

ECONOMICS

Chair: Brian Duncan

Program Assistant: Christine Lukvec

Office: Lawrence Street Center, LW-470

Telephone: 303-315-2030

Website: econ.ucdenver.edu/home/ (<http://econ.ucdenver.edu/home/>)

Overview

Economics is the science of decision making. The rigorous and general approach that characterizes economics lends itself to a remarkably wide field of practical application. Economists are noted for major contributions in a number of fields including government policy, taxation, law, regulation, political economy, international trade and finance, international and U.S. development, marketing, environmental studies, medical policy, portfolio management and banking. The broad and rigorous training of economics majors accounts for their significant demand in virtually every industry and government agency. Economics provides excellent preparation for advanced graduate study as well. Recent studies indicate that economics is a preferred degree for prestigious MBA programs and law schools.

Graduate Program

The Department of Economics offers an MA program in Economics and MS and Ph.D. programs in Health Economics. The MA program in Economics trains students in quantitative and applied economic skills and is directed toward two groups:

1. those who look on the MA as a key to career development in business or government service, and
2. those who desire to go on to pursue the PhD in economics or related fields.

The strong quantitative emphasis of the department's MA program is ideally suited for the pursuit of both these goals. Our graduates are sought out by energy companies, defense contractors, health care agencies, consulting firms, financial institutions, and other companies looking for employees who know how to use real-world data to answer research questions. Many of our graduates use their MA degree in economics at CU Denver as a springboard towards pursuing a Ph.D. degree in economics at highly ranked programs across the country.

The MS and Ph.D. programs in Health Economics are designed to train scientists to engage in modern economic research related to questions pertinent to health policy, health behaviors, and health care services. Both programs are collaborative among faculty in the Department of Economics (ECON), housed in the College of Liberal Arts and Sciences, and the Department of Health Systems, Management & Policy (HSMP), housed in the Colorado School of Public Health. The ECON coursework grounds students in rigorous economic theory and modern statistical methods, whereas the HSMP coursework connects students to institutional details of the health care sector, study design, quantitative methods, cost-effectiveness analysis, and grant writing. The Health Economics programs equip students with an applied interdisciplinary skill set that integrates creative knowledge with the technical expertise that is in demand in the health care industry, enhancing their career and professional development.

Health Economics, MS

Admission Requirements

- Meet all general graduate admission requirements (including a 3.0 undergraduate grade-point average).
- Submit three letters of recommendation (at least two letters should come from individuals who are familiar with your scholarly record. The third can be an additional academic reference or professional reference from someone who knows you well and can comment on your potential as a graduate student).
- Submit official transcripts from all colleges attended.
- Have completed 15 credit hours of undergraduate economics, including intermediate microeconomic theory and econometrics (upper division courses).
- Have completed courses in calculus and statistics (preferably a year of calculus. A course in linear algebra and/or differential equations is recommended).
- Submit GRE scores. All applicants, international and domestic, must submit GRE scores regardless of prior degrees, course work, or work experience. The institution code for CU Denver is 4875. GRE scores are used in conjunction with other indicators of academic success at the Master's level. Applicants must show strong evidence of quantitative ability either through high grades in math, statistics, and economics courses, a high quant score on the GRE, or preferably both.
- International students must submit TOEFL, IELTS, or PTE Academic scores. The institution code for CU Denver is 4875. The minimum required score is 203 (computer-based TOEFL), 75 (IBT-based TOEFL), 537 (paper-based TOEFL), 6.5 (IELTS), or 51 (PTE). Minimum subscores also apply. More information about TOEFL, IELTS, or PTE waiver requirements can be found on the International Admission's website. Please contact the International Admissions office if you have questions about this requirement.

Application Deadlines

Fall: June 1 Spring: December 1

The Department of Economics accepts late applications after these official deadlines. However, there is no guarantee that a late application will be processed in time for the start of the semester. Students are encouraged to apply well in advance the application deadline.

International students who apply after the June 1 or December 1 deadline may not have time to obtain a student visa. Being admitted to the M.S. program in Health Economics does not guarantee that a student will receive a student visa in time for the start of the semester. International students who are admitted to the MS program, but fail to obtain a visa in time, may defer admission for up to one year. All questions about student visas should be directed to the Office of International Education.

