Economics

Faculty

Dennis Ahlburg, Ph.D., Professor
Nels Christiansen, Ph.D., Associate Professor
John H. Huston, Ph.D., Professor
David A. Macpherson, Ph.D., E. M. Stevens Professor; Chair
Shana McDermott, Ph.D., Assistant Professor
Maria Pia Paganelli, Ph.D., Associate Professor
Gina Pieters, Ph.D., Assistant Professor
Ricardo Manuel Santos, Ph.D., Associate Professor
Roger Spencer, Ph.D., Vernon F. Taylor Distinguished Professor
Richard Salvucci, Ph.D., Professor
Edward J. Schumacher, Ph.D., Professor of Health Care Administration
Ben Vaughan, Associate Professor of the Practice of Economics

Requirements

- Major in Economics
- Minor in Economics
- Honors in Economics

The Major

The requirements for the degree of Bachelor of Arts with a major in Economics are as follows:

I. Departmental requirements:

Economics majors may choose among six separate curricula:

A. General Economics

   Students desiring to major in Economics without selecting a concentration must complete 30 credit hours in Economics, including ECON 1311, 1312, 2301, 3325, and 3326. (MATH 1320 or 3355* may be substituted for ECON 2301.)
Recommended: MATH 1311.

B. Concentration in Theoretical Economics

This concentration emphasizes mathematics and economics theory. It is recommended as the appropriate preparation for Ph.D. programs in economics.

Departmental Requirements:

1. 30 credit hours in Economics, including:
   
   ECON 1311, 1312, 3325, 3326, 4365, 4367, and 4370;
   
2. MATH 1311, 1312, 2321, 3316 or 3323, 3326, 3334, 3335, and 3360. (This combination satisfies the requirements for the minor in mathematics.) In addition, MATH 3338 and CSCI 1320 are strongly recommended.

C. Concentration in Economics and Law

This concentration stresses the application of economic theory to questions of the legal and social policy. It is especially appropriate for those planning to enter law school.

Departmental Requirements:

1. 30 credit hours in Economics, including ECON 1311, 1312, 2301, 3325, 3326, and 3339. (MATH 1320 or 3335* may be substituted for ECON 2301.)
2. ECON 3330 or 3335 or 3356.
3. Three courses, approved by the adviser, from departments other than Economics:
   
   a. A course stressing the case method of legal instruction (e.g., BUSN 3302, PLSI 3351);
   b. An appropriate course in logic, writing, or speech communication (e.g., ENGL 3314, HCOM 1333, PHIL 1341);
   c. A course that views the law from a perspective other than that of economics (e.g., PHIL 3453).

Recommended: Math 1311

D. Concentration in Economics and Business

This concentration is a liberal arts curriculum designed for students planning to enter graduate schools of business administration. In addition to a solid grounding in Economics, this concentration provides an introduction to many of the basic business subjects that students will encounter in MBA programs.

Departmental Requirements:

1. 30 credit hours in Economics, including:
a. ECON 1311, 1312, 2301, 3325, and 3326 (MATH 1320 or 3335* may be substituted for ECON 2301);
b. ECON 3329 or 3362;
c. ECON 3335 or 3328 or 3356;
d. ECON 3347 or 3348 or 3361.

2. 18 credit hours outside Economics, including:

   ACCT 1301, BUSN 3302, MIS 2301, MKTG 2301, FNCE 3301, and MGMT 2301.

   Recommended: MATH 1311 and MATH 1312.

E. Concentration in International Economics

The focus of this concentration is the analysis of two general phenomena: a) economic transactions across international borders, and b) the role of international institutions in shaping international economic life. Besides a firm basis in economic theory, international economics provides an ideal analytical framework for those students interested in any area of international and comparative studies.

Departmental Requirements:

A. 33 credit hours in Economics, including:

   1. ECON 1311, 1312, 2301, 3325, 3326, 3347, and 3348. (MATH 1320 or 3335* may be substituted for ECON 2301.)

   2. ECON 3340 or 3341 or 3342 or 3343 or 3361.

B. Three upper division credit hours in a modern foreign language.

C. Two courses, approved by the adviser, that emphasize current sociopolitical aspects of:

   1. A foreign country;
   2. A group of foreign countries; and/or
   3. The relations between several countries or areas of the world.

