ECON10005 Quantitative Methods 1

Credit Points:	12.50
Level:	1 (Undergraduate)
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: Two 1-hour lectures and a 1-hour tutorial per week Total Time Commitment: 120 hours per semester
Prerequisites:	A study score of at least 25 in English (any) or equivalent and Mathematical Methods in VCE Units 3 & 4 or equivalent. OR Entry into the Bachelor of Commerce.
Corequisites:	None
Recommended Background Knowledge:	Please refer to Prerequisites and Corequisites.
Non Allowed Subjects:	Students completing **ECON10005 Quantitative Methods 1 (../../view/current/econ10005)** may not gain credit for **MAST10010 Data Analysis 1 (../../view/current/mast10010)** or **MAST10011 Experimental Design and Data Analysis (../../view/current/mast10011)** .
Core Participation Requirements:	For the purposes of considering requests for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements for this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Coordinator:	Assoc Prof Christopher Skeels, Dr Mike Pottenger
Contact:	Semester 1 & 2: **mpotteng@unimelb.edu.au (mailto:mpotteng@unimelb.edu.au)** **skeels@unimelb.edu.au (mailto:skeels@unimelb.edu.au)**
Subject Overview:	This subject covers the core concepts which underpin quantitative decision analysis in the various specialisations within the faculty. It provides a foundation for all second-year quantitative subjects in the commerce degree. The topics covered are financial mathematics; measures of location and dispersion; probability, random variables and expected values; sampling design; estimation and testing using the normal and t-distribution; and simple regression and correlation. Excel is used to illustrate applications in accounting, economics, finance, management and marketing.
Objectives:	# Graph economic data using methods that facilitate analysis. # Explain concepts relevant for summarising and interpreting data. # Explain how the concepts of random variables and probability distributions are useful for drawing inferences. # Explain the concepts of population, samples and sampling distributions. # Estimate unknown population quantities and test hypotheses about them. # Conduct simple regression analysis to model the relationship between variables and draw inferences about relationships.

	# Apply common analytical techniques relevant for financial decision making.
Assessment:	2-hour end-of-semester examination (70%) Three assignments, each of 1000 words, due in weeks 5, 8 & 11 (30%) Successful completion of this subject requires a minimum 50% pass in the end-of-semester examination.
Prescribed Texts:	You will be advised of prescribed texts by your lecturer.
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2012/B-ARTS)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2012/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2012/B-MUS)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	# High level of development: problem solving; statistical reasoning; application of theory to practice; interpretation and analysis; synthesis of data and other information; evaluation of data and other information; use of computer software; accessing data and other information from a range of sources. # Moderate level of development: oral communication; written communication; critical thinking; receptiveness to alternative ideas. # Some level of development: collaborative learning; team work.
Notes:	Students completing **316-130 Quantitative Methods 1 (../../view/2010/316-130)** may not gain credit for **620-159 Data Analysis 1 (../../view/2010/620-159)** or **620-168 Experimental Design and Data Analysis (../../view/2010/620-168)** .
Related Course(s):	Bachelor of Music and Bachelor of Commerce Graduate Diploma in Economics
Related Majors/Minors/ Specialisations:	Economics Economics Major
Related Breadth Track(s):	Quantitative Methods in Economics Economics & Finance