Health Economics, PhD

Admission Requirements

- Meet all general graduate admission requirements (including a 3.0 undergraduate grade-point average).
- Submit three letters of recommendation (at least two letters should come from individuals who are familiar with your scholarly record. The third can be an additional academic reference or professional reference from someone who knows you well and can comment on your potential as a graduate student).
- Submit official transcripts from all colleges attended.

- Have completed 15 credit hours of undergraduate economics, including intermediate microeconomic theory and econometrics (upper division courses).
- Have completed courses in calculus and statistics (preferably a year of calculus. A course in linear algebra and/or differential equations is recommended).
- Submit GRE scores. All applicants, international and domestic, must submit GRE scores regardless of prior degrees, course work, or work experience. The institution code for CU Denver is 4875. GRE scores are used in conjunction with other indicators of academic success at the PhD level. Applicants must show strong evidence of quantitative ability either through high grades in math, statistics, and economics courses, a high quant score on the GRE, or preferably both.
- International students must submit TOEFL, IELTS, or PTE Academic scores. The institution code for CU Denver is 4875. The minimum required score is 203 (computer-based TOEFL), 75 (IBT-based TOEFL), 537 (paper-based TOEFL), 6.5 (IELTS), or 51 (PTE). Minimum subscores also apply. More information about TOEFL, IELTS, or PTE waiver requirements can be found on the International Admission's website. Please contact the International Admissions (<http://catalog.ucdenver.edu/cu-denver/graduate/international-admissions/>) office if you have questions about this requirement.

Application Deadlines

June 1

Students are encouraged to apply by February 1 for full consideration of financial aid. The final application deadline is June 1.

Economics, MA

Admission Requirements

- Meet all general graduate admission requirements (including a 2.5 undergraduate grade-point average).
- Submit three letters of recommendation (at least two letters should come from individuals who are familiar with your scholarly record. The third can be an additional academic reference or professional reference from someone who knows you well and can comment on your potential as a graduate student).
- Submit official transcripts from all colleges attended.
- Have completed 15 credit hours of undergraduate economics, including intermediate microeconomic theory and intermediate macroeconomic theory (upper division courses).
- Have completed courses in calculus and statistics (preferably a year of calculus and a course in econometrics or similar upper division statistics course. A course in linear algebra and/or differential equations is recommended).
- Submit GRE scores. All applicants, international and domestic, must submit GRE scores regardless of prior degrees, course work, or work experience. The institution code for CU Denver is 4875. Most students admitted to the MA program in economics score 154 or above (690 or above using the prior test scale) on the quantitative section of the GRE. However, this is not a minimum GRE cutoff score, nor is it a score above which admission is guaranteed. GRE scores are used in conjunction with other indicators of academic success at the Master's level. Applicants must show strong evidence of quantitative ability either through high grades in math, statistics, and economics courses, a high quant score on the GRE, or preferably both.

- International students must submit TOEFL scores. The minimum required score is 203 (computer-based TOEFL), 75 (IBT-based TOEFL), 537 (paper-based TOEFL), or 6.5 (IELTS). The institution code for CU Denver is 4875. The minimum TOEFL scores are a requirement of the Graduate School and cannot be waived by the department of economics. The Graduate School may waive the TOEFL requirement for applicants who have attended a college or university in the United States as a full-time student and have completed two semesters of academic work with a "B" average (3.0 GPA or higher). Please contact the International Admissions office if you have questions about this requirement.

Application Deadlines

Fall: June 1 Spring: December 1

The Department of Economics accepts late applications after these official deadlines. However, there is no guarantee that a late application will be processed in time for the start of the semester. Students are encouraged to apply well in advance the application deadline.

International students who apply after the June 1 or December 1 deadline may not have time to obtain a student visa. Being admitted to the MA program in economics does not guarantee that a student will receive a student visa in time for the start of the semester. International students who are admitted to the MA program, but fail to obtain a visa in time, may defer admission for up to one year. All questions about student visas should be directed to the Office of International Admissions (<http://catalog.ucdenver.edu/cu-denver/graduate/international-admissions/>).

Applied Econometrics and Data Analytics Graduate Certificate

Application Process

Applicants for a Graduate Certificate Program will send the following documents to the Certificate Program Director:

- Graduate Certificate Application Form:
- Official Transcripts
- Resume
- Letter of interest

Upon approval of the student's admission by the Graduate Certificate Program, the program director will send the student's certificate admission file to graduate admissions. Graduate admissions will confirm the applicant's credentials, will determine whether the student meets the general academic requirements, will admit the student and inform the student of his/her admission to the Graduate Certificate Program.

