

Economics Fall 2023 Course Listing

Fall 2023 enrollment is upon us! Read through this document thoroughly so you can effectively work with advisors and enroll yourself in classes best for you.

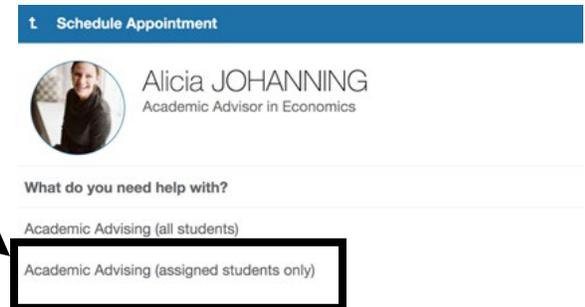
UPDATE FOR FALL2023: Advanced Econ Electives will be called “Core Electives” in Fall2023

Our definition of “advanced” is *not* the same as UW’s academic level description. To make this distinction clear, to ensure you choose the correct courses, we have changed the term from Advanced Econ Electives to Core Electives. This will go into effect Fall2023. All the courses that were formally Advanced Econ Electives will be called Core Electives. Only the term we use to classify the courses has changed. The level of difficulty, the content of courses, and the course pre-requisites will still stay the same.

Credits for these listed classes vary each semester and are determined based on enrollment size. Ensure you enroll for the correct number of credits by looking under “class notes” on CS&E. Economics classes *fill quickly and* enrolling on a waitlist is never a guarantee of enrollment. Waitlists will not be largely dealt with until the beginning of the Fall 2023 semester.

If you schedule an academic advising appointment with an Econ advisor on [Starfish](#), select “**Academic Advising (assigned students only)**”. You will be able to see more time slot availability.

A collective list of FAQs can be found here:
<https://econ.wisc.edu/academic-advising-faq/>



Honors in the Major

Econ 311: Intermediate Microeconomic Theory (Adv. Treatment/Honors course)

Professor Matteo Camboni, 3 credits

This course introduces the major analytical and theoretical tools necessary for advanced study in microeconomics. It will cover roughly the same material as Economics 301 but more in depth and with more math. However, in problem sets and exams, you will be expected to think before jumping to the math; you should not expect standardized exercises nor a study guide. This class is meant for honor students and is supposed to be challenging. It may feel uncomfortable but will help you develop the type of intuition and independence needed if you decide to continue your career in econ. This course will be taught at an accelerated pace and is best for those that want to exercise their already excellent analytical skills. It is designed to bridge fundamental concepts learned in Econ 101 to specified fields. This class will be small, designed for active participation. Also, there will be no TA sections.

This class is **required** for those doing Honors in the Economics Major. Those with Honors in the Major will have priority enrollment. Anyone without an honors designation must get permission to enroll from the advisor.

Pre-reqs: Econ 101 and 102, or Econ 111, and Math 222. Not open to those who already completed Econ301

In addition to you attending in-person classes regularly, here is more information from Prof Camboni:

- I post my lecture slides on Canvas.
- I don’t record lectures.
- I don’t share lecture notes.

General Electives in Economics

Econ 315: Data Visualization for Economists

Professor Gregory Pac, 3 Credits

This course will convey the fundamental concepts of economic data visualization and analysis. Students will develop a toolkit of skills to visualize, interpret, and communicate data. After examining the fundamentals of data visualization, emphasis is on methods using Tableau to design and develop dashboards, graphs, and charts to ease quick and accurate interpretation of economic relationships. Students will move beyond tabular results to display and demonstrate the findings of economic research.

This is a hands-on course which will require the use of a computer and to complete assignments in Tableau during and after class. The course will also provide a very brief overview of MS Excel. There will be 4 homework assignments where students will build visualizations using Tableau, an individual semester project, and a take-home final exam.

Pre-reqs: Econ 101 and 102, or 111; and Econ 310

In addition to you attending in-person classes regularly, here is more information from Prof Pac:

- All lecture slides (pdf) will be posted before each class meeting on Canvas.
- Lectures will not be recorded. Several short videos on how to use certain features in Tableau will be provided - these videos will either be recorded during class or will come from other sources (I will record this using Zoom). These are usually 5-10 minute videos where I show the class how to do something in Tableau and it is good for students to be able to see it again later. There are also videos online that do the same thing.
- No lecture notes will be provided; lecture slides will be on Canvas.

