

Vancouver School of Economics

The University of British Columbia

Graduate Course Offerings in 2021-22 Winter Session

Registration by logging into the UBC Student Centre (SSC) via <https://ssc.adm.ubc.ca>

Course number, section number, followed by credit value in parenthesis. **(It is recommended that you do not purchase any textbooks until after the first class.)**

ECON 500 - 001 Lecture (3.0) & L1A (0.0) Discussion Group (Term 1) - Microeconomics

Instructor: Vitor Farinha Luz

An introduction to microeconomic theory. Topics include: consumer theory, producer theory, decision making under risk and uncertainty, general equilibrium and game theory.

Note: For economics M.A. students only.

ECON 502 - 001 Lecture (3.0) & L1A (0.0) Discussion Group (Term 1) - Macroeconomics

Instructor: Viktoria Hnatkovska

This course introduces students to modern macroeconomic theory, with a particular focus on dynamic general equilibrium models. We will start by defining the main theoretical concepts and by exploring the basic structure underlying these models. We will then apply the framework in the study of consumption decisions, asset pricing, economic fluctuations, and growth. The study of these topics is complemented with practical applications, ranging from the United States and Canada's historical experiences to crosscountry comparisons, to the 2008-09 financial crisis.

Note: For economics M.A. students only. Textbook:
TBA.

ECON 514 – 001 (3.0) (Term 2) - Information and Incentives

Instructor: Michael Peters

This is basically a course in advanced game theory with two objectives. The first is to show you how you can adapt the theory you know to fit with the problems that interest you. The second is to show you how you can use modern computational techniques to make your game theory useful in practice.

Applications involve experiments and behavioral economics, matching problems and networks, auctions and market design.

The course is hands on so you'll be dealing with data sets. You'll be introduced to computer algebra systems and algorithms and how to use them. Jupyter notebooks will be used extensively and knowledge of either the Julia or Python programming languages (or both) will be an asset.

Prerequisites: ECON 500

Textbook: All readings are provided on the course webpage.

ECON 516 – 001 (3.0) (Term 1) - Special Topics in Macroeconomics

Instructor: Giovanni Gallipoli

This course aims to provide students with a set of computational and modeling skills that can be easily employed for the analysis of macroeconomic phenomena, as well as to answer microeconomic questions relating to the optimal choices of individuals, households, firms and groups. The main purpose of this course is to introduce methods which allow to map different data into computational models: such methods can be used for the quantitative evaluation of government policies, to examine historical inequality patterns, to study individual and aggregate wage dynamics, to identify individual and households' responses to shocks, to rationalize firms' growth patterns and for many other problems. At the end of the course students should be able to apply such methods in their own PhD work, if they so wish, and to pursue independent quantitative analysis using computational methods learned in class. The course provides: (i) an in depth discussion of specific topics in Macroeconomics (this may include consumption, investment, unemployment, asset pricing, coordination problems or others, depending on specific interests of both teacher and class); (ii) an overview of general equilibrium analysis and its existing (and potential) applications to the topics listed above, with a special focus on applications which entail the use of economies where agents are heterogeneous and markets are incomplete; (iii) an overview of computational methods to numerically solve for optimal individual decisions of economic agents as well as for equilibria of the model economies discussed in class. Students will be asked to reproduce results from one or more applied and computational papers. Collaboration among students is strongly encouraged when solving computational assignments, which often involve sharing information and dividing tasks in the spirit of co-authorship. Based on past years' experience, by the end of the course students will be able to set up, analyze and numerically compute equilibrium models with heterogeneity. In fact, many students end up making significant use of these methods for their own dissertation research (often regardless of field).

Note: This is an advanced topics course. For Ph.D. students only.

Prerequisites: ECON 600, 601, 602, 603, 626 & 627.

Textbooks: TBA

ECON 526 – 001 Lecture (3.0) & L1A (0.0) Discussion Group (Term 1) - Mathematics for Economists

Instructor: Hiro Kasahara

This is a course of mathematics for students in our Economics MA program. It covers mathematical tools that often appear in the modern economic literature. It is essential for the students' success in other courses to master the materials taught in this course.

Note: For economics MA students only.

