## DEPARTMENT OF ECONOMICS COURSE OFFERINGS

**Fall 2025** 

ECON2207 The Global Economy Aaron Medlin Prerequisites: ECON1101

This course aims to deepen your understanding of real world economic issues, while providing you with a stronger analytical base. We will focus on international trade theory and policy, and issues in international finance.

#### ECON2246 Impact of News on Financial Markets Hossein Kazemi Prerequisites:

ECON1131 or ECON1101

The impact of news on financial markets is examined in this course. More specifically, this course studies how Central Banks and Financial Markets react to economic and financial news. Using tools of economics and finance, the impact of macroeconomic data releases, business and financial news, as well as domestic and global political news on the financial markets will be measured and evaluated in this course. It further examines how the markets, including bonds, equities, commodities and foreign exchange markets, react to the news.

#### ECON2269 Aspects of Economic Growth (Dept) Prerequisites: ECON1101

This course aims at providing both the theory and empirics of modern economic growth theories. In addition to Classical and Neoclassical economic growth approaches, current views such as endogenous growth theory will be discussed. Emphasis will be placed on why some countries lag behind others and ways to solve this problem. The factors that are affecting economic growth such as technology, capital accumulation, change in employment, education, human capital, saving, energy consumption, and democracy are studied in detail. The course also addresses the role of financial markets and policy formation of economic growth.

# ECON2713 Global Horizons Beyond Boston College: Integrating Ethics, Economics, and the Common Good Can Erbil *Prerequisite: ECON1101*. Course is open only to seniors.

This seminar is ideal for seniors in the Economics and International Studies programs, aiming to apply their accumulated academic knowledge and their Boston College experience in a complex global context. "Global Horizons" invites students to explore the intricate interplay between global economic systems and ethical considerations, emphasizing a multidisciplinary approach that integrates insights from environmental science, public policy, sociology, psychology, and more. The course will emphasize the Common Good, social well-being, and the pursuit of a just society.

Throughout the course, students will engage with advanced economic theories and models, applying them to analyze and propose solutions to pressing global issues such as international trade, labor practices, and sustainable development. The course challenges students to consider the ethical dimensions of economic policies and practices, connecting their entire academic journey to Boston College's commitment to moral discernment and the Common Good, one last time before they graduate and start to make their own mark in the world beyond the Heights.

#### **Upper Level Electives**

#### **ECON3000 Economics of Discrimination Rahul Deb** *Prerequisites: ECON2201 or ECON2203*

This course investigates differences in economic outcomes (job interviews, wages, policing and judicial decisions, etc.) by group characteristics (gender, race, etc.). We explore the potential reasons for these differences and specifically, when these differences are the result of discrimination. We study the economic theories of the distinct forms of discrimination and the empirical work testing those theories. Throughout, we will discuss policies to alleviate group-level differences wherever present.

### **ECON3303 Economics of the Family Hanno Foerster** *Prerequisites: ECON2201, ECON2228*

This course uses economic tools to study decision-making and allocation of resources within families and explore their impact on the economy. The impact of gender differences will be examined historically in the US and across developed economies. Student participation will be an integral part of the course. Students will evaluate data and relate it to the theoretical model covered in class.

#### ECON3308 Game Theory in Economics Michele Biavati/Ryan Faulkner Prerequisites: ECON2201 or ECON2203

This course is an introduction to game theory. Game theory consists of a coherent set of concepts and analytical tools to examine interactive or strategic situations between people, that is, situations where the well-being of one actor depends not only on what s/he does but also on what others do. Hence in deciding how best to act, each person needs to consider how others are likely to act as well. Game theory has become a widely used tool of analysis in a wide range of disciplines, including economics, business, political science, law, and international relations.

