

MAST10014 Foundation Mathematics for Commerce 1

Credit Points:	12.50
Level:	1 (Undergraduate)
Dates & Locations:	2011, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: One 1-hour lecture plus two 1-hour tutorials per week (total 36 hours) Total Time Commitment: 108 hours (36 contact plus 72 non-contact)
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/
Coordinator:	Mr David Collis
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Subject Overview:	This is the first of a sequence of two subjects (Foundation Mathematics 1 and Foundation Mathematics 2) providing BAX 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:	Students completing this subject should: <ul style="list-style-type: none"> # understand basic algebra and be able to expand, factorise and collect like terms; # be able to solve linear equations, and simultaneous equations; # be able to sketch and interpret straight line graphs, and solving real world problems using linear models; # understand matrices, and be able to use basic matrix algebra to solve systems of 2 by 2 linear equations; # be able to solve quadratic equations, sketch and interpret quadratic functions, and solving problems using quadratic functions; # understand and be able to use exponential and logarithmic functions in problem solving; # understand the general concept of a function, including such notions as range, domain, function type and hybrid functions; # be able 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; # understand 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:	3 in-class tests - 45% (15% each) end of year exam - 35% participation - 20%
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.