Econ 330: Money and Banking

Professor Steven Rick, 4 Credits

Students will study the fundamental concepts of financial markets and financial institutions and how those concepts apply to real world issues. The course will also focus on central banking and the conduct of monetary policy. International finance and its impact on the foreign exchange market will be analyzed. Students will be able to construct and evaluate economic models, their assumptions and conclusions to evaluate monetary theory. An aggregate demand and supply model will be constructed to analyze the transmission mechanisms of monetary policy. Students will acquire a diverse set of skills and strategies in mathematical reasoning/statistical and computational techniques/deductive logic/problem solving. Students will use mathematics, computational, and statistical techniques to analyze real world situations and policies. Students will then use economic analysis to critically evaluate public policy proposals. The course homework will be assigned weekly and can be found on the weekly class notes that will be emailed to the students.

Pre-reqs: Econ 101 and 102, or 111

In addition to you attending in-person classes regularly, here is more information from Prof Rick:

- I email the lecture notes and graphs to the students a day or two before each lecture.
- I don't record lectures.

Econ 390: The Economics of Race in the United States

Professor Steve Trost, 3 credits

NEW

In this course, students will learn about the sources and causes of, and potential policy responses to, racial economic inequality in the United States. The course will focus on aspects of the economy where there are differences in economic outcomes for African Americans and other racial minority groups. Using economic theory as a foundation, students will learn how these differences can result from disparities in how markets or policies treat or impact different groups. Through discussing current research, students will also learn how economists have studied and measured these differences. Topics covered will include healthcare, education, labor markets, housing and neighborhoods, wealth, immigration, and criminal justice. Knowledge of Principles of Microeconomics is assumed. Course work will consist of reading, short papers, exams, and class discussions/presentations.

Pre-reqs: Econ 101 or 111

Advanced (Core) Electives in Economics

Declared economics students must complete a **minimum of 2 Advanced Economics Electives** from UW Madison.

Econ 400: Introduction to Applied Econometrics

Professor Christopher McKelvey, 4 credits

Econ 400 provides an introduction to applied econometrics – the body of statistical methods economists use to evaluate empirical relationships and test economic theories. The focus is on the application of these methods to the analysis of real-world data. Students who best learn through hands-on experience in analysis should choose this class. Problem sets make extensive use of the statistical software package STATA. This course intends to provide econometric skills necessary to read and understand empirical papers which statistical models can be used to establish causal relationships. Topics include univariate & multiple regression, differences-in-differences, instrumental variables, limited dependent variables, time series, and fixed-effects models. This course is a good match for those interested in developing data analysis skills, which are useful for a wide variety of analytically oriented professions.

Pre-reqs: Econ 310. Not open to students with credit for Econ 410

Econ 410: Introductory Econometrics

Professor Kohei Yata, 4 credits

Econ 410 is also an introductory econometrics course but takes a more theoretical and mathematical approach. The focus is on deriving estimators and evaluating the properties of these estimators. The problem sets make use of the statistical software STATA but place less emphasis on the application of statistical methods and a correspondingly greater emphasis on proofs. The topics covered are largely identical to those covered in Econ 400; it is the more mathematical treatment of these topics in Econ 410 that differentiates these two courses. This course is a good match for those interested in pursuing graduate school in economics.

Pre-reqs: Econ 310 and Math 217, or 221. Not open to students with credit for Econ 400.

[What is the difference between Econ 400 and Econ 410?](#)

In addition to you attending in-person classes regularly, here is more information from Prof Yata:

- I post my lecture slides on Canvas.
- I will record lectures upon request.
- I share my lecture notes after class.

Econ 441: Analytical Public Finance

Professor Rebecca Glawtschew, 3 credits

This is a course in applied microeconomic theory, focusing on the role of the government in the economy. This course will examine the reasons for governmental intervention in the economy, the extent of that intervention, and the response of private agents to such governmental actions. The course aims to provide students with an improved ability to think about the logic and consequences of public policies and interventions. Topics covered include government policies concerning externalities, public goods, education markets, insurance markets, welfare programs, and taxation. Weekly problem sets are a combination of (1) solving and evaluating relevant economic models and (2) analyzing existing governmental policies.

Pre-reqs: Econ 301 or 311

In addition to you attending in-person classes regularly, here is more information from Prof Glawtschew:

- Lecture slides will be provided in advance on Canvas.
- Lectures will not be recorded; a previous semester's recordings will be available as a supplement to in-person attendance
- Course notes that supplement the lecture slides will be provided on Canvas after lecture has occurred.

Econ 455: Behavioral Economics

Professor Matthew Friedman, 4 credits

This course explores some of the systematic ways in which people fail to be perfectly rational; e.g. in succumbing to temptation, suffering from biases, failing to properly incorporate all available information when making decisions, forgetting things, or being influenced by the way a problem is framed. This class will look to the psychological and experimental literature for evidence of how real people behave, build simple models of this behavior, and then explore the economic and policy implications. This course is more theoretical than empirical and will assume familiarity with intermediate micro as well as basic calculus and probability. Students will complete a final capstone project based on what they have learned during the semester.