Textbooks: Materials provided by the instructor

ECON 527 – 001 Lecture (3.0) & L1A (0.0) Discussion Group (Term 1) - Econometric Methods of Economic Research

Instructor: Vadim Marmer

This course is an introduction to the theory and practice of econometrics. The static linear regression model is the main focus of the course although extensions to dynamic and nonlinear models and simultaneous equations are pursued as well. Estimation and testing methods discussed will include those based on ordinary least squares, generalized least squares, generalized method of moments and instrumental variables, and maximum likelihood. Small sample results will be discussed; however, the main focus will be placed on the large sample theory.

Note: For economics M.A. students only.

Textbook: Russell Davidson and James G. MacKinnon, *Econometric Theory and Methods*, Oxford University Press.

ECON 531 - 001 (3.0) (Term 2) - Economic History of Modern Europe

Instructor: Felipe Valencia Caicedo

Why are some countries rich and others poor? How far back can we trace these economic disparities and how do they persist in time? Ultimately, what are the “deep-rooted” determinants of economic growth and development in the long run? We will document the staggering differences between (and within) countries and cover some of the theories that have been proposed to explain them. We will also spend time studying various mechanisms of transmission behind historical persistence and change. As we go along, we will make emphasis on the methods used in modern empirical research in order to give you a feel for the recent advances in the novel field of historical development. As part of the course, students will write an original (empirical) research paper on a topic of their choosing.

Prerequisites: ECON 500, 502, 526 & 527.

Textbook: TBA

ECON 541 - 001 (3.0) (Term 2) - Behavioural Development Economics

Instructor: Matt Lowe

In this course I will teach a range of concepts from behavioural economics and describe empirical applications (primarily) in developing countries. Topics include self-control problems (e.g. why can't I stop eating biscuits?), social preferences and social signalling (e.g. why am I nicer when other people are watching?), moral values around the world, and psychological poverty traps.

Prerequisites: ECON 500, 502, 526 & 527. Textbook:

TBA.

ECON 542 - 001 (3.0) (Term 1) - Economic Development II Instructor:

Instructor: Munir Squires

From 2014. This course focuses broadly on questions related to economic development and the behavior of households and institutions in developing nations. The aim is to understand key factors that affect poverty alleviation and inequality. The course works through a selection of papers currently at the frontier of development economics research. Topics include informal institutions, field experiments, household behaviour, political economy, environment, health, conflict, and gender.

Note: This is an advanced topics course. For Ph.D. students only.

Prerequisites: ECON 600, 601, 602, 603, 626 & 627. Textbooks:

TBA.

ECON 543 - 001 (3.0) (Term 1) - Economics of Transition Economies

Instructor: Thorsten Rogall

Description to be added soon.

ECON 544 – 001 (3.0) (Term 2) - Political Economy and Institutions

Instructor: Claudio Ferraz

This course examines the reasons why countries democratize, what makes people vote in democracies and what type of policies voters reward. We will introduce and test basic models of political competition and present failures of democracies that occur in developing countries such as clientelism, vote-buying, and political violence. We will then introduce agency models and discuss problems of asymmetric information that leads to corruption and discuss anti-corruption policies. We will then move to lectures on financing democracies with campaign contributions and the role of lobbying for policy formation. We will discuss the role of media in democracies and finish the course with lectures on the internet and social media and the rise of extremism and populism around the world.

ECON 546 – 001 (3.0) (Term 2) - Monetary Theory and Policy**Instructor: Victoriya Hnatkovska**

This course introduces students to the key theories and advancements in monetary economics. On the theory side, we will discuss general equilibrium models of money and models of the short-run real effects of monetary policy. Among the topics covered are money-in-the-utility-function models, cash-in-advance models, money and public finance, the credit channel of money, models of time consistency, interest rates and monetary policy, and the role of banks in the transmission of monetary policy. On the empirical front, we will discuss the identification of monetary policy shocks, their effects on the economy, and spillovers of monetary policy across countries and regions.

ECON 550 - 001 (3.0) (Term 2) Government Finances: Expenditures**Instructors: Marit Rehavi and Kevin Milligan**

ECON 550 is a graduate (Masters level) course in public economics with a focus on the design of social programs. The Topics include: local public goods, health care, poverty relief, and disability and unemployment insurance. These issues will be explored from both a theoretical and an empirical perspective. Graduate students from outside economics may enroll with the permission of the course faculty if they have appropriate microeconomic theory and econometric preparation.

Prerequisites: ECON 500, 502, 526 & 527.