   Recommended: MATH 1311.

F. Concentration in Economics and Public Policy

This concentration emphasizes the application of economic analysis to the design and implementation of public policy. It is especially appropriate for students intending to pursue careers and/or graduate study in public policy or public administration.

Departmental Requirements:

A. 33 credit hours of Economics including:
1. ECON 1311, 1312, 2301, 3325, 3326, 3347, and 3348. (MATH 1320 or 3335* may be substituted for ECON 2301.)
2. Two of ECON 3334, 3335, 3328, and 3339 (with approval of the adviser, ECON 3340 or 3347 may be substituted for one of these).

B. A course taught by the case method of instruction (e.g., BUSN 3302, PLSI 3351).

C. Two courses that examine the analysis of implementation of public policy from a perspective other than that of economics (e.g., HCAD 3350, PLSI 3313, SOC 3339, URBS 3336/PLSI 3316).

D. PLSI 1301.

Recommended (strongly recommended for students planning on advanced degree in public policy/public administration): MATH 1311, MATH 1312, ECON 3334, and ECON 4370.

Prospective majors should note that the Department has requirements for admission to the major. Full acceptance will be granted when the student has completed both Principles courses (ECON 1311 and 1312) with an average grade of C or better. Successful completion of the major also requires at least a C average across the four Principles and Intermediate Theory courses (ECON 1311, 1312, 3325, and 3326).

* Students intending to use MATH 3335 to fulfill this requirement should note that MATH 1311, 1312, 2321, and 3334 are prerequisites for that course.

II. University requirements:

Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

The Minor

Students who wish to explore Economics in some depth but whose primary interests lie elsewhere may choose a minor in Economics. The minor requires 18 credit hours of Economics, including ECON 1311, 1312, and either 3325 or 3326. At least half the 18 credit hours must be in upper division courses, and at least nine credit hours must be taken at Trinity. None of the courses used to satisfy these requirements may be taken Pass/Fail.

Honors in Economics

The Economics Department offers an honors thesis option to its majors. Candidates must have a 3.5 grade point average in economics, approval by a majority of the economics faculty and permission of the faculty member directing the thesis. The six hours for the thesis must be in addition to the hours required for the major. Please see
the Chair of the Department for further details.

Courses

Economics - Lower Division

ECON-1311 Principles of Microeconomics
An introduction to the economic organization of society, with emphasis on how markets, prices, profits and losses guide and direct economic activity. Throughout the course, economic analysis is applied to a wide range of contemporary problems and issues.

ECON-1312 Principles of Macroeconomics
The theory and measurement of changes in the levels of prices, employment, national income and other aggregates. Topics addressed include money and the banking system, international economics, unemployment and inflation, and government stabilization policy. Prerequisite: ECON 1311

ECON-2301 Statistics for Business and Economics
Applications of statistical techniques to business and economics. Sampling, tests of hypotheses, regression and other statistical techniques and their implementation using modern statistical software. (Also listed as BAT 2301.) (Offered every semester).

Economics - Upper Division

ECON-3115 Economists in the Elementary Schools
The application and communication of economic ideas in an educational context. Teams of Trinity students help teach Economics in local elementary schools by creating and leading hands on activities that illustrate and apply fundamental economic concepts. May be repeated for credit with permission of the instructor. Prerequisite: ECON 1311 or one of the Education Practicum courses (EDUC 2201, 2202, or 2203) and consent of instructor

ECON-3116 Economists in the Middle Schools
The application and communication of economic ideas in an educational context. Teams of Trinity students help teach Economics in local middle schools by creating and presenting applications of fundamental economic concepts. May be repeated for credit with permission of the instructor. Prerequisite: ECON 1311 and consent of instructor

ECON-3117 Economists in the High School
The application and communication of economic ideas in an educational context. Teams of Trinity students help teach Economics in local high schools by creating and presenting applications of fundamental economic concepts. May be repeated for credit with permission of instructor. Prerequisites: ECON 1311 and 1312, and consent of instructor.