Additional Requirements

- Students may be enrolled as a CU Denver graduate student in any discipline, or as a CU Denver non-degree seeking graduate student with a bachelor's degree.
- Students should have completed ECON 4811 Introduction to Econometrics or equivalent coursework, or have professional experience in statistical analysis.
- International students must submit TOEFL scores or otherwise satisfy the University's English Language Proficiency requirement.

Health Economics and Outcomes Research Graduate Certificate

Application Process

Applicants for a Graduate Certificate Program will send the following documents to the Certificate Program Director:

- Graduate Certificate Application Form
- Official Transcripts
- Resume
- Letter of interest

Upon approval of the student's admission by the Graduate Certificate Program, the program director will send the student's certificate admission file to graduate admissions. Graduate admissions will confirm the applicant's credentials, will determine whether the student meets the general academic requirements, will admit the student and inform the student of his/her admission to the Graduate Certificate Program.

Additional Requirements

- Students may be enrolled as a CU Denver graduate student in any discipline, or as a CU Denver non-degree seeking student with a bachelor's degree.
- Have completed ECON 4811 Introduction to Econometrics or equivalent coursework, or have professional experience in statistical analysis.
- International students must submit TOEFL scores or otherwise satisfy the University's English Language Proficiency requirement.

Programs

- Health Economics, MS (<http://catalog.ucdenver.edu/cu-denver/graduate/schools-colleges-departments/college-liberal-arts-sciences/economics/health-economics-ms/>)
- Health Economics, PhD (<http://catalog.ucdenver.edu/cu-denver/graduate/schools-colleges-departments/college-liberal-arts-sciences/economics/health-economics-phd/>)
- Economics, MA (<http://catalog.ucdenver.edu/cu-denver/graduate/schools-colleges-departments/college-liberal-arts-sciences/economics/economics-ma/>)
- Applied Econometrics and Data Analytics Graduate Certificate (<http://catalog.ucdenver.edu/cu-denver/graduate/schools-colleges-departments/college-liberal-arts-sciences/economics/applied-econometrics-data-analytics-graduate-certificate/>)
- Health Economics and Outcomes Research Graduate Certificate (<http://catalog.ucdenver.edu/cu-denver/graduate/schools-colleges-departments/college-liberal-arts-sciences/economics/health-economics-outcomes-research-graduate-certificate/>)

Faculty

Professors:

Laura M. Argys, PhD, University of Colorado Boulder
Brian J. Duncan, PhD, University of California at Santa Barbara
Daniel I. Rees, PhD, Cornell University
W. James Smith, PhD, University of Colorado Boulder
Buhong Zheng, PhD, West Virginia University

Associate Professors:

Andrew I. Friedson, PhD, Syracuse University

Hani Mansour, PhD, University of California at Santa Barbara

Assistant Professors:

Ryan P. Brown, PhD, Duke University
Chloe East, PhD, University of California Davis
Maulik Jagnani, PhD, Cornell University
Phillip Luck, PhD, University of California Davis
Andrea Velasquez, PhD, Duke University

Clinical Teaching Assistant Professors:

Enoch Cheng, PhD, University of California-Los Angeles
Ernest Boffy-Ramirez, PhD, University of California at Santa Barbara
Soojae Moon-Anderson, PhD, University of Colorado Boulder

Instructors:

Debbie Evercloud, PhD, University of Virginia
Nicholas Golding, MA, Ohio State University
Lawrence Hamelin, MA, University of Colorado Denver
Kyle J. Hurst, MA, Baylor University
Kyle Montanio, PhD, University of Rhode Island
George K. Quansah, MA, University of Colorado Denver
Yue Shen, PhD, Queen's University
Kawin Thamtanajit, PhD, University of Delaware
Chun-Chieh Hu, PhD, Syracuse University

Economics (ECON) Courses

ECON 5030 - Data Analysis with SAS (3 Credits)

Covers techniques for handling and interpreting economic data and conducting econometric analyses using SAS programming. Provides hands-on data management and analyses with large data sets with applications to business and economics, and prepare students for SAS Base Programmer certification exam. Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Statistics with Computer Applications(ECON 3811) or a similar course is strongly recommended as preparation for this course. Cross-listed with ECON 4030. Term offered: fall, spring. Max Hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

Typically Offered: Fall, Spring.