ECON 550 - 002 (3.0) (Term 2) - Government Finances: Expenditures**Instructors: Marit Rehavi and Kevin Milligan**

ECON 550 is a PhD field course in public economics with a focus on the design of social programs. The topics covered include: local public goods, health care, poverty relief, and disability and unemployment insurance. These issues will be explored from both a theoretical and an empirical perspective. PhD students from outside economics may enroll with the permission of the course faculty if they have appropriate microeconomic theory and econometric preparation.

Note: ECON 550 does not cover any topics in taxation. ECON 551 covers the economics of individual and corporate taxation.

Prerequisites: ECON 500, 502, 526 & 527.

ECON 551 – 001 (3.0) (Term 1) - Government Finance**Instructor: Terry Moon**

This course covers topics in public economics focused on the revenue side of the government budget: (1) *Optimal Income Taxes & Labor Supply*, (2) *Savings & Retirement*, (3) *Optimal Capital and Corporate*

Taxes (4) Dividend and Capital Gains Taxes, (5) Investment and Stock Market, (6) Real Estate and Property Taxes, and (7) Consumption Taxes. Additionally, we'll discuss topics related to taxation in developing countries (i.e., tax enforcement and evasion), international taxes and profit shifting, inequality, and wealth taxation. Finally, students will learn how innovation and competition policies shape the growth of our economy and challenges policymakers face to foster innovation and competition in the economy. The course will tightly integrate conceptual frameworks with empirical applications to delve deeply into these topics, with **the main goal of helping students develop their own job market paper ideas**. Importantly, students will see **how topics in public economics closely overlap with topics in labor, social security, macro, finance, real estate, development, international, innovation, and I.O.**; therefore, no matter which fields students end up choosing, they will benefit from topics introduced in this course.

ECON 555 – 001 (3.0) (Term 2) - International Trade and Spatial Economics
Instructor: Victor Couture

This is a graduate level course in international trade and spatial economics. Two thirds of the lectures will cover recent theories of international trade and their empirical applications. The last third of the lectures will cover applications of these theories to spatial and urban economics.

Prerequisites: ECON 500, 502, 526 & 527

Textbooks: Advanced International Trade: Theory and Evidence 2/E (Rev) by Feenstra

ECON 556 - 001 (3.0) (Term 2) - International Finance
Instructor: Michael Devereux

This course examines recent issues in international finance and open economy macroeconomics. Topics covered will include: (1) the interaction of international capital markets and aggregate fluctuations, (2) the consequences of alternative international asset market structures, (3) models of current account determination, (4) models of nominal and real exchange rate determination and the international monetary transmission mechanism, and (5) models of currency and debt crises.

Prerequisites: ECON 500, 502, 526 & 527. Textbook:
TBA.

ECON 560 – 001 (3.0) (Term 1) - Economics of Labour
Instructors: Raffaele Saggio and Florian Hoffmann

This course introduces students to additional theoretical concepts in labor economics and covers recent empirical work in the field. Along the way, we will cover also several methodologies often used in

empirical work such as Difference-in-Differences estimation (DiD), Instrumental Variables (IV), Regression Discontinuity Designs (RDD) and structural methods.

Note: This is an advanced topics course for PhD students only.

Prerequisites: ECON 600, 601, 602, 603, 626 & 627.

Textbook: Readings provided by the instructor.

ECON 561 – 001 (3.0) (Term 2) - Topics in Industrial Relations

Instructor: David Green

In this course, we will examine the determinants of economic inequality. We will start by looking at models of wage and employment determination, with an emphasis on human capital models. We will then use that as a framework for evaluating the impact of key forces and institutions on inequality: discrimination, immigration, minimum wages, and unions among others. For PhD students, the course is designed as a continuation of 560 with some small repetition where needed to give MA students the necessary background.

Textbook: TBA.

ECON 562 – 001 (3.0) (Term 2) - Research Design and Policy Evaluation in Economics

Instructor: Marit Rehavi

Econ 562 will cover modern methods of causal inference with a particular emphasis on the reduced form methods used in applied microeconomic fields (e.g. labor, public, crime, health, development economics, etc.). Topics covered may include randomized controlled trials, differencing methods, instrumental variables, regression discontinuity, covariate selection methods (e.g. Lasso), treatment effects, and random forests. The emphasis of the course will be on the identifying assumptions and appropriate application of these methods.

Econ 562 is open to M.A. students who have completed ECON 527 and Ph.D. students in economics. Ph.D. students in other fields with appropriate preparation may enroll at the instructor's discretion.

