ACTL20001 Financial Mathematics I

Credit Points:	12.50
Level:	2 (Undergraduate)
Dates & Locations:	2011, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: Two 1-hour lectures and a 1-hour tutorial per week Total Time Commitment: Not available
Prerequisites:	One of: # a mark of 60 or better in 620-120 UMEP Mathematics for High Achieving Students or 620-121 Mathematics A (Advanced) (for students who took these subjects in 2007 or earlier); # an average mark of 60 or better in **MAST10008 Accelerated Mathematics 1 (../../view/current/mast10008)** and **MAST10009 Accelerated Mathematics 2 (../../view/current/mast10009)** , with a pass in each subject; # a mark of 75 or better in 620-141 Mathematics A; # an average mark of 75 or better in **MAST10006 Calculus 2 (../../view/current/mast10006) (../../view/current/mast10006)** and **MAST10007 Linear Algebra (../../view/current/mast10007)** ; # a mark of 75 or better in **MAST10007 Linear Algebra (../../view/current/mast10009)** and a mark of 60 or better in **MAST10009 Accelerated Mathematics 2 (../../view/current/mast10009)** ; # an average mark of 60 or better in 620-120 UMEP Mathematics for High Achieving Students and **MAST10009 Accelerated Mathematics 2 (../../view/current/mast10009)** , with a pass in each subject
Corequisites:	None
Recommended Background Knowledge:	Please refer to Prerequisites and Corequisites.
Non Allowed Subjects:	None
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/
Contact:	To be advised
Subject Overview:	Topics include compound interest functions; valuation of a series of payments, including where the cash flows and/or the force of interest are continuous functions of time; equations of value; loans repayable by instalments; characteristics of major asset types; and discount valuation of fixed interest securities, ordinary shares and property, including effects of tax.
Objectives:	Apply relevant pre-requisite mathematical knowledge in the solution of a range of practical problems;Describe and apply the main methods of finding the accumulation or present value of money under simple and compound interest and discount;Derive and apply formulae to calculate the accumulation or present value of a series of payments, including the cases of continuous payments and variable interest ratesAnalyse and solve equations of value for rates of interest Calculate rates of return on investment portfolios using methods employed by actuariesConstruct and analyse a loan schedule, including cases when terms of a loan are altered; Explain the key features of the main types of financial assets, including shares, bonds, property and derivativesPerform compound interest calculations relating to financial assets, including the calculation of price and yield

Assessment:	A 2-hour end-of-semester examination (70%), two assignments totalling not more than 2000 words (20%), and a 45 minute mid-semester examination (10%). Satisfactory completion of this subject requires a 50% pass in the end of semester examination
Prescribed Texts:	You will be advised of prescribed texts by your lecturer.
Recommended Texts:	Information Not Available
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/2011/B-ARTS)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2011/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2011/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: written communication; problem solving; application of theory to practice; synthesis of data and other information; use of computer software.