#Enrollment limited; significant writing/research component. +Fulfills cultural diversity core requirement. For up-to-date information on Economics course offerings, please see http://www.bc.edu/economics

### ECON3324 Money and Financial Markets Hossein Kazemi Prerequisites: ECON2202 or ECON2204, ECON2228

Not open to students who have completed ECON3361. This course covers topics such as the significance and multiple functions of money in the economy, the behavior of interest rates, the banking system, financial markets, and the management of financial institutions. This course further covers the Federal Reserve System and the conduct of monetary policy, different asset classes, the foreign exchange market, and the international financial system. There is a heavy emphasis on use of market data and the analysis of economic releases-earnings reports, government policy statements, etc.-to provide a comprehensive introduction to the subject. Moreover, through an extensive use of Bloomberg in this class students learn how to access and analyze data and economic releases to provide a window into how modern practitioners in the discipline analyze financial markets.

#### ECON3331# Distributive Justice Uzi Segal Prerequisites: ECON 2201 or ECON2203

This course analyzes modern ideas of justice and fairness. We will discuss social choice questions and some recent experimental literature regarding fairness. This is a seminar and meetings involve class discussions of required readings of papers and short stories. Limited enrollment (12). Significant reading/writing/research component.

#### ECON3339 Applying Economic Theory in the Practice of Law Ken Felter Prerequisites: ECON2201, ECON2228

In this seminar, Applying Economic Theory in the Practice of Law, we will investigate, discuss, and write about how the economic theory that you are learning can be applied in several areas of substantive law and procedural rules. We will apply both traditional (neoclassical) and behavioral economic theory.

Among many other law and economics topics, we will explore how, thinking as economists, will enable you to analyze: the allocation and transfer of property rights, the effectiveness, efficiency, and fairness of criminal laws, the compensation, deterrence, and fairness goals of the tort law (accident) system, whether judicial remedies deter breaches of contracts, how the common law evolves, the effectiveness and efficiency of the laws and rules that govern the United States judicial system, why civil legal disputes are commenced and often, but not always, settle, the use or misuse of statistics and expert evidence, the efficiency and accuracy of jury trials, the effects of allocating attorneys' fees and feeshifting in civil litigation, Americans' retirement savings decisions, and how bias and noise cause errors in a wide range of legal decisions.

Throughout the semester, the emphasis will always be on how the economic theory that you are learning can be applied in the practice of law in real world situations.

#### ECON3340# Labor Economics Joanna Venator/Mark Kazarosian Prerequisites:

ECON2201 or ECON2203, ECON2228

This course will introduce students to the methodology of labor economics from both institutional and neoclassical perspectives. The principal emphasis will be on neoclassical theory and empirical work dealing with the supply and demand for labor; the operation of the labor market; the determination of wages; and the impact of trade unions and collective bargaining. Special emphasis will be placed on applications of theory and empirical findings to policy questions. It is highly recommended that students have a strong grasp of Calculus.

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#### ECON3353 Industrial Organization: Firms, Competition, and Strategy Gi Heung **Kim** Prerequisites: ECON1151, ECON2201 or ECON2203

We will study how firms make strategic decisions in competitive environments. Using real-world examples from industries such as healthcare, real estate, digital platforms, and others, we will examine how microeconomic models operate in practice. Topics include, but are not limited to, pricing and price discrimination, product and platform differentiation, entry deterrence, information asymmetry, and collusion. The goal is to provide a rigorous economic foundation for understanding market structures and to develop applicable solutions to challenges faced by managers and government policymakers.

### ECON3363 Micro Public Policy Analysis Joseph Quinn Prerequisites: ECON2201 or

This is a seminar on the economic analysis of current microeconomic public policy issues. During the first half of the course, students will read and discuss articles on selected topics and prepare first drafts of papers on topics of their choice. The second half of the course will be run like a professional economics conference. Students will read and critique others' papers, present their drafts to the class, and revise their papers on the basis of the comments received.

### ECON3365 Public Finance Christopher McHugh / Mark Kazarosian Prerequisites: ECON2201 or ECON2203 and ECON2228

This is a course in the microeconomics of the public sector. We will discuss the rationale for the government's role in a market economy, major expenditure programs, and the theory and structure of the tax system. The focus will be on the federal (as opposed to state and local) government's expenditure and tax programs, with special attention given to topics of current concern.