ECON 5050 - Special Economic Problems (1-8 Credits)

Provides students the opportunity to critically evaluate some practical and theoretical problems under supervision, and to present results of their thinking to fellow students and instructors for critical evaluation. Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Cross-listed with ECON 4050. Max Hours: 8 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

ECON 5073 - Microeconomic Theory (3 Credits)

Fundamental features of partial equilibrium theory of the firm, consumer and market. General equilibrium and welfare economic topics are examined. Features of the models that have empirical applications are accented. Restriction: Restricted to students with graduate standing and coreq ECON 5803 or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Term offered: fall. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to students with graduate standing and coreq ECON 5803 or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

Typically Offered: Fall.

ECON 5083 - Macroeconomic Theory (3 Credits)

Examines the major macroeconomic models within a common framework. Differences in the foundations, structure, and policy implications of the competing models are analyzed. Restriction: Restricted to students with graduate standing and coreq ECON 5803 or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Term offered: spring. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to students with graduate standing and coreq ECON 5803 or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

Typically Offered: Spring.

ECON 5090 - History of Economic Thought (3 Credits)

Traces the development of economic thought from ancient times to the 20th century. Considers the context in which these ideas were developed and their relationship to modern economic thought and contemporary economic problems. Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Microeconomics (ECON 2022) and Macroeconomics (ECON 2012) or similar coursework is strongly recommended as preparation for this course. Cross-listed with ECON 4090. Term offered: fall. Max Hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

Typically Offered: Fall.

ECON 5150 - Economic Forecasting (3 Credits)

Teaches forecasting techniques used in business and government to project trends and short-term fluctuations. Actual data are employed in instruction and labs. State-of-the-art spreadsheet and algorithms are introduced as part of the course work. Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Statistics with Computer Applications (ECON 3811) or similar coursework is strongly recommended as preparation for this course. Cross-listed with ECON 4150. Term offered: spring. Max Hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

Typically Offered: Spring.

ECON 5410 - International Trade (3 Credits)

Trade theory identifies who wins and loses from trade and why there are usually overall gains. Explores issues in immigration, globalization, income inequality, tariffs, dumping, the WTO, the environment, wages and growth strategies among others. Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Cross-listed with ECON 4410. Max Hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

ECON 5530 - Economics of Natural Resources (3 Credits)

Examines economic models of renewable resource management and models of exhaustible resource depletion. Analyzes decisions made by private firms and governments affecting the methods and rate of resource development. Examines the effects of resource development on economic growth and environmental quality and the effects of economic development on resource scarcity. Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Cross-listed with ECON 4530. Max Hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

ECON 5540 - Environmental Economics (3 Credits)

Economic approach to environmental problems: relationship between ownership structures, externalities and environmental damage; poverty, population pressure, and environmental degradation; valuation of environmental amenities; sustainability of economic activity; cost-benefit analysis applied to the environment; evaluation of alternative instruments for environmental control. Prereq: ECON 5073 with a B- or higher. Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Cross-listed with ECON 4540. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prerequisite ECON 5073 with a B- or higher. Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

ECON 5660 - Health Economics (3 Credits)

Introduces students to analytical skills and economic methods, and demonstrates how these methods can be applied to issues in health policy and management. Topics include: demand for health and medical care; health care costs, health reform, medical technology; market for health insurance; physicians, hospitals, and managed care; pharmaceuticals; regulations in the U.S. health care sector; demand for addictive substances; infant and maternal health; international comparisons of health care systems. Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Max Hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

ECON 5740 - Industrial Organization (3 Credits)

Examines the determinants of, and linkages between, market structure, firm conduct, and industrial performance. Topics include: determinants of the market size; impact of different market structures on prices and outputs; strategic behavior of firms to prevent entry or induce exit of rival firms; collusion; price discrimination; advertising; competition, monopoly, and innovation; implications for economic efficiency and public policy. Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Cross-listed with ECON 4740. Max Hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

ECON 5800 - Special Topics (1-3 Credits)

Current economics topics to be determined by the instructor.

Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

ECON 5803 - Mathematical Economics (3 Credits)

Application of mathematical techniques in micro-and macro-economic analysis. Topics include single and multivariable differentiation, basic matrix algebra, optimization, and integration with applications to economic models of consumption, production, market equilibrium, national accounting, and growth. Restriction: Students must be admitted to the MA in ECON, MS or PhD in Health Economics. Cross-listed with ECON 4803. Term offered: fall, spring. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Students must be admitted to the MA in ECON, MS or PhD in Health Economics.

