2020/1 - ECO-4001A INTRODUCTORY MATHEMATICS FOR ECONOMISTS

Autumn Semester, Level 4 module
(Maximum 189 Students)
UCU: 20 Organiser: Dr Bahar Ghezelayagh
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Coursework
Timetable Slot:D3\, H2\

Are you surprised to find that studying economics requires some maths skills? Does this worry you? If so, this module will help you overcome these fears and show you that the maths techniques used in economics are actually not as hard as you might think. This module will provide you with a good grounding in basic mathematical techniques and prepare you for any second and third year modules which require maths skills. You'll learn how to apply your maths in an economic context during the lectures, seminars and in two computer lab sessions in which you'll use Excel. In this module, you'll cover some of the material normally covered in a typical A-level course. At first, you'll develop a basic understanding of linear and non-linear functions, gradually advancing to using differential calculus and constrained optimisation. Throughout the module, you'll focus on the mathematical techniques and their economic applications. In computer lab sessions, you'll learn how to use Excel to draw graphs of functions, solve simultaneous equations and optimisation problems. By the end of the module, you'll be able to correctly identify appropriate mathematical techniques and apply them to economics. You'll also know how to use Excel to solve some mathematical problems and draw graphs of functions. In addition, you'll be well prepared for any second and third year modules which require maths skills.

2020/1 - ECO-4002A THE ECONOMICS OF SOCIETY

Autumn Semester, Level 4 module
(Maximum 160 Students)
UCU: 20 Organiser: Professor Duncan Watson
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Coursework
Timetable Slot:F2/-A2\ E1

This module emphasises the application of economics to real-world dilemmas. It focuses on how applied economics can be used to study 'wicked problems'. Such problems, sometimes referred to as 'social messes', are often highly confrontational: How can we control problems of crime? Why do societies suffer significant complications arising from drug addiction? How can we reduce deaths from terrorism and war? Exploring the value of the economic approach in transforming policy recommendations, you'll consider how economics can play a crucial part in such debates.

2020/1 - ECO-4003A MATHEMATICS FOR ECONOMISTS

Autumn Semester, Level 4 module
(Maximum 120 Students)

UCU: 20 Organiser: Dr Emiliya Lazarova
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Coursework
Timetable Slot:H2\, A2/

For Economists, Mathematics is a tool to carry out analysis of significance to social and economic life. Throughout this module you'll learn to think analytically and critically to solve complex problems, consolidating your A-level Mathematics knowledge to gain competence in identifying and applying the right mathematical techniques to a wide variety of economics contexts. You'll develop a set of transferrable quantitative skills by reviewing relevant algebraic and non-algebraic functions, progressing to differential calculus and its application to (constrained) optimisation. You'll also learn how to use Excel to produce graphs and solve equations.

2020/1 - ECO-5003A MATHEMATICAL ECONOMICS

Autumn Semester, Level 5 module
(Maximum 70 Students)
UCU: 20 Organiser: Dr Stefania Sitzia
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Examination with Coursework or Project
Timetable Slot:E2/-C3, H3/, D3
Exam Paper(hrs):2 Exam Period:SPR-02

BEFORE TAKING THIS MODULE YOU MUST TAKE ECO-4001A OR TAKE ECO-4003A

Students can only enrol on this module if they obtained a mark of 60% on ECO-4003A or 70% on ECO-4001A - Please seek further advice if you have any concerns about your suitability for this module. The module provides an introduction to mathematical techniques for economists, covering linear algebra, comparative static analysis, optimisation, calculus, applications (e.g. growth models, market equilibria, constrained utility maximisation and cost minimisation). It is particularly useful if you intend to undertake postgraduate study in Economics.

2020/1 - ECO-5005A INTERNATIONAL TRADE AND INTEGRATION

Autumn Semester, Level 5 module
(Maximum 89 Students)
UCU: 20 Organiser: Dr Jibonayan Raychaudhuri
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Examination with Coursework or Project
Timetable Slot:E1\, A2/
Exam Paper(hrs):2 Exam Period:SPR-02

BEFORE TAKING THIS MODULE YOU MUST TAKE ECO-4005Y AND TAKE ECO-4006Y

Developing your understanding of the international economy, this module examines global flows of goods through international trade using a number of classical “core models” of international trade theory, as well as more recently developed models of “New” trade theory. It also deals with trade policy and its effects on overall economic welfare, and with controversial issues like strategic trade policy.

