Economics and Finance

Websites: Economics (https://new.sewanee.edu/programs-of-study/economics/), Finance (https://new.sewanee.edu/programs-of-study/finance/)

The Department of Economics and Finance offers two majors (Economics and Finance) and one minor (Economics). The Economics major provides instruction for students interested in understanding economic activity: its development and operation, its problems and trends, and its public and private institutions. The Finance major offers a strong foundation in economics with core classes in the economic sub-field of finance and a robust spectrum of electives. Both majors are designed with an emphasis on data collection, visualization, and analytics, grounded in empirical research methodologies, requiring a strong foundation in statistics and programming.

The Economics major is designated as STEM (CIP code 45.0603).

Faculty

Professors: Blythe, Williams

Associate Professors: Ahmad, Elrod (Chair), Song, St-Pierre, Sturgill, Theyson

Assistant Professors: Dao, Huang, Jing, Misra, Sherpa, Wu

Majors

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- · Economics (http://e-catalog.sewanee.edu/arts-sciences/departments-interdisciplinary-programs/economics/economics-major/)
- Finance (http://e-catalog.sewanee.edu/arts-sciences/departments-interdisciplinary-programs/economics/finance-major/)

Students may not declare a double major in Economics and Finance.

Minor

Requirements for the Minor in Economics

The minor requires successful completion of the following:

Code	Title	Semester Hours
Course Requirements		
ECON 120	Principles of Economics	4
Select one of the following: ^I		4
ECON 133	Principles of Econometrics	
STAT 204	Elementary Statistics	
Select three additional courses in Economics (ECON) numbered 200 or above		12
Total Semester Hours		20

This requirement should be completed during the sophomore year.

Courses

Economics Courses

ECON 120 Principles of Economics (4)

The course introduces students to the field of economics, and explores a variety of topics spanning both microeconomics and macroeconomics. Using basic algebraic and graphical techniques, it lays the foundation for how economists model the world using mathematics to study how individuals, firms and governments make choices and how they affect the world around us. Microeconomic topics include consumer theory, producer theory, behavior of firms, externalities, and the role of the government in the economy. Macroeconomic topics include determination of output, unemployment, interest rates, inflation, monetary and fiscal policies, and economic growth.

ECON 133 Principles of Econometrics (4)

This course is an introduction to econometrics, a field of economics that facilitates the understanding of economic literature and pursuit of empirical research in economics. It covers the use of basic statistical methods, probability theory, sampling theory, estimation, hypothesis testing, and linear regression. Students practice the application of these techniques by collecting, organizing, and analyzing real-world economic data using the statistical software STATA. *Prerequisite: ECON 120*.

ECON 201 Microeconomic Theory (4)

Studies the behavior of consumers, firms, and industries, and the conditions of equilibrium in output/input markets and in the economy as a whole. *Prerequisite: (ECON 101 or ECON 120) and (MATH 101, MATH 102, or MATH 207).*

ECON 202 Macroeconomic Theory (4)

The theory of economic growth, employment, and the price level. *Prerequisite: (ECON 102 or ECON120) and (MATH 101, MATH 102, or MATH 207).*

ECON 233 Applied Econometrics (4)

This course provides an introduction to economic applications of statistics, including descriptive statistics, probability theory, distributions, parameter estimation, hypothesis testing, simple and multiple regression, and the application of these statistics to economic research. Students will use econometric software and real-world data to study economic questions. Open only to students pursuing majors in Economics or Finance. *Prerequisite: ECON 133*.

ECON 301 Money and Banking (4)

A study of the American monetary and banking systems, with particular attention to commercial banking, the Federal Reserve System, monetary theory, and monetary policy. *Prerequisite: ECON 102 or ECON 120.*

ECON 304 Labor Economics (4)

This course uses microeconomic theory to analyze the economics of work. The demand for and the supply of labor are the basis for analyzing a wide range of observed outcomes in the labor market, including wage determination and employment. Topics with important policy implications include human capital and educational investments, economics of the highly paid, unions, immigration policy, fringe benefits, unemployment insurance, race and gender discrimination, minimum wage policies, welfare policy, and the distribution of income. *Prerequisite: ECON 201 or ECON 305.*

ECON 307 Income, Distribution, Poverty and Public Policy (4)

The nature, determinants, and consequences of income as it is distributed in the United States, with particular emphasis on problems and policies relating to the poor. *Prerequisite: (ECON 101 and ECON102) or ECON 120.*

ECON 308 Urban Economics (4)

This course explores how the location decisions of utility-maximizing households and profit-maximizing firms lead to the formation of cities. Economic principles underlying urban development and their application to current policy debates are understood through examination of transportation, education, crime, housing, the role of government in land use patterns, and other urban issues. *Prerequisite: ECON 101 or ECON 120.*

ECON 310 Economic Development (4)

The course examines the principles and concepts of development and focuses on major development problems and policies, both domestic and international. Topics of analysis include theories of economic growth and development, poverty and income distribution, population, human capital, agricultural and rural development, and international trade. *Prerequisite: (ECON 101 and ECON102) or ECON 120.*

ECON 311 Health and Development (4)

This course provides students with an understanding of issues regarding the delivery of health care services in the context of developing countries. Topics include the measurement of health status; the relation between health and economic development; the demand for health services; cost-benefit and cost-effectiveness analysis; and methods for financing health care in developing, resource-constrained nations. *Prerequisite: ECON 101 or ECON 120*.