Typically Offered: Spring.

ECON 5813 - Econometrics I (3 Credits)

Theory and application of statistical techniques used to analyze economic problems. Topics include simple and multiple regression models, simultaneous equation models, and the problems encountered in their application. Students formulate models, obtain data, estimate models, interpret results and, forecast. Restriction: Restricted to students with graduate standing and coreq ECON 5803 or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Term offered: fall. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to students with graduate standing and coreq ECON 5803 or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

Typically Offered: Fall.

ECON 5823 - Econometrics II (3 Credits)

Second course in the econometrics sequence, covering intermediate topics in cross-section and time series analysis. Topics include limited dependent variables, autoregressive and distributed lag models, longitudinal data analysis and unit roots, co-integration and other time-series topics. Prereq: ECON 5813 with a B- or higher. Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA). Term offered: spring. Max Hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5813 with a B- or higher Restriction: Restricted to Graduate and Graduate Non-Degree Majors or undergraduate majors in the Bachelor's to Master's program (ECON BA-BMA).

Typically Offered: Spring.

ECON 5840 - Independent Study (1-3 Credits)

Note: Students must submit a special processing form completely filled out and signed by the student and faculty member, describing the course expectations, assignments and outcomes, to the CLAS Graduate Academic Services Coordinator for approval. Term offered: fall, spring, summer. Repeatable. Max hours: 9 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 9.

ECON 5880 - Directed Research (1-6 Credits)

Students will engage in original research projects supervised and mentored by faculty. Students must work with faculty prior to registration to develop a proposal for their project and receive permission to take this course. Note: Students must submit a special processing form completely filled out and signed by the student and faculty member, describing the course expectations, assignments and outcomes, to the CLAS Graduate Academic Services Coordinator for approval. Term offered: fall, spring, summer. Repeatable. Max hours: 6 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 6.

Typically Offered: Fall, Spring, Summer.

ECON 5939 - Internship (1-6 Credits)

Note: Students must submit a special processing form completely filled out and signed by the student and faculty member, describing the course expectations, assignments and outcomes, to the CLAS Graduate Academic Services Coordinator for approval. Term offered: fall, spring, summer. Repeatable. Max hours: 9 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 9.

Typically Offered: Fall, Spring, Summer.

ECON 5950 - Master's Thesis (1-4 Credits)

Note: Students must submit a special processing form completely filled out and signed by the student and faculty member, describing the course expectations, assignments and outcomes, to the CLAS Graduate Academic Services Coordinator for approval. Max hours: 4 Credits.

Grading Basis: Letter Grade with IP

Additional Information: Report as Full Time.

ECON 6010 - Advanced Microeconomic Theory (3 Credits)

Recent and contemporary literature on fundamentals of economic theory. Consideration of value theory with particular emphasis on methodology, theory of demand, theory of the firm, and theory of distribution. Prereq: ECON 5073 with a B- or better. Restriction: Restricted to students with Graduate standing. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5073 with a B- or better Restriction: Restricted to students with Graduate standing

ECON 6020 - Advanced Macroeconomic Theory (3 Credits)

Considers general equilibrium and aggregative analysis in economic theory, with particular emphasis given to the theory of employment, consumption and investment. Prereq: ECON 5083 with a B- or higher. Restriction: Restricted to student with graduate standing. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5083 with a B- or higher. Restriction: Restricted to student with graduate standing

ECON 6022 - Federal Data for Health Research & Policy (1-3 Credits)

Students will develop the knowledge and skills required to effectively use a variety of federal and statistical data sets for health research and policy analysis. Each week is devoted to one or two federal statistical datasets-- data collection methods; why they are collected and what health issues they are designed to address; what population they represent and at what geographic scale. Most critically, students will be able to distinguish between questions that can be addressed with a public version of the data and questions that require restricted versions of the data that are protected by federal law and guidelines. Students will read, discuss and present research from various perspectives (Demography, Economics, Geography, Public Health, Sociology) using these data sources and apply their knowledge of data analysis from a variety of perspectives. Students will learn how to gain access to restricted data, how to protect individual anonymity with best practice disclosure avoidance techniques and will develop a research proposal for confidential research access.