2020/1 - ECO-5006A INTRODUCTORY ECONOMETRICS

Autumn Semester, Level 5 module
(Maximum 300 Students)
UCU: 20 Organiser: Dr Georgios Papadopoulos
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Examination with Coursework or Project
Timetable Slot:G2+, H1
Exam Paper(hrs):2 Exam Period:SPR-02

BEFORE TAKING THIS MODULE YOU MUST TAKE ECO-4001B

Are you interested in working with data? Would you like to be able to make economics predictions, understand how people/societies make choices, or test an economic theory? If so, this module will introduce you the theoretical and empirical techniques you need to satisfy these interests. This module will introduce you to econometrics, which is a combination of economic theory, mathematical economics and economic statistics. You’ll acquire a good understanding of how to structure an empirical model that is based on economic theory or intuition, as well as obtain numerical estimates of these models and test whether the estimated association hold in the population. In addition, as your seminars will take place in the computer labs, you’ll gain skills in analysing data using a specialist software package. In the first part of the module, you will be introduced to the idea of causality in the relationship between variables. You’ll then be shown how to estimate simple association between two variables using a simple linear regression model. It will become clear to you that these models do not necessarily capture the causal relationship between the two (i.e. correlation does not imply causation!). You will then be introduced to the Multiple Linear Regression model, which to some extend allows estimation of causal relationships, given some assumption in the data and the population hold. You will learn how to estimate these models as well as how to interpret and test their estimated parameters. Real world applications will be considered throughout. By the end of the module you’ll be able to estimate appropriate regression models, identify problems that may arise and know how to address them. You’ll also be able to test economic theory using empirical techniques and use a statistical software package. In addition, you’ll be well prepared for any final-year modules which require statistical/econometric skills.

2020/1 - ECO-5007A INTERMEDIATE MICROECONOMICS

Autumn Semester, Level 5 module
(Maximum 288 Students)
UCU: 20 Organiser: Dr Amrish Patel

(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Examination with Coursework or Project
Timetable Slot:E1/, H2
Exam Paper(hrs):2 Exam Period:SPR-02

BEFORE TAKING THIS MODULE YOU MUST TAKE ECO-4001A OR TAKE ECO-4003A AND TAKE ECO-4005Y AND TAKE ECO-4006Y

What do a politician, a social media company and a supermarket shopper have in common? They all make choices. But what will they choose? What is a good choice? Should we try to change their choice? Understanding choices and how they are made is critically important. This module will see you explore the ways economists think about making choices. Whether those choices are in the context of uncertainty or interaction with others, you'll develop models for predicting and analysing them. You'll also develop skills of reasoning, argumentation and applying mathematical analysis to solve real world problems. You'll begin by looking at individual decision making, then uncertainty, and finally strategic interaction. Building on your knowledge of basic concepts in microeconomics, you'll become adept at applying mathematical analysis to answer a variety of real world problems, from providing public goods to understanding oligopolistic competition, learning through a mix of lectures, workshops and seminars. You'll also have the opportunity to practice for your future career as an economic consultant via a written assignment, where you'll write a consultant's report on a real-world problem. All areas of economics use microeconomics, so whatever you'd like to study or work with in the future, you'll be well served by this module. You'll complete this module with well-developed logic and analysis skills, as well as a solid grasp of fundamental concepts in microeconomics.

2020/1 - ECO-5011A MULTIDISCIPLINARY ECONOMICS

Autumn Semester, Level 5 module
(Maximum 50 Students)
UCU: 20 Organiser: Professor Duncan Watson
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Coursework and Project
Exam Paper(hrs):

Considering solutions to real-world problems, this module is designed to provide an interdisciplinary perspective to economic analysis. It considers a wide range of different approaches to economic study, including: economic sociology, economic geography, economic philosophy, economic psychology and political economy. With no prior economic or mathematical knowledge expected, it is suitable for students who want to explore pluralist economic perspectives. The chosen topics demonstrate how economic analysis improves our understanding of decision-making and assists in the design of public policy.

2020/1 - ECO-6001A LABOUR ECONOMICS

Autumn Semester, Level 6 module
(Maximum 999 Students)
UCU: 20 Organiser: Dr Liliana Harding

(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Coursework
Timetable Slot:B1/, F1/, F2/¦G1\¦G1/

BEFORE TAKING THIS MODULE YOU MUST TAKE ECO-5007A AND TAKE ECO-5007B OR TAKE ECO-5001Y

The workings of the labour market impact upon your career, life choices and outcomes. Do you want to understand how the choices you make - for example your education, migration decisions, job type – and even inherent characteristics, such as race and gender – impact upon your success in the labour market? This is a central theme of this module. You will begin by developing an understanding of labour supply (why we choose to work, and how much) and labour demand (how many workers employers hire, and how much they pay for that labour) before examining how individual characteristics, either inherent or through choice, and institutions such as minimum wage legislation, welfare payments, and the economy, affect both individuals and firms. You will examine education, discrimination, migration, unemployment and trade unions and the way government policy in each of these areas has shaped our economy. By the end of the module, you'll have a better understanding of issues such as the economic value of your degree and factors that might make you more attractive to an employer, why women are on average paid less than men, the costs and benefits of migration to an economy and the likelihood of unemployment through the life course. Through the coursework project, you will have an opportunity to examine and analyse an issue in depth by using a data set employed by the government to assess trends in the labour market.