ECON 565 – 001 (3.0) (Term 1) - Market Structure and Business

Behaviour Instructor: Sam Hwang

We will discuss empirical papers in which economic models are estimated with a view to introducing you to a variety of structural estimation method. Last year's course syllabus which includes the list of papers to be discussed is available at https://www.dropbox.com/s/q9rqxhr0ezpn2td/syllabus_2020.docx?dl=0. Your grade will be based on presentations and numerical exercises.

Note: This is an advanced topics course. For Ph.D. students only.
Prerequisites: ECON 600, 601, 602, 603, 626 & 627. Textbook:
TBA.

ECON 567 – 001 (3.0) (Term 2) - Organization Theory and Non-Market Allocation
Instructor: Paul Schrimpf

This course focuses on empirical methods in industrial organization. Topics covered include: production function and productivity estimation, demand for differentiated products, models of entry and market structure, and dynamic models of firm investment.

Prerequisites: ECON 500, 502, 526 & 527.
Textbook: TBA.

ECON 573 – 001 (3.0) (Term 2) - Graduate Environmental Economics
Instructor: Patrick Baylis

This is a graduate-level course in environmental economics designed to help students understand how to analyze and conduct empirical research. The first part of the course will focus on conceptual treatments of externalities, public goods, and pollution regulation. The second part will cover standard applied econometric approaches in the field, and the third part will return to selected topics in the field along with content designed to assist students with their own empirical research project. Every class will include a student presentation section in which a pre-assigned student will critically analyze and present an empirical paper in the field. The course is suitable for both M.A. and Ph.D. students.

Pre-Requisites: ECON 500, 502, 526 and 527.
Textbook: None required, but "A Course in Environmental Economics: Theory, Policy, and Practice." By Phaneuf and Requate is optional.

ECON 590B – 001 (3.0) (Term 2) - Special Advanced Course: Topics in International Finance
Instructor: Michael Szkup

This is a 2nd-year course in theory and methods of international finance/macro focusing primarily on the role of informational and financial frictions. We will cover in detail a number of theoretical and

applied topics. Among theoretical topics that we will study are noisy rational expectations, thin markets, global games (static and dynamic), supermodular games, and dynamic coordination models with frictions. On the more applied side, we will cover topics such as sovereign default modes (including newest developments), models with heterogeneous firms, models of financial crises, leverage and firms' investment choices. The course will be structured as a workshop where students will take an active role in presenting required reading.

Note: This is an advanced topics course. For Ph.D. students only.

Prerequisites: ECON 600, 601, 602, 603, 626 & 627.

Textbook: TBA.

ECON 594 (6.0) (Offered in 2022 Summer Session) - Applied Economics

Instructor: TBA

The purpose of this course is to provide students with experience in applied research. Attention is devoted to problems encountered in combining economic theory with econometric methods in empirical research. Each student is required to undertake an empirical research project the results of which are summarized in an extended essay.

Note: For M.A. Economics students only.

ECON 600 - 001 Lecture (3.0) & L1A Discussion Group (0.0) (Term 1) - Microeconomics I

Instructor: Wei Li

ECON 600 and 601 will cover standard microeconomic techniques for economics PhD students.

ECON 600 will cover choice theory, consumer theory, producer theory, general equilibrium, and choice under uncertainty.

Note: This is a course for economics Ph.D. students. Exceptional students from other backgrounds may be considered.

Prerequisite: Thorough understanding of the elements of multivariate calculus, working knowledge of basic probability and proof strategies.

Recommended textbook: no single book is used exclusively. Course materials will be drawn from the following textbooks and related papers.

- Mas-Colell, Andreu, Michael Dennis Whinston, and Jerry R. Green. Microeconomic theory. Vol. 1. New York: Oxford university press, 1995.
- A Course in Microeconomic Theory, David M. Kreps, Princeton University Press, 1990.
- Microeconomic Analysis, Hal R. Varian, W. W. Norton and Company, 1992.

ECON 601 - 001 Lecture (3.0) & L1A Discussion Group (0.0) (Term 2) - Microeconomics II

Instructor: Vitor Farinha Luz

ECON 600 and 601 will cover standard microeconomic techniques for economics PhD students. ECON 601 will cover topics in static and dynamic games, bargaining, contract theory, adverse selection and mechanism design.

Note: This is a course for economics Ph.D. students. Exceptional cases may be considered.

Prerequisite: ECON 600.

Textbook: Mas-Colell, Andreu, Michael Dennis Whinston, and Jerry R. Green. Microeconomic theory. Vol. 1. New York: Oxford university press, 1995.

