

620-173 Introduction to Mathematics

Credit Points:	12.500
Level:	Undergraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 1, - Taught on campus. Lectures and tutorials
Time Commitment:	Contact Hours: 36 one-hour lectures (three per week) and 11 one-hour tutorials (one per week). Total Time Commitment: 120 hours
Prerequisites:	Successful completion of VCE Mathematical Methods 1/2 or equivalent
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	<p><p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.</p> <p>It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability</p></p>
Coordinator:	Dr M Fackrell
Subject Overview:	<p>Students will strengthen and develop algebraic and conceptual skills, building a firm mathematical base for 620-154 Calculus 1.</p> <p>Fundamental concepts about number systems and set theory will be followed by introductory counting principles and techniques. These will be applied to the laws of probability, leading to the study of discrete and continuous random variables. Basic ideas about functions and their inverses will be introduced using examples such as the logarithmic, exponential and trigonometric functions. Differential and integral calculus will be studied with applications to graph sketching and optimization problems. Students will also learn integration techniques, with applications to areas between curves.</p>
Assessment:	Up to 25 pages of written assignments 10% (due during semester), a 45-minute written test 10% (held mid-semester), a 3-hour written examination 80% (in the examination period).
Prescribed Texts:	None
Breadth Options:	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> # Bachelor of Arts # Bachelor of Environments # Bachelor of Music <p>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.</p>
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	In addition to learning specific mathematical skills, students will have the opportunity to develop generic skills that will assist them in any career path. These include:

	<ul style="list-style-type: none"># Problem-solving skills: the ability to engage with unfamiliar problems and identify relevant solution strategies;# Analytical skills: the ability to construct and express logical arguments and to work in abstract or general terms to increase the clarity and efficiency of analysis;# Collaborative skills: the ability to work in a team;# Time management skills: the ability to meet regular deadlines while balancing competing commitments.
Notes:	<p>This subject is not available for science credit or commerce credit in any course.</p> <p>This subject is equivalent for pre-requisite purposes to VCE Mathematical Methods 3/4. Students with a score of 25 or more in VCE Mathematical Methods 3/4 will normally not be permitted to enrol in this subject.</p>
Related Course(s):	Bachelor of Agriculture