ECON-3141 La economia mexicana (The Mexican Economy)
Examination of significant contemporary issues affecting the economic life of Mexico: analysis of international, agricultural, financial, communications, and/or labor sectors of the economy and their relationship to Mexico's macroeconomic performance; special attention to the political situation in Mexico and its impact on the economy. (Also listed as LAC 3101.) Prerequisites: SPAN 2302, ECON 1311, and 1312 or 3318; or consent of instructor.

ECON-3315 Iceland - Its Unique Geological, Economic and Cultural History
This course will expose students to the unique economic, geologic, and cultural history of Iceland. The economic aspects will focus on the role of financial markets and monetary institutions in economic booms and crashes using Iceland as a case study, possible solutions to public good problems such as the Icelandic fishing quota, business practices which often prioritize protection of the environment and social responsibility, and the role of international trade in development of a small country. The geological history will emphasize Iceland's plate tectonic setting, volcanism, glacial history and related hazards, geothermal energy, and the effects of climate change. The cultural portion will explore the fundamental role of literature in a country with virtually no illiteracy, and the role of the sagas in the transmission of culture, language, and the law in the country with the oldest parliament in the world. Depending on the student's selection of their research topic, three hours of upper division credit in Economics, Geosciences, Environmental Studies, Business Administration, or Political Science may be earned, contingent upon approval from the relevant department. (Offered every other year).

ECON-3318 The Global Economy
An introductory survey of international economics aimed at students interested in political science, diplomacy, world affairs, history, or business. An examination of economic relationships among countries with an emphasis on globalization process and the debate it has produced. Economic analysis is used to study the impact of imposing (or removing) barriers to trade and the problems of the balance of payments and the exchange rate. Special emphasis is given to the changing policy options available to governments, multilateral organizations, non-governmental organizations, and multinational corporations in the rapidly evolving global economy. Prerequisite: ECON 1311. Cannot be taken for credit by students who have taken ECON 3347 or 3348 or 3361.

ECON-3320 Strategies and Games
An introduction to strategic thinking and the basic concepts of Game Theory, according to which a participant's action depends critically on the actions of other participants. The course emphasizes the application of those concepts in a wide variety of areas, including finance, management, marketing, law, political science, biology, anthropology, and psychology. Topics include but are not limited to games with perfect information, games with asymmetric information, auctions, uncertainty and risk, and evolutionary stable strategies. Prerequisites: ECON 1311 and sophomore standing or permission of the instructor.

ECON-3323 The Economics of Government
Microeconomics analysis of governmental decision-making and the democratic process. Emphasis is on evaluating the economic efficiency of taxation and expenditure decisions of policymakers, and on how institutional arrangements of majority voting, representative democracy, political parties, bureaucracies and special-interest groups affect the decisions. Prerequisite: ECON 1311

ECON-3325 Intermediate Microeconomics
An analytical study of decentralized economic decision-making, with primary emphasis on markets and prices. The range and precision of the analytical techniques developed in Economics 1311 are expanded substantially; these techniques are applied to a variety of economic situations, issues and problems. Attention is given to the economic efficiency consequences of different market structures in both product and input markets, and of various kinds of government intervention in market processes. Prerequisite: ECON 1311

ECON-3326 Intermediate Macroeconomics
Theoretical analysis of changes in national income, price level, employment, and the international value of the dollar. Evaluation of alternative stabilization policies. Introduction to economic forecasting. Prerequisites: ECON 1311 and 1312.

ECON-3327 Sports Economics
The utilization of economic methods to study sports. The economic tools employed come from the fields of labor economics, industrial organization, public finance, fame theory, and econometrics. Particular attention will be paid to real world applications to sports issues. Topics will vary over time. Examples of topics: optimal game strategy; player compensation and incentives; government subsidization of the construction of new stadiums; optimal pricing strategies; the mechanisms used by sports leagues to achieve their goals; labor market discrimination; and the causes and consequences of monopsony power in sports. (Offered every other year).