Note: Familiarity with SAS (preferable) or other statistical software such as SPSS or Stata and statistics or data analysis is recommended.

Restriction: Restricted to degree-granting graduate programs. Cross-listed with HBSC 6022, GEOG 5022, and SOCY 5022. Max hours: 3 Credits. Grading Basis: Letter Grade

Restriction: Restricted to degree-granting graduate programs

Typically Offered: Spring.

ECON 6053 - Seminar In Applied Economics (1.5 Credits)

Familiarizes students with applied research in economics. Students read, discuss, and critique articles in economic journals. Emphasis is placed on research design and methods employed in these articles to prepare students for development of their own research projects in subsequent courses. Topics vary with instructor, and may include international economics, labor economics, monetary theory, public or finance and development economics. Prereq: ECON 5813 with a B- or higher. Coreq: ECON 5823. Restriction: Restricted to students with graduate standing. Repeatable. Max Hours: 6 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 6.

Prereq: ECON 5813 with a B- or higher Coreq: ECON 5823 Restriction: Restricted to students with graduate standing

ECON 6054 - Seminar In Applied Economics II (1.5 Credits)

Familiarizes students with state-of-the-art applied economic research. Students read, discuss, and critique articles published in economic journals. Note: Topics vary with the instructor. Prereq: ECON 5813 with a B- or higher. Coreq: ECON 5823. Restriction: Restricted to students with graduate standing. Term offered: spring. Repeatable. Max Hours: 6 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 6.

Prereq: ECON 5813 with a B- or higher Coreq: ECON 5823 Restriction: Restricted to students with graduate standing

Typically Offered: Spring.

ECON 6060 - Special Topics (1-3 Credits)

Special topics in advanced microeconomics. Consideration of value theory based upon methodology, theory of demand, and theory of distribution. Restriction: Restricted to students with Graduate standing. Introduction to Mathematical Economics (ECON 3801) or similar coursework is strongly recommended as preparation for this course. Restriction: Restricted to Graduate and Graduate Non-Degree majors. Max Hours: 3 Credits.

Grading Basis: Letter Grade

Restriction: Restricted to Graduate and Graduate Non-Degree Majors

ECON 6073 - Research Seminar (3 Credits)

Focuses on training students to do rigorous research in economics. Topics include the analysis of large data sets, further development of econometric skills, and writing a research paper. Note: Students attend lectures and also meet regularly with the instructor in the process of doing a sophisticated research project. Prereq: ECON 5073 and ECON 5823 with a B- or higher and either ECON 6053 or ECON 6054 with a B- or higher. Restriction: Restricted to students with graduate standing. Term offered: fall. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5073 and ECON 5823 with a B- or higher and either ECON 6053 or ECON 6054 with a B- or higher. Restriction: Restricted to students with graduate standing
Typically Offered: Fall.

ECON 6210 - Public Finance (3 Credits)

Advanced economic theory applied to the problems of public and private sector decision making. Applied topics in taxation, education, voting theory, welfare economics, externalities and public goods. Prereq: ECON 5073 with a B- or higher. Restriction: Restricted to students with graduate standing. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5073 with a B- or better Restriction: Restricted to students with Graduate standing

ECON 6410 - International Trade (3 Credits)

Contemporary and classical literature on theories of international trade. Topics include the determination of the pattern and terms of trade, the relationship between growth and trade, and commercial policy. Prereq: ECON 5073 with a B- or higher. Restriction: Restricted to students with graduate standing. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5073 with a B- or better Restriction: Restricted to students with Graduate standing

ECON 6420 - International Finance (3 Credits)

Topics in international finance, including exchange rate determination, the adjustment process, international financial markets and the international monetary system. Prereq: ECON 5073 with a B- or better. Restriction: Restricted to students with Graduate standing. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5073 with a B- or better Restriction: Restricted to students with Graduate standing

ECON 6610 - Labor Economics (3 Credits)

Advanced study of the labor market, including: history, nature, and function of labor organizations; the process of wage determination; and the formation of public policy. Prereq: ECON 5073 and 5813 with a B- or higher. Restriction: Restricted to students with Graduate standing. Term offered: spring. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5073 and ECON 5813 with a B- or higher Restriction: Restricted to students with Graduate standing

Typically Offered: Spring.