ECON 312 Health Economics (4)

This course examines the nature of demand for different kinds of health services, the supply of health services, the market structure of the health care industry, market failures in the provision of health care services, alternative health care delivery systems, and related policy issues. *Prerequisite: ECON 101 or ECON 120.*

ECON 315 Industrial Organization and Public Policy (4)

Discusses the economic performance of firms and industries; the importance of industrial structure in determining performance; the problem of monopoly, business behavior, and performance; public policies to promote competition; and public regulation. *Prerequisite: ECON 201.*

ECON 320 Behavioral Economics (4)

This course analyzes the observed behavior of decision-makers and explores when and why actual behavior deviates from the predictions of standard economic models. Drawing from research in psychology, the course enriches standard economic theories by incorporating social, cognitive, and emotional factors into decision-making models. These factors include (but are not limited to) bounded rationality, social preferences, procrastination, and self-control. The course also considers the policy implications of behavioral models as they relate to saving, consumption, health, and education. *Prerequisite: ECON 201 or ECON 305.*

ECON 326 Growth Theory (4)

This course explores long run economic growth, as opposed to short run fluctuations in economic growth arising from business cycles. Motivated by stylized facts from both cross-country and time series data, the course considers the following types of questions: Why are some countries so rich while others are so poor? What explains the heterogeneity in the growth experience across countries, with some growing at a moderate pace over long periods, others growing rapidly over shorter periods, and yet others stagnating. Investigation of such questions is guided by the neoclassical growth model and modern theories of endogenous growth including variety expansion and quality ladder models. As the models are fleshed out, topics covered may include, but are not limited to: investment, technological progress and its relationship to research and development; education, health and population; the role of government and institutions; and the role of natural resources. *Prerequisite: ECON 202 or ECON 306*.

ECON 329 Law and Economics (4)

This course examines how legal rules and institutions create economic incentives and affect behavior. The course is organized around the three major areas of the common law-property, tort, and contract law-and criminal law. Both a jurisprudential and an economic theory of the law are introduced and developed. Economic analysis is used to predict the behavior and outcomes that result from various legal rules and to evaluate which legal rules are best in terms of economic efficiency. *Prerequisite: ECON 101 or ECON 120*.

ECON 331 Public Finance and Fiscal Policy (4)

Examines the economic function of government: allocation of resources, distribution of income, stabilization. Revenue structure: federal, state, and local taxation. Government expenditure: the federal budget, criteria for evaluating government expenditures, specific programs. Fiscal policy. *Prerequisite: ECON 101 or ECON 120*.

ECON 335 Environmental Economics (4)

A study of the causes of and solutions for pollution and environmental degradation weighs the value of ecosystems and their role in sustaining economic activity. Applies cost/benefit analysis to environmental issues and provides an introduction to economics of nonrenewable and renewable resources such as mines, forests, and fish. *Prerequisite: ECON 101 or ECON 120*.

ECON 336 Energy Economics (4)

This course applies microeconomic principles to the energy sector, focusing on energy supply and demand in the U.S. and global markets. It uses economic theory and an empirical perspective to examine markets for coal, electricity, natural gas, and renewable energy resources. It also assesses public policies that affect energy markets, including those related to energy taxes and subsidies, deregulation, and other policy instruments for pollution control. *Prerequisite: ECON 101 or ECON 120*.

ECON 339 Economics of Immigration (4)

This course explores the economic causes and consequences of immigration. Importantly, it theoretically and empirically studies how the migration experience relates to the residents of both origin and destination countries. Topics include immigrant selection, assimilation, fiscal and labor market effects of immigration for the destination countries, and the consequences of brain drain for the source countries. *Prerequisite: ECON 101 or ECON 120.*

ECON 340 Introduction to Mathematical Economics (4)

Studies the mathematical formulation of economic theory by examining selected topics drawn from micro and macroeconomic models, general equilibrium analysis, input/output analysis, static and dynamic analysis, and linear programming. *Prerequisite: MATH 101 and (ECON 201 or ECON 305)*.

ECON 341 Game Theory (4)

An introduction to the field of game theory—that is, study of strategic interactions in which participants take into account both the realized and anticipated behavior of other participants in determining their own behavior. Applications are drawn from the labor market, oligopoly, global politics, and everyday life. Prerequisite: (ECON 101 or ECON 120) and (MATH 101, MATH 102, or MATH 207).