2020/1 - ECO-6002A DEVELOPMENT ECONOMICS

Autumn Semester, Level 6 module
(Maximum 130 Students)
UCU: 20 Organiser: Dr Sheheryar Banuri
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Examination with Coursework or Project
Timetable Slot:D1
Exam Paper(hrs):2 Exam Period:SPR-02

BEFORE TAKING THIS MODULE YOU MUST TAKE ECO-5007A AND TAKE ECO-5007B OR TAKE ECO-5001Y OR TAKE DEV-5016A AND TAKE DEV-5017B

In this module you'll explore central issues in the economics of development, along the following themes: 1) Perspectives on development: Examine trends in development thinking, development initiatives and critiques. Also discuss various notions of development. 2) Explaining underdevelopment and development policies: Focus on key models of development. You'll also study some specific aspects in detail, such as inequality, poverty, labour, and agriculture, stressing the various inter-linkages and relationships between these topics. 3) Applied development economics: Consider implementation issues in contemporary development economics and examine the role of development agencies in aiding development.

2020/1 - ECO-6003A FURTHER ECONOMETRICS AND DATA ANALYSIS

Autumn Semester, Level 6 module
(Maximum 120 Students)
UCU: 20 Organiser: Dr Peter Dawson
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Examination with Coursework or Project
Timetable Slot:E2\+
Exam Paper(hrs):2 Exam Period:SPR-02

BEFORE TAKING THIS MODULE YOU MUST TAKE ECO-5006A OR TAKE ECO-5002Y

This module provides you with further econometric tools, helping enhance your understanding of empirical work in macro and micro-economics and enabling you to use modern econometric strategies to tackle a wide range of research questions. It covers two prominent econometric themes – time-series analysis and microeconometrics – and makes use of econometrics software 'Stata' throughout. This module will prove valuable if you wish to undertake postgraduate study or pursue a career in a field that requires statistical analysis.

2020/1 - ECO-6004A BUSINESS AND ECONOMICS OF SPORT

Autumn Semester, Level 6 module
(Maximum 100 Students)
UCU: 20 Organiser: Dr Peter Dawson
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Coursework
Timetable Slot:C2/-D3\

BEFORE TAKING THIS MODULE YOU MUST TAKE ECO-5006A OR TAKE ECO-5002Y AND TAKE ECO-5007A OR TAKE ECO-5001Y

The professional sports industry exhibits peculiar characteristics and an abundance of performance data, so provides (an almost) unique opportunity to test the theoretical principles that are presented in business and economics. This module applies principles of business and economics such as demand and supply, production, industrial organisation and labour markets to the analysis of the sport industry. You'll discuss business and financial decision-making in relation to the behaviour of individual clubs, organisations and major sporting events. You'll see how the underpinnings of sport can be used to develop a deeper understanding of how economic analysis contributes to and improves business, financial and commercial decision-making. Encompassing diverse approaches used to analyse product and labour markets and assess the contribution of major sporting events, the focus is on policy evaluation and the development and evaluation of organisational rules and regulations. Through the development of a case study and a report, you'll be able to critically evaluate the financial and commercial structure of sporting entities and develop a deeper understanding of sports leagues and policy proposals with respect to demand and labour markets, and contribute to discussions relating to the impact of major sporting events. On successful completion of this module, you will have developed your writing, presentation and analytical skills and be able to communicate the ideas developed in this module to a wider audience.