ECON 602 - 001 Lecture (3.0) & L1A Discussion Group (0.0) (Term 1) - Macroeconomics I

Instructors: Henry Siu

This course introduces students to modern macroeconomic theory, with a particular focus on dynamic general equilibrium models. We will start by defining the main theoretical concepts and by exploring the basic structure underlying these models. We will then apply the framework in the study of consumption and investment decisions, economic fluctuations, and growth. The study of these topics is complemented with practical applications that involve the use of numerical methods.

Note: For economics Ph.D. students only.

Textbook: TBA

ECON 603 - 001 Lecture (3.0) & L1A Discussion Group (0.0) (Term 2) - Macroeconomics II

Instructors: Giovanni Gallipoli

The course is organized around a set of topics, including aggregation in macroeconomics, optimal taxation, consumption and insurance, unemployment, search and money, heterogeneity in macroeconomics. There are two objectives to the course: (1) familiarize students with topics which are commonly studied in the macroeconomic literature; (2) provide some basic techniques used in the analysis of such topics.

Note: For economics Ph.D. students only.

Prerequisite: ECON 602. Textbook:

TBA.

ECON 622 – 001 (3.0) (Term 1) - Computational Economics with Data Science Applications
Instructor: Paul Schrimpf

This is a graduate topics course in computational economics, with computational tools used in modern economic research; applications of data science and machine learning in economics; generating data from the web and text; software tools for reproducible research.

Prerequisites: ECON 627 (or equivalent)

Textbook: Readings provided by the instructor.

ECON 626 - 001 Lecture (3.0) & L1A Discussion Group (0.0) (Term 1) Econometric Theory I
Instructor: Kevin Song

This course introduces theoretical foundations for statistical inference and econometric methodologies that are useful in empirical research in economics. The topics covered in the course include measure-theoretic probability and statistical inference, analysis of linear regression models, and basic concepts of asymptotic inference.

Note: For economics Ph.D. students only.

Textbook: TBA

ECON 627 - 001 Lecture (3.0) & L1A Discussion Group (0.0) (Term 2) Econometric Theory II
Instructor: Vadim Marmer

A continuation of Econ 626, this course consists of two parts. In the first part, we begin by discussing identification and generalized method of moments (GMM) estimation of linear models with endogeneity, including simultaneous equations models. The course then proceeds to the theory of extremum estimators, which covers nonlinear econometric models including nonlinear GMM. The second part of the course covers topics in time series econometrics including stationarity and ergodicity, mixing and linear processes, heteroskedasticity and autocorrelation consistent variance estimation.

Note: For economics Ph.D. students only.

Prerequisite: ECON 626. Textbook:

TBA.

ECON 628 – 001 (3.0) (Term 1) - Topics in Applied Econometrics I
Instructor: Raffaele Saggio and Florian Hoffmann

This course surveys modern methods of microeconomic research with an emphasis on quasiexperimental research designs and methods that rely on longitudinal (“panel”) data.

Note: For economics PhD students only.

Prerequisites: ECON 600, 601, 602, 603, 626 & 627. Textbook:

TBA

ECON 629C – 001 (3.0) (Term 2) - Topics in Applied Econometrics II

Instructor: Kevin Song

This course is aimed toward second-year PhD students in economics and covers advanced topics in nonparametric econometrics and causal inference. The course consists of two parts. The first part covers the basic theoretical properties of various nonparametric and semiparametric estimation methods such as kernel and series estimation of a regression model, data-dependent choice of tuning parameters, and several semi-parametric models such as partially linear and single index models. In the second part, the course introduces and discusses various methods of causal inference in econometrics including recent developments in the literature.

Note: This is an advanced topics course. For Ph.D. students only.

Prerequisites: ECON 600, 601, 602, 603, 626, 627 & 628.

Textbook: A typed up lecture note will be provided weekly.

ECON 640 - 001 (3.0) (Terms 1 and 2) - Ph.D. Research Seminar

Instructor: Nathan Nunn

A seminar course to assist students in identifying a viable research topic for a Ph.D. dissertation. Students who have passed the comprehensive examinations must be registered in Econ 640 until a dissertation prospectus has been successfully presented. In each year in which the student is enrolled in 640, a research or survey paper must be submitted for approval to two faculty members, one of which is the faculty member in charge of 640.

Attendance is mandatory for post-comp Ph.D. students.

Note: For economics Ph.D. students only.