ECON-3328 Monetary Policy Mkts & Banking
An introduction to the financial system and the impact of money and monetary policy on the economy. Major topics include: the economics of financial markets, the Federal Reserve and fundamentals of the money supply process, and the macroeconomic effects of monetary policy. (Offered every year.) Prerequisites: ECON 1311 and 1312

ECON-3329 Labor Economics and Labor Relations
Theories of the demand for and the supply of labor. Analysis of human capital formation, labor force participation, income distribution, unemployment, and unions. Case studies in labor relations. (Also listed as MGMT 3311.) Prerequisite: ECON 1312 and 3325. ECON 3325 may be taken concurrently.

ECON-3330 Economics and the Environment
The economic problem of coping with a finite environment. Study of the interrelationships among economic growth, environmental quality, urban concentration, and resource constraints. Economic analysis of pollution control and other environmental policy problems. (Also listed as URBS 3330). Prerequisite: ECON 1311
ECON-3333 Health Economics
An introduction to the application of the tools of microeconomics to issues in the organization, delivery, and financing of health care. Economic analysis will be utilized to better understand critical issues in health care such as the level and growth of health expenditures, the role of the government versus the private sector in financing care, the relationship between doctors, hospitals, insurance providers, patients, and employers, and the role of society in providing for the uninsured. (Also listed as HCAD 3333) Prerequisite: ECON 1311 or consent of the instructor.

ECON-3334 Urban Economics
Analytical study of the reasons for cities to exist, the location of economic activity, the economic base of urban areas and the functioning of urban land markets. Economic analysis of selected urban policy issues such as local economic development, zoning and growth controls, housing, transportation, poverty, crime, and the provision of local public services. Attention is paid to the urban experience outside as well as within the U.S. (Also listed as URBS 3334). Prerequisites: ECON 1311, and three hours of upper-division credit in either Economics or Urban Studies.

ECON-3335 Industrial Organization
The determinants of market structure and the effects of market structure on firm and industry behavior. The relationship between industry characteristics and desirable economic performance. Frequent applications to particular American industries. Prerequisite: ECON 1311

ECON-3336 Antitrust Economics
The role of antitrust policy in the American economy. Examines the major antitrust statutes and court opinions of the United States as they relate to market structures and business practices. Landmark antitrust cases are discussed and analyzed with economic theory in an effort to gain insight into the implications of business practices encompassed by the antitrust laws. The penalties and remedies for antitrust violations will also be discussed. Prerequisite: ECON 1311

ECON-3338 Government Regulation of Business
Economic analysis of direct government regulatory activity. The course first explores how regulation arises from the political process. These insights, and the tools of microeconomic theory, are then applied to analyze public policy in such fields as electricity, telecommunications, broadcasting, transportation, and safety. (Also listed as BUSN 3338). Prerequisite: Three hours of upper division Economics, or consent of instructor.

ECON-3339 Economic Analysis of Law
Economic analysis of such basic legal concepts as property, contracts, torts and crime. Economic theory is also applied to the legal system itself, including an examination of such matters as law enforcement, civil procedure, and the effectiveness of legal sanctions. Prerequisite: ECON 3325

ECON-3340 Economic Growth and Development
An inquiry into the desirability, the methods of measurement, alternative strategies for, and the impact of
individuals and groups within society on economic development. A survey of theories of economic development. Case studies in comparative perspective. Prerequisites: ECON 1311 and 1312.

**ECON-3341 Economic Development of Mexico**
Economic aspects of Spanish colonialism; the transition to national independence; difficulties associated with the period through 1876; industrialization and development through the Revolution; the takeoff of the modern economy after 1940; contemporary issues. Prerequisite: ECON 1311 and 1312.

**ECON-3342 Latin American Economic History**
A selective survey of the principal currents of economic growth and change in Latin America since the sixteenth century. Special attention given to the uneven formation of market economies and to problems associated with colonialism and neo-colonialism; with international financial crises and adjustment; and with ideologically diverse models of development. (Also listed as HIST 3348.) Prerequisites: ECON 1311 and 1312.