ECON 6666 - The Economics of Health Behaviors (3 Credits)

This course teaches an economic approach to studying health behaviors and the policies that affect them. Special attention will be paid to analyzing the effects of excise taxes and to understanding the quasi experimental approach to doing applied research in economics. Prereq: ECON 5073 and ECON 5813 with a B- or higher. Restriction: Restricted to students with Graduate standing. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5073 and ECON 5813 with a B- or higher Restriction: Restricted to students with Graduate standing

ECON 6770 - Development Economics (3 Credits)

This course provides a theoretical and empirical framework for analyzing economic problems in developing countries focusing on the role of individuals, families and institutions. Topics include poverty traps, human capital accumulation, gender discrimination, microcredit and violent conflict. Prereq: ECON 5073 and 5803 with a B- or higher. Cross-listed with ECON 4770. Term offered: fall. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5073 and ECON 5803 with a B- or higher.

Typically Offered: Fall.

ECON 6801 - Advanced Mathematical Economics (3 Credits)

Addresses economic dynamics, formal mathematical modeling in economics, and optimization in economic theory. Prereq: ECON 5803 with a B- or higher or permission of instructor. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5803 with a B- or higher.

ECON 6810 - Econometrics and Forecasting (3 Credits)

Covers advanced topics in cross-sectional and time-series analysis. Emphasizes important theoretical and empirical issues encountered in applied work in economics and business. Topics include problems of structural change and model misspecification, instrumental variables, simultaneous equations models, distributed lags, maximum likelihood estimation, qualitative and limited dependent variables, Arima models, vector-autoregressions, issues on exogeneity and causality. Through the use of econometric software programs and actual data, students learn to execute estimation and forecasting projects soundly. Prereq: ECON 5813 and 5823 with a B- or higher. Restriction: Restricted to students with Graduate standing. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5073 and ECON 5813 with a B- or higher Restriction: Restricted to students with Graduate standing

ECON 6840 - Independent Study (1-3 Credits)

Note: Students must submit a special processing form completely filled out and signed by the student and faculty member, describing the course expectations, assignments and outcomes, to the CLAS Graduate Academic Services Coordinator for approval. Term offered: fall, spring, summer. Repeatable. Max hours: 9 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 9.

Typically Offered: Fall, Spring, Summer.

ECON 7073 - Advanced Microeconomic Theory II (3 Credits)

This is a second-semester Ph.D. level course in microeconomics. The first semester course discussed consumer and producer theory; this course will discuss game theory, market equilibrium, and information economics. Prereq: ECON 5073 with a B- or better. Restriction: Restricted to students with Graduate standing. Term offered: spring. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: ECON 5073 with a B- or better Restriction: Restricted to students with Graduate standing

Typically Offered: Spring.

ECON 7661 - Health Economics I (3 Credits)

This is the first course in the Ph.D field sequence for Health Economics. The goal of this course is to familiarize you with the basic theory and empirical findings in the part of health economics which focuses on the market for medical care and the policy that surrounds it. Prereq or Coreq ECON 5823. Students must enroll in both courses concurrently or have completed ECON 5823 with a B- or better. Restriction: Restricted to students with graduate standing. Term offered: spring. Max hours: 3 Credits.

Grading Basis: Letter Grade

Co-requisite ECON 5823 OR prerequisite ECON 5823 with a grade of B- or better. Restricted to students with graduate standing.

Typically Offered: Spring.

ECON 7662 - Health Economics II (3 Credits)

This course teaches an economic approach to studying the various policies that affect these risky health behaviors. The extensive economic literature on the causes and consequences of risky health behaviors will be studied. Prereq or Coreq: ECON 5823 with a grade of B- or better. Restriction: Restricted to students with graduate standing. Term offered: fall. Max hours: 3 Credits.

Grading Basis: Letter Grade

Co-requisite ECON 5823 OR prerequisite ECON 5823 with a grade of B- or better. Restricted to students with graduate standing.

Typically Offered: Fall.

ECON 8990 - Doctoral Dissertation (1-10 Credits)

Designed to allow doctoral students to conduct research for course credit prior to advancement to candidacy. Note: Students must submit a special processing form completely filled out and signed by the student and faculty member, describing the course expectations, assignments and outcomes, to the CLAS Graduate Academic Services Coordinator for approval. Term offered: fall, spring. Repeatable. Max hours: 50 Credits.

Grading Basis: Letter Grade with IP

Repeatable. Max Credits: 50.

Additional Information: Report as Full Time.

Typically Offered: Fall, Spring.