2020/1 - ECO-6005A ADVANCED TOPICS IN MICROECONOMICS

Autumn Semester, Level 6 module
(Maximum 360 Students)
UCU: 20 Organiser: Dr Ben McQuillin
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Examination with Coursework or Project
Timetable Slot:C1, E2/-C3
Exam Paper(hrs): Exam Period:SPR-02

BEFORE TAKING THIS MODULE YOU MUST TAKE ECO-5007A OR TAKE ECO-5001Y

How have economists improved the designs of auction mechanisms, school admissions systems and even kidney exchanges? What light does their work shed on the remarkable successes of specific, creative new market places, such as e-Bay, Uber, Airbnb and Tinder? And why does microeconomic theory force us to re-think fundamental ideas of democracy and social-wellbeing? In this advanced theory module you'll explore a range of topics from modern academic microeconomics that are currently influential within the science or in public policy and debate. You'll learn to work with economic models that accommodate uncertainty, asymmetric information, and strategic interaction, and also entail bargaining, cooperation, and collective action. A recurring theme and motivation for such models will be the broader topic of "market design"; the theory and practice of creating and improving processes of collective choice and allocation. Initially, you'll learn through informal analysis – conducted in small groups – of practical microeconomic problems that illustrate wider, deeper questions. You'll then be guided to discover the classical, foundational papers that have addressed these questions, to form your own ideas about these seminal contributions and use the formal theory to tackle further problems. By this process you will gain confidence, experience and a deep, clear comprehension of frontier topics more than befitting a graduating microeconomist.

2020/1 - ECO-6006A INDUSTRIAL ORGANISATION AND BUSINESS STRATEGIES

Autumn Semester, Level 6 module
(Maximum 999 Students)
UCU: 20 Organiser: Dr Franco Mariuzzo
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Examination with Coursework or Project
Timetable Slot:A2
Exam Paper(hrs):2 Exam Period:SPR-02

BEFORE TAKING THIS MODULE YOU MUST TAKE ECO-5007A OR TAKE ECO-5001Y

Most economic activity is organized by firms, and most firms must compete with rivals to attract consumers. This competition is the essence of a market economy. Microeconomic textbooks tend to focus on price competition in markets with a single price, but a far wider range of strategies is available to modern businesses. Prices can depend on anything from

product quality to an individual buyer's browsing history. Firms must make investment decisions in capacity, new production technology, marketing and R&D. The economics of business strategies examines how firms make such price and investment decisions when they must also consider what strategies are likely to be adopted by rivals. Recent public debate has questioned who benefits from a market economy, for example highlighting apparently high prices paid by some consumers. This module provides the foundation for understanding who benefits from competition and we begin to consider the appropriate role of government regulation of competition. A sister module ("Competition in the Digital Age") examines these in more depth and with the added complexity and real world context of the digital economy. This module investigates the nature of competition from a theoretical point of view and an applied policy perspective. The focus is on the strategic behaviour of firms in real markets that are not perfectly competitive. We ask questions like: What competitive weapons do firms use? Which strategies can firms use to soften competition? When are strategies to soften competition good for consumers, when are they bad? What determines whether firms compete or collude within an industry/market? To what extent are mergers driven by efficiency or by market power considerations? Of course, firms differ across a range of characteristics; for example, some supply just one product, while others are active in a multitude of markets; some firms spend heavily on advertising or R&D, while others spend very little on these activities. Throughout the module we will ask the question when, and how, government should intervene to facilitate the competitive process. The module covers theories that are key to the understanding of firms' strategies and the basis for regulatory intervention. The module is rich in examples of real-world applications of the theories. To enhance the learning and interest of the module, staff from two external organisations (potential employers) will teach you case studies from the real world. You will be assessed on your ability to answer a technical assignment (25%) and an oral presentation of a recent discussion paper (25%). The final exam will account for 50% of the grade. To accommodate for students coming from different mathematical backgrounds the module uses a series of seminars to cover many relevant examples and teach tools and methodologies to answer relevant mathematical problems.

2020/1 - ECO-6007A THE ECONOMICS OF FINANCIAL MARKETS

Autumn Semester, Level 6 module
(Maximum 999 Students)
UCU: 20 Organiser: Dr Alasdair Brown
(UG) MODULE - 40% PASS ON AGGREGATE
Module Type: Examination with Coursework or Project
Timetable Slot:H2
Exam Paper(hrs): Exam Period:SPR-02

Why do certain stocks earn higher returns than others? How many stocks should an investor have in their portfolio? What behavioural biases do financial market participants exhibit, and how does this affect asset prices? Why do we observe frequent bubbles and crashes in stock prices? How can an investor price a financial option, which derives its value from the value of another asset? These are the types of questions you will explore on this module. Covering the central topics in the economics of financial markets – asset pricing, behavioural finance and derivatives – you'll learn how to estimate expected returns for a stock and price a financial option. You'll be exposed to a mixture of theory and empirical evidence,

discovering how to evaluate theories in light of this evidence. You'll learn through a mixture of lectures, which have regular intervals for team or individual work, as well as seminars and self-study. Assessment comprises of technical and essay questions. By the end of the module, you'll be equipped for further study in financial economics or a career in the finance industry.