ECON 343 International Trade (4)

This course studies international trade theories and trade policy. Topics include trade models, the gains from trade, determinants of the terms of trade and income distribution, global factor movements, protectionist policy, and trade agreements. *Prerequisite: ECON 101 or ECON 120.*

ECON 344 International Finance (4)

This courses studies financial aspects of growth, income and price level determination in open economies. Topics include the balance of payments, exchange rate determination, international payment adjustment mechanisms, capital flows, and international macroeconomic policy. *Prerequisite: ECON 102 or ECON 120.*

ECON 355 Managerial Economics (4)

This course builds upon a theoretical foundation in microeconomics through the study and use of quantitative decision-making tools commonly applied to economic problems faced by firms. The course is designed to improve the student's ability to understand and apply economic principles used by firms in decision-making, in addition to providing an opportunity to create simple firm decision models using spreadsheets and basic statistical analysis. *Prerequisite: ECON 101 or ECON 120*.

ECON 385 Special Topics (2 or 4)

A selection of topics are explored depending on interest. This course may be repeated for credit when the topic differs. *Prerequisite: (ECON 101 and ECON102) or ECON 120.*

ECON 390 History of Economic Thought (4)

Presents economic thought throughout history, but primarily the classical, Marxian, neoclassical, and Keynesian schools. Leading writers are considered chronologically, with emphasis on Smith, Ricardo, Malthus, Marx, J.S. Mill, Marshall, and Keynes. *Prerequisite: (ECON 101 and ECON 102) or ECON 120.*

ECON 410 Research Seminar (4)

This course uses economic literature as a tool to examine the economic ideas and advanced econometric techniques necessary to empirical economic research. Students will apply these concepts to their original senior research, which will be completed as part of this course. Open only to seniors pursuing majors in economics. Open only to seniors pursuing majors in economics. Prerequisite: ECON 333 or (ECON 233 and ECON 201 and ECON 202).

ECON 444 Independent Study (2 or 4)

Supervised research for selected students. This course may be repeated for credit when the topic differs. Prerequisite: ECON 120, professor consent, and prerequisite override required..

ECON 450 Honors Thesis (4)

A continuation of ECON 410 for students writing an honors thesis in Economics. Open only to seniors pursuing majors in economics. Prerequisite: Instructor prerequisite override required.

Finance Courses

FINC 201 Corporate Finance (4)

This course addresses the concepts underlying corporate finance and equity markets. Topics include financial statement analysis, time value of money, security valuation, capital budgeting, capital structure, dividend policy, and working capital management. *Prerequisite:* ECON 101 or ECON 120.

FINC 301 Investments (4)

This course examines investment theory and its applications. Topics include equity valuation, equity trading, portfolio theory, asset pricing models, performance evaluation, and efficient market hypothesis. *Prerequisite: FINC 201 and (ECON 133 or STAT 204)*.

FINC 302 Derivatives and Fixed Income Securities (4)

This course introduces students to fixed income securities, derivatives contracts, and the use of these contracts in trading and risk management. Topics include yield curve, duration, types of fixed income products, structured financial instruments, futures, forward contracts, swaps, and options. This course cannot be taken for credit by students who have already completed ECON 362. *Prerequisite:* FINC 201 and (ECON 133 or STAT 204).

FINC 304 Entrepreneurial Finance (4)

In this course, students learn to carry out their own independent research on important issues in environmental management and sustainability. Meetings are focused upon hands-on practice in experimental design, field data collection, data management, basic coding, project management, grant proposal writing, and public speaking. Throughout those experiences, students gain foundational knowledge in the sciences of climate change, carbon sequestration, pollution, and environmental justice.

FINC 305 Financial Modeling (4)

Examines the real-world applications of finance theory and helps students develop financial modeling skills. Topics include the dividend discount model (DDM), financial statement modeling, discounted cash flow (DCF) analysis, the leverage buyout (LBO) model, merger modeling, bond valuation, and portfolio optimization. *Prerequisite: FINC 201 and (ECON 133 or STAT 204)*.

FINC 310 Real Estate Finance (4)

This course examines theory, concepts, and tools for analyzing investment decisions in real estate. Topics include mortgage analysis, and valuation, financing, and taxation of real estate investments. *Prerequisite: BUSI 215.*

FINC 385 Special Topics (2 or 4)

A selection of topics are explored depending on interest. This course may be repeated for credit when the topic differs.

FINC 410 Advanced Security Analysis (4)

This course examines theory, concepts, and tools for advanced security analysis focusing on equities. Topics include financial statement analysis, security valuation, equity research, financial modeling, and portfolio analysis and management. Open only to seniors pursuing majors in finance. Open only to seniors pursuing majors in finance. Prerequisite: BUSI 215 and FINC 301 and (ECON 333 or STAT 214).