ECU44172 — Quantitative Methods

Module Information	
Module Code	ECU44172
Module Title	Quantitative Methods
Department	Economics
Year Group	Senior Sophister
Module Personnel	Dr Paul Scanlon
Academic Year	2026-27
Credit Weighting	10 ECTS
Semester	Semester 2
Contact Hours	22 hours of lectures, 4 hours of tutorials

Module Content	
Module Description	This module will cover selected topics in mathematical economics and will build on the foundations developed in ECU33081 and ECU33082
Module Learning Aims	The objective of the module is to furnish students sufficient quantitative skills to analyse and perform advanced research in economics.
Learning Outcomes	On completion of the module, students should be familiar with the following and how to apply them to economic modelling: • 1. Differential and difference equations • 2. Dynamic optimization and Economic Applications • 3. Dynamic Programming • 4. Stochastic calculus
Indicative Reading / Resources	Hoy, Michael et al., Mathematics for Economics, any edition, MIT Press

Assessment	
Assessment Components	Exam 80%, Assignment 20%
Assessment Details	Assignment will entail development of economic model

Additional Information	
Prerequisites	ECU33081, ECU33082, ECU33091
Co-requisites	None
Any other information	