**ECON-3343 Slavery and the Atlantic Economy**
Interdisciplinary analysis of the Atlantic market joining Europe, Africa, and the Americas from the sixteenth through the nineteenth centuries, with particular emphasis upon slavery, the slave trade, and the development of the "plantation complex." Makes explicit use of economic theory to explain historical change. (Also listed as HIST 3384.) Prerequisites: ECON 1311 and HIST 1354 or HIST 1380 or consent of instructor.

**ECON-3344 Economic and Business History of the United States to 1865**
A study of the development of American business and the economy through the U.S. Civil War. (Also listed as BUSN 3344 and HIST 3360.) Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

**ECON-3345 Economic and Business History of the United States Since 1865**
A study of the development of American business and the economy from the U.S. Civil War to the present. (Also listed as BUSN 3345 and HIST 3361.) Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

**ECON-3346 La economia espanola y la Union Europea (The Spanish Economy and the European Union)**
An examination of Spain’s economic development and its position within the European Union. The business, economic, and political transformation of Spain from a struggling nation with an authoritarian regime to an economic power with an open and democratic society are studied. The course also examines the development of European Union, with a special focus on its influence on the Spanish business environment. The experiential component of the course includes visits to businesses, government agencies, and NGO's in Spain. (Also listed as INTB 3346, SPAN 3346, and LAC 3346). (Offered once a year. Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of the instructor.

**ECON-3347 International Trade**
A study of the economic theory of international trade and the development of the practices of commercial policy.
Emphasis is on the economic analysis of a variety of protectionist policies, the international institutions involved in trade and protectionist issues, the importance of trade for development, issues in international capital flows, and multinational corporations. Practice is provided in reading and understanding published sources of data and analysis. Prerequisite: ECON 1312 and 3325

ECON-3348 International Monetary Systems
A study of the principles and practices of foreign exchange, international money markets, the balance of payments, payments adjustment mechanism and the national policies for achieving both domestic and international objectives. Coverage includes the description and history of the relevant national and international institutions. Practice is provided in understanding recent international economic events and current policy issues. (Also listed as FNCE 3348.) Prerequisites: ECON 1311 and 1312.

ECON-3351 Development of Economic Thought
A survey of the "Great Books" of Economics from Adam Smith's Wealth of Nations to John Maynard Keynes's General Theory. The course is intended to acquaint students with the ideas of the creators of economic theory in an effort to understand the intellectual forces that have shaped modern economic thought. Classical, Marxian, Neo-Classical, Institutional and Keynesian theory will be studied and analyzed against the backdrop of the times in which the ideas were developed. Prerequisite: ECON 1311 and 1312

ECON-3356 Financial Institutions and Markets
Analytical investigation of the structure, efficiency, and regulation of financial markets and institutions. Topics include determination of the level and structure of interest rates, asset valuation, and the flow of funds between markets, theory and practice of financial intermediation, and the social utility of the financial sector. (Also listed as FNCE 3351.) Prerequisites: Junior standing and ECON 1311 and 1312.

ECON-3361 International Finance
This course emphasizes the study of the global exchange rate and associated derivatives markets with particular emphasis on foreign risk hedging; the study of financial equilibrium relations and their effects on the international capital markets, and the potential arbitrage opportunities that result in the absence of equilibrium; and the use of case studies to illustrate the application of theoretical tools on the multinational corporate environment. (Also listed as FNCE 3361.) Prerequisites: FNCE 3301 or Consent of Instructor

ECON-3362 The American Corporation
This course acquaints the student with organization theory, corporate decision-making, and the role of the corporation in society. Contemporary corporate issues are discussed and analyzed through readings and the application of fundamental principles to case studies. (Also listed as BUSN 3313) Prerequisite: ECON 1311

ECON-3365 Behavioral and Experimental Economics
Uses experimental findings to test existing theories and motivate the development of new ones. Students participate in both the design and running of experiments. Analyzes the impact of behavioral theories on such topics as trust, reciprocity, time discounting, portfolio choice, and altruism. Behavioral Economics incorporates psychological findings into both traditional economic and game theoretic models of decision making. Experimental
Economics studies the design and methodology of economic experiments. Prerequisite: ECON 3325 or permission of the instructor.

