ECON 1006 INTRODUCTION TO ECONOMIC METHODS

Credit Points 10

Legacy Code 200052

Coordinator Raja Mukherjee (https://directory.westernsydney.edu.au/search/name/Raja Mukherjee/)

Description Introduction to Economic Methods covers basic concepts in mathematics and statistics to help student understanding of subjects such as accounting, management, marketing, finance, and economics. Students taking this unit are expected to improve their numeracy and analytical skills. In particular, students will learn how to collect, analyse and interpret data using simple descriptive and inferential statistical methods including simple regression analysis. In addition, by working through applied exercises, students are expected to improve their problem solving skills and acquire a basic understanding of calculus relevant to fields such as finance.

School Business

Discipline Economics

Student Contribution Band HECS Band 4 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 1 subject

Equivalent Subjects LGYA 9799 - Introduction to Economic Methods MATH 1030 - Statistics for Business MATH 1028 - Statistical Decision Making MATH 1029 - Statistical Decision Making (UWSC) MATH 1012 - Management Analytics MATH 1031 - Statistics for Business (WSTC)

Assumed Knowledge

HSC Mathematics or equivalent.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Apply concepts of simple algebra and calculus in describing economic concepts and solve elementary problems in unconstrained optimisation as applied in accounting, finance and economics;
2. Collect data and analyse its main features using descriptive statistics and computer software;
3. Apply probability concepts to solve problems;
4. Evaluate arguments involving discrete or continuous probability distributions;
5. Perform statistical inference involving interval estimation and hypothesis testing of statistical population parameters;
6. Analyse the relationship between two variables using statistical techniques.

Subject Content

- functions and relationships between economic phenomena
- The use of calculus to model Basic economic and business concepts
- Unconstrained and constrained optimisation in economics using calculus
- Descriptive statistics, frequency and relative frequency distributions
- The concept of A statistical experiment and Basic probability concepts
- Discrete probability distributions including The binomial Distribution
- Continuous probability distributions: The normal Distribution
- The Sampling Distribution of The sample mean and The central limit theorem
- Point and interval estimation of A population mean, population proportion and population variance (including business applications)
- Hypothesis testing of A population mean, population proportion and population variance (including business applications)
- inference involving The student?fs Distribution and The chi-square Distribution
- Correlation analysis

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/ Group Task
Quiz	Quizzes are non-compulsory. There are three online with each quiz having a weighting of 10%. 90 minutes are allowed per quiz for completion.	30	N	Individual
Report	800 words	10	N	Individual
Final Exam	3 hours	60	N	Individual

Prescribed Texts

- Comprehensive lecture notes will be provided for students on vUWS, and students will be referred to a variety of reference materials freely downloadable from the internet or available in the library.

Teaching Periods

Autumn

Online
Online
Subject Contact Raja Mukherjee (https://directory.westernsydney.edu.au/search/name/Raja Mukherjee/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ECON1006_22-AUT_ON_O#subjects)

Parramatta City - Macquarie St
Evening
Subject Contact Raja Mukherjee (https://directory.westernsydney.edu.au/search/name/Raja Mukherjee/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ECON1006_22-AUT_PC_E#subjects)

Day

Subject Contact Raja Mukherjee (https://
directory.westernsydney.edu.au/search/name/Raja Mukherjee/)

View timetable (https://classregistration.westernsydney.edu.au/even/
timetable/?subject_code=ECON1006_22-AUT_PC_D#subjects)