Pre-reqs: Econ 301 or 311; and Econ 310

Econ 458: Industrial Structure and Competitive Strategy

Professor Raymond Deneckere, 3 credits

This class analyzes competition among firms and its effect on industrial structure. Theoretical models and case studies are used, thereby challenging both analytical and synthetic skills. Covered topics include: Entry barriers, price competition dynamics, entry and exit strategies, and competitive tactics such as product differentiation, advertising and technological change. The unique course framework has students working on projects in a team-oriented environment, in a manner reflective of many workplace environments. Grading will be based on case analyses, review questions on class material, class participation, and a final research paper. The class size is designed to be small, so collaborative efforts are enforced. This is a great course for the entrepreneurially talented as well as those preparing for a career in consulting.

Pre-reqs: Econ 301 or 311

In addition to you attending in-person classes regularly, here is more information from Prof Deneckere:

- I do not use slides for the lectures.
- I do provide detailed lecture notes that students should read **before** attending class. Additional readings are also posted on the Canvas course page.

Econ 461: International Macroeconomics

Professor Stella Chan, 4 Credits

This course studies the theories and policy issues in international finance, or open macroeconomics. Topics such as the workings of the foreign exchange markets, the determination of the exchange rates, the relationships between trade, income, and financial flows, and the effects of macroeconomic policy under fixed and flexible exchange rate regimes will be explored. Students will discuss the causes and consequences of currency and financial crises and learn about the European Monetary Union. Problem sets, data analysis exercises, and exams constitute the class.

Pre-reqs: 302 or 312

In addition to you attending in-person classes regularly, here is more information from Prof Chan:

- I will be recording my lectures. However, I will not be posting the links to my recorded lectures online. Instead, students will need to email me with explanations as to why they miss the lecture if they want to obtain the link.
- I usually bring physical copies of “clean” handouts to class, which contains the outline of the lecture, printed definitions, and blank space for students to take notes and draw graphs on. The clean handouts are posted on Canvas before class starts (for students who take notes with a tablet), and the written handouts will be posted online after class on the same day.
- I sometimes show data and news articles using lecture slides, and I will post those lecture slides online after class as well.

Econ 475: Economics of Growth

Professor Simeon Alder, 3 credits

This course studies models of economic growth and relate them to country experiences. Topics include growth and technology, education, natural resources, government policies, and population growth. Questions asked are: How does technological change affect growth? What impact does education have on growth? What is the role of institutions on determining income levels and economic growth? Expect weekly readings, homework, in-class discussions, and calculus!

Pre-reqs: (Econ 301 or 311 and Econ 302 or 312); and Math 217 or 221

In addition to you attending in-person classes regularly, here is more information from Prof Alder:

- Incomplete slides will be available ahead of time. Material will be added during the lectures (graphs, equations, text,...). The “complete” slides are not published; the students are responsible for keeping up with the material.
- The course uses a textbook and I will post my own lecture notes for topics that are not covered in the textbook.
- I don't record lectures.

Econ 521: Game Theory and Economic Analysis

Professor Ben Bernard, 4 credits

Whether you are applying for a job, launching a startup, running for office, or playing poker, the outcome in many situations depends not only on your own decisions but also on those made by others. Game theory examines how to model such interactions formally and which outcomes to expect when everybody takes into account the objectives and decisions of others. In this course you will learn the main concepts and tools of game-theoretic analysis, how to analyze real-world strategic interactions in an abstract framework, and how to use the framework to make predictions about behavior. Applications of game theory extend well beyond economics to politics, sociology, life sciences, engineering, finance, computer science, and other fields.

Pre-reqs: Econ 301 or 311 and Math 222

In addition to you attending in-person classes regularly, here is more information from Prof Bernard:

- I provide lecture slides and lecture notes.
- I don't record lectures.

Econ 530: Insuring Life's Risks: Health, Aging, and Policy

Professor Corina Mommaerts, 3 credits

Students will study risks faced over the course of one's life, rationales for social insurance programs to protect against these risks, and costs and benefits of these programs. We will study risks (and insurance) such as sickness (health insurance), death (pensions and life insurance), losing one's job (unemployment and disability insurance), aggregate risks such as climate change and pandemics (home insurance), and others. Students will learn to think through questions like: why do some insurance markets function poorly (like pet insurance)? Why don't markets for some insurance products exist (like divorce insurance)? How do genetic testing and “Big Data” affect insurance markets? Students will review important economic theory, including behavior under uncertainty, adverse selection, and moral hazard, and discuss empirical research that uses econometric techniques to test theories and evaluate social programs. Classes will be a combination of lecture format and large-group discussion/debate. Students will be assessed on problem sets that focus on the economic theory, several 2-page critiques of reading assignments (a book and journal articles), class participation, and a midterm and final exam. Graphs, algebra, econometrics, and some calculus should be expected!