**ECON-3367 Comparative Views of Modern China**

This course represents an overview of the most important economic relationship of the twenty-first century. The global financial crisis that started in 2008 revealed just how much the strategic relationship between China and the United States represents the heart of the world's economy. China has recently surpassed Japan to become the world's second largest economy and America's third largest commercial partner. The rise of China has brought about a reorganization of the global economy and the international balance of power. This new world order carries challenges and opportunities. China remains a communist country with a significant legacy of a command economy. It is also a market economy. Understanding this mixture - capitalism with Chinese characteristics or the Chinese variety Capitalism - is the major aim of this course. We also cover topics relevant to the economic relationship between China and the USA, including international trade and the balance of trade, the Chinese currency system, the growth of China and its growing influence in the international sphere. (Also listed as URBS 3367, CHIN 3367, and BUSN 3367).

**ECON-3-71 Internship**

Internships may be arranged with businesses, non-profit institutions, and government agencies. Economic analysis must be performed during the course of the internship, with work load requirements similar to those of a typical Economics course carrying the same number of hours of credit. The sponsoring institution develops a work program, to include written economic analysis, in conjunction with the supervising faculty member and the student. Students are limited to a maximum of six hours’ credit for internship experiences. Prerequisites: Six semester hours of economics and permission of the Department Chair.

**ECON-3372 Practica profesional en Espana (Internship in Spain)**

A supervised summer internship in Spain. Students enrolled in ECON 3372 will serve as interns with various firms, trade groups, governmental agencies, or public interest groups where they will work and gain experience related to the Spanish economy and business world. The nature of the student’s responsibilities will vary with the internship involved and be subject to the approval of the supervising faculty member. (Also listed as INTB 3372, SPAN 3372, and LAC 3372). (Offered once a year). Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

**ECON-3-90 Research Topics**

Supervised independent study on selected topics in economics. Prerequisites: Junior standing, 3.0 grade average in economics, and permission of instructor.

**ECON-3-98 Honors Readings**

Independent study in selected areas in preparation for Honors Thesis. May be taken for up to three hours of credit.

**ECON-4349 Seminar in Economic Issues**

Use of economic analysis and reasoning to better understand current economic issues. Topics vary. Representative selection includes economics of the stock market, Social Security, welfare reform, and topics
selected by students from articles in the Journal of Economic Perspectives. Emphasis is on oral and written analysis of economic issues, class discussion and debate, and reading of articles by leading economists from sources other than textbooks. Focus is on the questions being asked by economists and the approaches taken to address these questions - that is, what economists do and how they do it. Prerequisites: Six hours of upper-division Economics and Junior standing.

ECON-4365 Game Theory
The science of strategic thinking. A study of the strategic aspects of situations in which a person’s choice depend critically on what other people may choose. Topics include static games with complete information, dynamic games, games with uncertainty and games with incomplete information. Emphasizes the application of game theoretic tools to a broad array of economic issues. Prerequisites: ECON 3325, MATH 1312, and ECON 2320 (or equivalent) or consent of instructor

ECON-4367 Advanced Microeconomic Theory
This course acquaints the student with classical microeconomic theory and enables him or her to construct mathematical economic models. Topics include: consumer theory; theory of the firm; multimarket equilibrium; decision-making under certainty; optimization over time; theoretical and applied welfare economics. Prerequisite: ECON 3325 and MATH 2321

ECON-4370 Econometrics
The development of statistical techniques of measurement and inference especially suited to empirical economics. The course covers linear regression, maximum likelihood estimation, and significance tests. The main emphasis is on the proper formulation and testing of hypotheses. Prerequisites: ECON 1312, ECON 3325; ECON 2320 (or equivalent), and MATH 1312 or permission of instructor.

ECON-4397 Seminar in Economics
Study of theoretical and empirical work in economics from scholarly books and periodicals. Independent research and group discussion. May be repeated when topics differ. Topic A: Microeconomics Topic B: Macroeconomics Topic C: Labor Economics Topic D: Selected topics Prerequisite: Permission of instructor.

ECON-4-98 Honor Thesis
Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both semesters of their Senior year.