

MAST10014 Foundation Mathematics for Commerce 1

Credit Points:	12.50
Level:	1 (Undergraduate)
Dates & Locations:	This subject is not offered in 2013.
Time Commitment:	Contact Hours: A 1-hour lecture and a 2-hour tutorial per week Total Time Commitment: Total expected time commitment is 108-hours across the semester, including class time.
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	High school mathematics up to a year 10 standard or equivalent.
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request 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 of 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/
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Subject Overview:	This is the first of a sequence of two subjects (Foundation Mathematics 1 and Foundation Mathematics 2) providing BA Extended students with a foundation in mathematics that provides a pathway into the Bachelor of Commerce. The content consists of traditional VCE mathematical topics, with a particular emphasis on those topics needed for subsequent studies in the Bachelor of Commerce degree. Applications, examples and problems will be taken from Commerce disciplines.
Objectives:	On completion of the subject students should have: <ul style="list-style-type: none"> # a basic understanding of algebra and be able to expand, factorise and collect like terms; # the ability to solve linear equations, and simultaneous equations; # the ability to sketch and interpret straight line graphs, and solving real world problems using linear models; # an understanding of matrices, and be able to use basic matrix algebra to solve systems of 2 by 2 linear equations; # the ability to solve quadratic equations, sketch and interpret quadratic functions, and solving problems using quadratic functions; # an understanding of and be able to use exponential and logarithmic functions in problem solving; # an understanding of the general concept of a function, including such notions as range, domain, function type and hybrid functions; # the ability to use basic techniques for transforming graphs (translation, dilation and reflection) as well as the basic concept of rates of change and the calculation of average rates of change; # an understanding of the derivative of a function in terms of limits, the differentiation of polynomial, exponential and logarithmic functions, and maximal and minimal problem solving using stationary points.
Assessment:	Three in-class tests (15% each), an end of semester examination (45%), participation (10%). This subject has a minimum hurdle requirement of 75% attendance and regular participation in tutorials. In-class tasks missed without approval will not be marked. All assessment must be completed in order to pass this subject.
Prescribed Texts:	A book of lecture notes will be provided.

Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	<ul style="list-style-type: none"># High level of development: numeracy; identifying the numerical dimension of phenomena; abstract reasoning using mathematical forms; initiative to apply mathematical forms to real life phenomena.# Moderate level of development: use of scientific calculators; written communication; creative problem solving skills; critical literacy to interpret mathematical claims.# Some level of development: collaborative learning; independent thinking.
Notes:	This subject is only available to students enrolled in the BA Extended.
Related Course(s):	Bachelor of Arts (Extended)