#### ECON3370 Topics in Applied Econometrics Christopher Maxwell Prerequisites: ECON2228

This is an advanced econometrics/data analytics course and extends ECON2228. Selected topics include linear and non-linear least squares estimation as well as maximum likelihood estimation, including logit/probit, ordered logit/probit, and poisson/negative binomial count regression models. A term-long research project is an important part of the course and will entail in-class presentations as well as a submission at the end of the semester. The analytics in the course will be Stata-based, but students, in doing their own work, should feel free to work in R, SAS, Python, or whatever their statistical language of choice might be. Limited enrollment.

### ECON3371 International Trade Farid Farrokhi Prerequisites: ECON2201 or ECON2203 Not open to students who have taken ECON3372

This course examines the forces shaping the global economy, with a focus on the impact of international trade on wages, jobs, and prices. Using a blend of economic models and accessible academic articles, the course aims to provide an understanding of trade theories and their real-world applications, including timely issues such as U.S. protectionist policies implemented through import tariffs.

ECON3372 International Finance Rosen Valchev/Liang Zhang Prerequisites: ECON2202 or ECON2204, ECON2228 Not open to students who have taken ECON3371 or ECON 3376

International financial markets, international trade and balance of payments issues will be studied by using analytical models of the open economy. Topics of particular interests are exchange rate determination, capital flows, trade flows, and other international linkages between economies. The course will apply the analytical tools of international economics to address macroeconomic aspects of current policy issues such as the global impact of the financial crisis, exchange rate policy, sovereign debt crises, and persistent trade deficits and international indebtedness.

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ECON3373# Impact Evaluation in Developing Countries Paul Cichello *Prerequisites: ECON2228* This course reviews advanced econometric techniques and research designs used to estimate the causal effect of programs or policies implemented in developing countries. Fixed effects, difference-in-difference, instrumental variable, and propensity score methods are discussed as are regression discontinuity, natural experiment, and randomized experiment designs. The economic rationale for such programs is also addressed. Topic areas include health, education, service delivery, insurance, and micro-finance.

#### ECON3375 Economic Growth and Development Pablo Guerron Prerequisites: ECON1151, ECON2202

This class explores economic growth over the past millennia. For most of its history, humanity did not

experience the type and quality of life as we know it today (e.g., electricity, running water, medicine, telecommunications, and transport). It is only during the second half of the 18<sup>th</sup> century when Europe (and later the U.S.) started to see economic growth. This growth started with the Industrial Revolution. In the first part of the course, we will study models that explain why economic growth is such a recent phenomenon. We will rely on models such as those proposed by Malthus to understand why the world did not grow at all for most of five millennia. We will also explore models that help us to understand the explosive economic growth experienced by the U.S. in the 19<sup>th</sup> and 20<sup>th</sup> centuries (and other countries more recently). As a by-product, there will be some discussion on the recent slowdown affecting most Western economies (the so-called Secular Stagnation). Importantly, we will talk about the increasing reliance on automation for production in the so-called 4<sup>th</sup> Industrial Revolution. That is, the impact automation may have on employment, welfare, and society. For example, we will explore how automation is contributing to inequality.

A crucial part of the course is to understand how research and development (R&D) and innovation contribute to growth. Therefore, the second part of the course will be devoted to studying R&D at the aggregate (macro) level but also at the industry level. We will use case studies in, for example, the pharmaceutical sector to study why R&D is such a crucial factor for growth but also difficult to implement and predict its impact on firms and ultimately on the economy. We will study the current development of vaccines and treatments for Covid-19. In addition, we also analyze the role of automation and big data (data mining and machine learning) in R&D.

As will become clear, programming is a vital skill in the 4<sup>th</sup> Industrial Revolution. To prepare students for this shifting labor landscape, *students will learn Python to manipulate data and solve models*. An example of this is to compute productivity using data from national accounts for different countries.

#### ECON3385 Health Economics Tracy Regan Prerequisites: ECON2201 or ECON2203, and ECON2228

This course is designed as an introduction to the study of health care economics with special emphasis on the pharmaceutical and health insurance industries. We will discuss the historical evolution of health care markets, current legislative changes, and public policy implications. Students will apply the tools learned in their introductory and intermediate microeconomics and econometrics courses to current and past topics in the health care industry. Presentation and discussion of current events and popular press books will familiarize students with recent topics in health care. International systems of health care will also be researched.

