Economics courses for Visiting Students at LMH

Guidance notes for application to study Economics at LMH

- You may take up to two Economics courses at LMH each term, usually one major (8 tutorials) and one minor (4 tutorials).
- Please do not specify major or minor preferences when you complete your application; if offered a place, your major/minor allocations will be determined in collaboration with the Director of Visiting Students in order to build a coherent programme.
- You must submit the Economics Open-Book Exercise with your application. Please carefully follow the instructions about which questions to attempt.
- Courses are only available in the terms indicated below. Please take availability into account when making your course choices. (Asterisks indicate terms in which courses are likely but not definitely available.)
- We cannot guarantee that all courses will be available in any one year. If any of your chosen courses is not available, the Director of Visiting Students will discuss a suitable alternative with you.
- Prerequisites may be taken in Oxford (in some cases concurrently) or at your home university. If you will take a prerequisite course after applying but before arrival in Oxford, please ensure that this is clearly stated on your application and please ask your referees to comment on your expected attainment in that course.
- Please note that course titles, syllabi and levels may not correspond directly to US and international university equivalents. The separate information sheet about prerequisites gives more information about US equivalents for the prerequisites.

The courses available are listed under the following headings:

- Mathematics and Statistics Courses (3 courses)
- Intermediate-Level Theory Courses (2 courses)
- Finals-Level Theory Courses (4 courses)
- Advanced Theory Courses (3 courses)
- Applied Courses (9 courses)

Mathematics and Statistics Courses

| Course Name | Summary | Availability | | Availability Tutorials | | Prerequisites (Oxford Courses - see separate table of US equivalents) |
|--------------------------|--|--------------|----|------------------------|---|---|
| Calculus for Economics | Sequences and series, exponential and logarithmic functions, differentiation, optimisation, integration. Unconstrained and constrained optimisation of functions of several variables. | MT | | | 4 | Pre-calculus |
| Introductory Probability | Probability theory, random variables and moments, LLN, CLT | MT | | | 4 | Calculus for Economics (can be taken concurrently) |
| Introductory Statistics | Statistical inference (estimation and testing), introduction to time series, causal inference. | | НТ | | 4 | Calculus for Economics |

Intermediate-Level Theory Courses

| Course Name | Summary | Availability | | Availability | | Tutorials | Prerequisites (Oxford Courses - see separate table of US equivalents) |
|----------------|---|--------------|--|--------------|--------|--|---|
| Micro Theory I | Producer theory, consumer theory, partial equilibrium, market failures and policy | MT | | | 8 or 4 | Calculus for Economics (can be taken concurrently) | |
| Macro Theory I | Growth, macroeconomic aggregates, monetary and fiscal policy, open economy | | | TT | 6 or 4 | Micro Theory I | |

Finals-Level Theory Courses

| Course Name | Summary | Availability | | | Tutorials | Prerequisites (Oxford Courses - see separate table of US equivalents) |
|--------------------------------|---|--------------|----|----|-----------|---|
| Micro Theory II | General equilibrium, welfare and social choice, game theory and industrial organisation, choice under uncertainty (Expected Utility), asymmetric information | MT | | | 8 or 4 | Micro Theory I |
| Introduction to Game Theory | Discrete and continuous actions. Dominance and Nash equilibrium. Dynamic games: subgameperfect equilibrium; finite & infinite repetition, Folk Theorem. Applications include industrial organisation and information economics. | MT | | | 4 | Micro Theory I |
| Macro Theory II | Monetary Policy, Sticky Price Models, Macroeconomics at the Zero Lower Bound, Open Economy, Economic Growth, Inter-temporal Macro, Debt and Fiscal Policy | | НТ | | 8 or 4 | Micro Theory I AND Macro Theory I |
| Econometrics | Statistical and causal inference, multivariate regression models, endogeneity, heterogeneity, forecasting, non-stationarity and co-integration, dynamic causal models | | | TT | 8 or 4 | Introductory Probability & Statistics |

