

MATH0002 Economics 1 - Combined Studies

<i>Year:</i>	2024–25
<i>Code:</i>	MATH0002
<i>Level:</i>	4 (UG)
<i>Normal student group(s):</i>	UG: Year 1 Economics and Statistics degrees Year 1 Mathematics with Economics degrees
<i>Value:</i>	30 credits (= 15 ECTS credits)
<i>Term:</i>	1 and 2
<i>Assessment:</i>	70% examination and two 15% multiple choice tests
<i>Normal Pre-requisites:</i>	Grade A in A-level Mathematics. A knowledge of A-level Economics is useful but not essential
<i>Lecturer:</i>	TBC / TBC

Course Description and Objectives

Economics is the science of allocating scarce resources among competing social wants. Microeconomics describes how individuals and firms make informed tradeoffs between scarce alternatives in order to improve their well being. Macroeconomics, on the other hand, is the study of the economy as a whole in an attempt to explain aggregate trends. This introductory course is designed to give the student enough rigorous mathematical comprehension of both microeconomic and macroeconomic analysis to provide an adequate foundation for the second-year course, STAT0001. By the end of the first term, the student should understand the main ideas of microeconomic theory and be able to apply them to analyse real-world policy issues. In the second term, macroeconomic issues, such as the impact of monetary and fiscal policies in both open and closed economies, are examined. While a mathematical approach is encouraged throughout, the main concepts are also illustrated graphically. Furthermore, emphasis is placed on the intuition behind the concepts to enable more profound understanding. Nevertheless, students in this course require some fluency in both algebra and calculus.

Recommended Texts

Perloff, J.M. (2012), *Microeconomics*, 8th Edition, Harlow, United Kingdom: Pearson Education Limited. (ISBN:9781292215693).

Blanchard, O.J. and Johnson, D.R. (2012), *Macroeconomics*, 6th Edition (Global Edition), Pearson Education, USA (ISBN-13: 978-0273766339).

Detailed Syllabus

Term 1: Microeconomics

Supply and demand, consumer choice, applying consumer theory, firms and production, costs, competitive firms and markets, applying the competitive model, monopoly, factor markets and vertical integration.

Term 2: Macroeconomics

Introduction to macroeconomics, equilibrium in the goods and financial markets, the IS-LM model, the effects of monetary and fiscal policy, the labour market, frictional unemployment, the AS-AD model, the Phillips curve, disinflationary policies, openness in goods and financial markets, depreciation and the trade balance, exchange-rate regimes, the Mundell-Fleming model.