#### **ECON3389 Machine Learning for Economics Pietro Visaggio**

Prerequisites: ECON1151

Large scale data sets ("big data") become ubiquitous across many applied areas. The goal of this course is to provide an introduction to methods that allow us to deal with this situation. We focus on statistical learning techniques and high-dimensional statistics, and show how they can be applied in economics and business administration.

### ECON3391# Economics of Energy and the Environment Richard Sweeney Prerequisites: ECON2201, ECON2228

This course provides an overview of recent research in energy and environmental economics, with an emphasis on connecting policy questions of interest to available data and econometric methods. In the context of specific markets, we will first review the theoretical justifications for government intervention. We will then turn to the empirical evidence to see what recent economic scholarship has to say about a variety of energy policy questions, including: Should we ban fracking? Do oil pipelines reduce property values? What is the best way to promote renewable energy? Should we be more energy efficient? Students will be required to read and discuss academic articles each week, as well as write an empirical term paper.

### ECON3393 Computational Methods in Macroeconomics Paul McNelis, S.J. Prerequisites: ECON2202 or ECON2204

The focus of the course is on what we can learn from familiar macroeconomics models once we calibrate them and run them on a computer. In other words, the objective is to show how to gain relevant insight by subjecting these familiar models to "computational experiments." We show how these computational experiments help us to understand familiar patterns we see in macroeconomic data and to assess alternative policy interventions. The course will examine data, even large datasets, but the goal is to explain patterns and discuss/debate policy, not to forecast or empirically fit models to data. The models we study come from the classical, Keynesian, new-Keynesian frameworks, as well as models of exchange-rate dynamics and the Real Business Cycle explanations. The course finishes with examination of the Solow models of total-factor productivity-led growth, the Nordhaus Dynamically Integrated Climate Economy (DICE) model and the Romer model of endogenous growth.

### ECON3396 Quasi-Experimental Energy and Environmental Economics Edson Severnini *Prerequisites: ECON2201 or ECON2203, ECON2228*

This course offers an in-depth exploration of experimental and quasi-experimental methods for analyzing key issues in energy and environmental economics. Designed for advanced undergraduate students, it focuses on causal inference and policy evaluation in real-world contexts. The course covers a range of methodologies, including randomized controlled trials, difference-in-differences, instrumental variables, regression discontinuity designs, and synthetic control methods. These tools are applied to study topics such as the impacts of environmental regulations, the economic effects of climate change, the effectiveness of renewable energy subsidies and energy infrastructure investments, and the role of behavioral interventions in promoting energy efficiency. Students will engage with cutting-edge research, replicate empirical studies, and develop their own research proposals. By blending theoretical knowledge with hands-on data analysis, the course prepares students to design and evaluate evidence-based policies for addressing energy and environmental challenges.

### ECON 3397 Macroeconomics of Inequality Lukas Freund Prerequisites: ECON2201 or ECON2203, ECON2202 or ECON2204, ECON2228

This course offers an introduction to the analysis of economic inequality in macroeconomics. We will study the forces determining inequality across countries and across individuals within a country, as well as the interplay between inequality, business cycles, and macroeconomic policy. To examine these topics rigorously, the course makes extensive use of mathematical tools, so to succeed students should be proficient in algebra and calculus.

### **ECON3398 Economics of Defense Peter Devine** *Prerequisites: ECON2201 or ECON2203, ECON2202 or ECON2204, ECON2228*

This upper-division elective explores the economic foundation of national defense through the lens of industrial organization and technology-driven growth models. Students will analyze the structure and behavior of defense industries, examining monopoly and monopsony dynamics, procurement incentives, and the role of public-private partnerships in defense innovation. The course will also assess how technological advancements drive military capabilities, influence strategic competition, and shape long-term economic security. Case studies will highlight the interaction between defense policy, industrial policy, and economic constraints, equipping students with the analytical tools to evaluate defense-related economic decisions in a rapidly evolving global landscape.

This course provides guidance in developing a thesis topic and preparing a detailed proposal. must be completed prior to registering for ECON4498.	ECON4497