Advanced Theory Courses

| Course Name | Summary | Av | /ailability | / Tutorials | Prerequisites (Oxford Courses - see separate table of US equivalents) | |
|------------------------------------|---|----|-------------|-------------|---|--|
| Advanced Econometrics | Maximum likelihood, endogeneity and instrumental variables, unit roots and cointegration, limited dependent variable models, duration models, panel data models | MT | | 8 or 4 | Econometrics | |
| Advanced Microeconomic Analysis | Linear Algebra, Multivariate Calculus, Constrained Optimisation, General Equilibrium (with certainty), Choice under Uncertainty, Principal-Agent problems, General Equilibrium (with uncertainty), Asset pricing. | | нт | 8 or 4 | Micro Theory II | |
| Advanced Game Theory | Strategic-form and extensive-form representations. Solution concepts. Games with incomplete information. Applications include bargaining, auctions, global games, evolutionary games, co-operative games, learning, games in political science. | | HT | 8 or 4 | Introduction to Game Theory | |

Applied Courses

| Course Name | Summary | Availability | | ability Tutorial | | Prerequisites (Oxford Courses - see separate table of US equivalents) |
|--------------------------------------|--|--------------|-----|------------------|------------------------|---|
| International Economics | Economic integration. The international trading system. Balance of payments adjustment and financing; policies for attaining internal and external balance. Behaviour of floating exchange rates. Optimum Currency Areas and Exchange Rate Regimes. International Policy Co-ordination and the International Monetary System. | MT | | | 8 or 4 | Micro Theory II AND Macro Theory II |
| Behavioural & Experimental Economics | Poverty and inequality; growth and development; coordination failures and under-development; international trade, capital flows, and development; human capital, health and education; labour and migration; credit markets; market failure and government failure; political economy | MT | НТ | | 4 in MT AND 4 in HT | Micro Theory II |
| Economics of Developing Countries | Poverty and inequality; growth and development; coordination failures and under-development; international trade, capital flows, and development; human capital, health and education; labour and migration; credit markets; market failure and government failure; political economy. | MT | HT* | | 8 or 4 | Micro Theory II AND Econometrics |
| Development of the World Economy | Economic development of the major regions of the world: Europe, Asia, the Americas, Africa, Oceania. Proximate sources of growth: first and second nature geography, institutions and the state. Consequences of growth: living standards, inequality and consumption. International transactions: real trade and factor flows, finance. Warfare and empire. | MT | | ТТ | 8 or 4 | Micro Theory I AND Macro Theory I |

| Economics of Industry | Market structures, costs and scale economies, oligopoly and the theory of games, entry, empirical studies of pricing and profitability, advertising, product differentiation, managerial theories of the firm, mergers and vertical integration, innovation, public policy towards market structure and conduct, regulation. | MT | | TT* | 8 or 4 | Micro Theory II AND Econometrics |
|--|--|----|----|-----|--------|----------------------------------|
| Public Economics | Welfare measurement and cost-benefit analysis, with applications to healthcare and the environment; taxes and transfers; optimal income and commodity taxation, intertemporal public finance including pensions provision; government expenditure, incl health, education; political economics. | MT | | TT* | 8 or 4 | Micro Theory II |
| Money & Banking | The role of money in general equilibrium models. Aggregate models of price and output fluctuations. The role of banks and other financial intermediaries. Models of monetary policy. Inflation targeting and other policy regimes. Money and public finance. The transmission of monetary policy to asset prices and exchange rates. | MT | | TT* | 8 or 4 | Macro Theory II |
| Labour Economics | The analysis of labour markets from both microeconomic and macroeconomic perspectives; collective bargaining and trade unions; personnel economics; the economics of education and human capital; wage determination and inequality | | НТ | TT* | 8 or 4 | Econometrics |
| Environmental Economics & Climate Change | Foundational environmental and resource economics, cost-benefit analysis for the environment, integrated assessment models for climate change, government responses to pollution problems, international issues. | | НТ | TT* | 8 or 4 | Micro Theory II |