

| Module Details | | | | |
|----------------|-------------------------------------|--|--|--|
| Module Title | Quantitative Methods for Economists | | | |
| Module Code | AFE4013-B | | | |
| Academic Year | 2024/5 | | | |
| Credits | 20 | | | |
| School | School of Management | | | |
| FHEQ Level | FHEQ Level 4 | | | |

| Contact Hours | | | |
|----------------|-------|--|--|
| Туре | Hours | | |
| Lectures | 24 | | |
| Tutorials | 12 | | |
| Directed Study | 164 | | |

| Availability | | | | |
|--------------|--|--|--|--|
| Occurrence | Location / Period | | | |
| BDA | University of Bradford / Academic Year | | | |

Module Aims

This module aims to enhance students' understanding of economic analysis by expanding their knowledge of the relevant mathematical and statistical methods and how these can be applied across economics.

Outline Syllabus

Functions.

Simultaneous equation solving.

Linear algebra in matrix forms.

Differentiation.

Constrained and unconstrained optimisation.

Linear programming.

Probability distribution:

Discrete and continuous random variables.

Sampling theory and confidence intervals.

Hypothesis testing..

| Learning Outcomes | | | | |
|-------------------|--|--|--|--|
| Outcome Number | Description | | | |
| 01 | Recognise, apply and discuss the fundamental tools of mathematics and statistics required for the understanding of economic and econometric analysis | | | |
| 02 | Apply foundation level quantitative methods to a range of economic problems. | | | |
| 03 | Demonstrate logical analysis and problem-solving skills. Identify and explain appropriate approaches to solve economic and mathematical problems. | | | |

Learning, Teaching and Assessment Strategy

Concepts and theories will be explored in weekly lectures before being discussed and practiced in biweekly tutorials. Campus communication will be used to monitor progress and support learning. The lectures and seminars will be supplemented with resources on Canvas..

| Mode of Assessment | | | | | |
|--------------------|---------------------------|-------------------------------------|-----------|--|--|
| Type Method | | Description | Weighting | | |
| Summative | Examination - Closed Book | Examination Closed Book (1.5 Hours) | 50% | | |
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Reading List

To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.

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