO 215: Investment Portfolio Management

An introduction to stock and bond markets. Students will experience semester-long activities and manage an investment portfolio. Students may enroll in this course a maximum of three times, earning 3 credits. Graded on a pass/fail basis.

**Credits:** 1

**Prerequisites:**

ECO 101 and ACC 211

## ECO 301: Intermediate Macroeconomics

Focused study of macroeconomics. Topics include national income accounting, determinants of consumption and investment spending, international capital flows, financial asset holdings, long-run economic growth, business cycles, monetary and fiscal policy, and unemployment.

**Credits:** 3

**Prerequisites:**

ECO 102 and either ECO 208 or MTH 210

## ECO 302: Intermediate Microeconomics

Focused study of microeconomics with analytical investigation of consumer choice, production costs, and firm behavior, including critical examination of different market paradigms. Topics include choice under uncertainty, problems with asymmetric information, externalities, and the use of game theories in analyzing strategic behavior of firms.

**Credits:** 3

**Prerequisites:**

ECO 102 and either ECO 208 or MTH 210

## ECO 305: Game Theory

Analysis of strategic social interactions with the tools of game theory. Fundamental concepts such as strong dominance, Nash equilibrium, mixed strategies, sub-game perfect equilibrium, and backward induction are covered. Emphasis is on applications in economics and business, including topics in industrial organization, as well as topics in political science.

**Credits:** 3

**Prerequisites:**

ECO 101

## ECO 306: Econometrics

This course introduces the student to the theory and basic empirical tools of econometrics. Applications of standard methods to data are emphasized: parameter estimation, hypothesis testing, and forecasting. In the context of Ordinary Least Squares, the focus is on violations of Classical Assumptions such as model misspecification, omitted variable bias, multicollinearity, serial correlation, and heteroscedasticity. Extensive use is made of hands-on work with data sets.

**Credits:** 3

**Prerequisites:**

ECO 102 and (BUS 323 or MTH 360) or instructor approval.

## ECO 320: Corporate Finance I

Study of the basic concepts and analytical tools necessary for financial decision making with emphasis on time and risk as determinants of present value, bond and stock valuation, capital budgeting, capital asset pricing model, cost of capital, and capital structure.

**Credits:** 3

**Prerequisites:**

ACC 211, and ECO 102

## ECO 330: Corporate Finance II

Continuation of ECO 320. Using the case method, computer simulations and spreadsheet applications, students will work individually and in teams to further their understanding of financial systems analysis.

**Credits:** 3

**Prerequisites:**

ECO 320

## ECO 350: Business and Professional Ethics

Examination of professional responsibility with case studies of ethical issues in business and the professions. (Same as RPH 350).

**Credits:** 3

## ECO 370: Political Economy of Public Issues

Discussion and research of current public debates and interests in which both governmental and economic forces and interests are joined. Students will present their research to the class and write a major paper.

**Credits:** 3

**Prerequisites:**

ECO 102 or consent from instructor. (Same as POL 370)

## ECO 382: Special Topics in Economics

Study of selected topics in economics. Prerequisites will vary.

**Credits:** 1-3

## ECO 390: Money and Banking

Evolution of monetary and financial systems with integrated international aspects, including interest rates, financial markets and institutions, and monetary policy.

**Credits:** 3

**Prerequisites:**

ECO 102

## ECO 401: Multinational Financial Management

An examination of financial management in an international setting. Includes analysis of exchange rate determination, exchange rate risk, international financial crises, macroeconomic and political country risk, as well as issues in corporate finance including cash flow, capital management, and international investment.

**Credits:** 3

**Prerequisites:**

ECO 102

## ECO 410: International Economics

The exploration of various theories of international trade and finance with emphasis on factors affecting trade and financial flows and the commercial and trade policy implications on these flows. Students will also examine exchange rate regimes, balance of payments, and the role of international institutions such as the World Trade Organization, the World Bank, and the International Monetary Fund.

**Credits:** 3

**Prerequisites:**

ECO 102

## ECO 420: Public Finance

An application of microeconomic theories analyzing the role of government in providing public goods and services to a predominantly market economy. Students will examine collective decision-making, types of taxes, local public finance, and government expenditure programs and tax systems with emphasis on their efficiency, equity, and incentive aspects.

**Credits:** 3

**Prerequisites:**

ECO 102

## ECO 425: Environmental Economics

Examination of the interactions between production and consumption and the natural environment. Students will use microeconomic theories of externalities and public goods to model environmental problems and efficient solutions and analyze command-and-control based solutions and market-based solutions. Students will also discuss current environmental policy issues and use analytical decision-making tools such as environmental risk analysis and benefit-cost analysis to evaluate environmental projects.

**Credits:** 3

**Prerequisites:**

ECO 102

## ECO 430: History of Economic Thought

Study of the evolution of ideas central to economic theory and the development of currently accepted ideas.

**Credits:** 3

**Prerequisites:**

ECO 102

## ECO 475: Investments

Application of finance tools to the valuation of different types of securities, such as stocks, bonds, and options with emphasis on how to combine these securities into portfolios that provide the best risk-return profile for a given investor.

**Credits:** 3

**Prerequisites:**

BUS 323, ECO 320, and either ECO 208 or MTH 210

## ECO 482: Special Topics in Economics

Study of selected topics in economics. Prerequisites will vary.

**Credits:** 1-3