Pre-reqs: Econ 301 or 311 and Econ 310. Econ 400 or 410 recommended

In addition to you attending in-person classes regularly, here is more information from Prof Mommaerts:

- I post my lecture slides on Canvas.
- I don't record lectures.
- I don't share lecture notes, but I post the slides.

Econ 548: Economics of Healthcare

Professor Korinna Hansen, 3 credits

This is a course in applied microeconomics. It is designed for those who already understand basic consumer and producer theory, and focuses on how health care markets differ from other markets. Due to asymmetric information, uncertainty, government involvement, and externalities, the economics of the health care sector and its players (patients, providers, insurers, employers, and government) require a special analysis. You will learn how to apply microeconomic tools to study the medical care system and analyze the economic aspects of health care policy implications. In the process you will also learn the institutional structure of the US health care market. A large group paper/presentation requirement will provide experience on how to research and present academic material.

Pre-reqs: Econ 301 or 311

Econ 570 Data Analytics for Economists

Professor Kim Ruhl, 4 credits

This course teaches students the fundamentals of modern data analytics. These skills are needed to provide data-driven answers to relevant questions. Data analytics is a fundamental aspect of business management, academic research, and good governance. The course is taught using the python programming language, but programming is *not a prerequisite*. We will spend the first three weeks of class learning how to write python code. Following, the course focuses on cleaning and shaping data (a major challenge!), visualization, and statistical modeling. The course culminates in a group research project in which teams of students formulate a research question, find the appropriate data to analyze, and produce an executive report on their findings. Approximately half of the in-class time consists of students working on data programming problems: laptops are required.

Pre-reqs: ECON 310, (STAT 240 and 340), or (STAT 303 and 333); and ECON 301 or 311

****This is the same class as Econ690 Data Analytics taught previously; it just now has an official number! If you took Data Analytics with Kim Ruhl as Econ 690 previously, you cannot take Econ 570 now!**

In addition to you attending in-person classes regularly, here is more information from Prof Ruhl:

- I share all my in-class materials.
- I don't record lectures.

Econ 664: Issues in International Trade

Professor Lydia Cox, 3 credits

NEW

This is a new course with a new professor! The course will cover advanced topics in international trade and investment, including foreign direct investment, dynamic models of trade, and models of firm-level heterogeneity.

If you loved Econ 464 or international trade, this course is for you to consider.

When we have more information for you regarding this class's description and pre-reqs, we'll share with you!

Econ 690: Economics of Crime

Professor Francis Flanagan, 3 Credits

NEW

An economic analysis of crime and the criminal justice system. The course will use empirical analysis and economic theory to examine the causes and costs of crime, the purpose and effects of the criminal justice system, and the incentives of the agents involved, including those committing crime, police, prosecutors, lawmakers, and judges. Work expectations include weekly readings and homework (with some calculus), midterm exams, and a writing assignment. In-class discussions are a key component of the course and students are expected to participate.

Pre-reqs: Econ 301 or 311

Econ 695: Data Analysis and Big Data

Professor Matthew Friedman, 3 credits

This course teaches students how to extract economically meaningful information from data on a scale beyond what basic data-processing software packages (Excel, Access, SPSS) are designed to handle. This will include hands-on training that will teach students to measure spatial distance between data points, group data by physical location, calculate spatial statistics, visually represent spatial data using maps, and analyze relationships between variables using clustering algorithms and spatial regression analysis. Students who successfully complete the course will be able to build a database and analyze it using several econometric methods, including regression analysis, supervised and unsupervised machine learning. In addition, the course will introduce students to spatial data analysis using Geographic Information Systems (GIS).

These skills will be taught through guided practice and weekly exercises to verify understanding. We will focus on practical applications using 'real-world' examples – getting hands on programming experience while answering policy relevant research questions. Students will be evaluated based upon their weekly participation completing these exercises. Additionally, a capstone group project that require students to work collaboratively to demonstrate their mastery of course topics, producing a research paper based on their own novel analysis.

This class is designed for those who have little or no programming background in Python. Students are expected to work at least six (6) hours per week outside of class to complete assignments and review learning enrichment materials.

Pre-reqs: ECON 310, (STAT 240 and 340), or (STAT 303 and 333)

Please note that our schedules will be very busy during enrollment time. Please use **Starfish to schedule an appointment** or email **one** advisor from Economics- Alicia Johanning, Madison Hartup, or Sam Dziuk.

Remember, too, we have drop-in hours in 7238 Social Sciences during the following times:

Wednesday: 10AM-12PM, and 1PM-4PM (excluding Spring Break) in 7238 Social Sciences

For questions pertaining to pre-requisites, enrollment difficulties, or other logistical inquiries should be sent to our general Econ Advise account, econadvise@ssc.wisc.edu.