

FINANCIAL TECHNIQUES, INSTRUMENTS & MARKETS

Second Semester, 2005

ACST201 LEARNING GUIDE

ACST201 Teaching Team

Team Member	Team Role	Room	Telephone	Consultation Times
John Shepherd	Coordinator/Lecturer	C5C 491	9850 8573	Monday, 2-3pm Wednesday, 12-1pm
Denis Gorey	Visiting Lecturer Tutor Tutor Tutor Tutor Tutor Tutor Tutor			
Oliver Carson				
Phillip Chan				
Tim Curry				
Ross Fieldhouse				
Anthony Passe-De Silva				
Lachlan Pike				
Katelyn Priester				
Wang Zifei (Ronald)				

ACST201 Subject Details

Unit Name: **Financial Techniques, Instruments & Markets** (3 credit points)

Prerequisites: 18 credit points including ACST101(P)
 Not Counted for Credit With (NCCW): ACST200; ACST229; ECFS200

Learning Objectives

Our main aim in ACST201 is to use financial mathematics to understand some of the basic concepts and principles of financial analysis. The concepts and principles include the price of a financial instrument, the yield earned on an investment, the relationship between price and yield, break-even analysis, horizon analysis, reinvestment risk, interest rate risk, volatility and duration, arbitrage pricing, pricing forwards, futures and options and the contingent payments approach.

To help you understand these ideas, we will ask you (in tests and final exam) to explain what you are doing, why you are doing it, and how the result would change if the given data were different. We will ask you to explain in non-technical language (ie plain English, with no financial maths jargon), as if you were explaining to a board of directors, or a CEO or CFO, or a client, who needs to make a decision based on your analysis, but does not want to know about the calculations.

In ACST201 you will also have opportunities to develop your skills in building Excel worksheets and in using the internet, your problem solving skills, and your awareness of your preferred learning style and your learning strengths and weaknesses.

Workshop Classes

Your main 2-hour class each week is called a "lecture" in the Timetable, but it is really a workshop. Each workshop will be a combination of mini-lectures (10-15 minutes), problem-solving exercises and demonstrations and interactive small group work. You can expect to be actively involved, and needing to think a lot, not just passively listening and taking notes. So make sure you arrive on time, or you will find it difficult to pick up what is happening in the class. Please bring your calculator to every class (workshops and tutorials) you will need it.

You will have one 2-hour workshop each week:

Enrolment stream	Day	Time	Location
Day	Wednesday	8-10 am	W5B Macquarie Theatre
Evening	Tuesday	7-9 pm	E7B Mason Theatre

Any changes to workshop times/locations will be advised in class and also on the ACST201 WebCT site.

Tutorial groups

There are eighteen tutorial groups spread across several timeslots. Each group will meet once every week (except in Week 1). You should be registered for just one tutorial group. When you enrolled you will have been given the day, time and classroom location of your tutorial group.

Day	Time	Location
Tuesday	5-6 pm	C4A312; C5A313
Tuesday	6-7 pm	E7B164; E5A309; E7B163; E7B200
Wednesday	10-11am	E7B163
Wednesday	11-12am	W6B286
Wednesday	1-2pm	W5A205; C5A310
Wednesday	2-3 pm	W5A101; W5A103; C5A310
Wednesday	3-4 pm	W5A101; W5A103; E7B200
Wednesday	4-5 pm	W5A101; E7B164

In most weeks, your tutorial will begin with a short Tutorial Test (see further details on page 4). At your tutorial, your graded In-Class Tests will be returned to you, and your tutor will work through the solutions to the test problems with you. Also, your tutor will help you each week with any questions you have about workshop, e-workbook or assignment problems, etc.

Reference books

You do **NOT** have to buy a printed textbook. ACST201 uses an electronic workbook (see details below). You may find these books useful as references for some topics in ACST201:

- Knox, David M, Zima, Peter & Brown, Robert L (1999) *Mathematics of Finance* (Second edition), Irwin/McGraw-Hill
- Sherris, Michael (1996) *Money & Capital Markets* (Second Edition), Allen & Unwin
- Viney, Christopher (2003) *Financial Institutions, Instruments & Markets* (Fourth edition), Irwin/McGraw-Hill (or third edition by McGrath & Viney)
- Valentine, Tom, Ford, Guy & Copp, Richard (2003) *Financial Markets & Institutions in Australia*, Pearson Education Australia

ACST201 WebCT site

Make sure you visit the ACST201 WebCT site regularly. It will be used for:

- communication – announcements and reminders of important dates will be posted there;
- answering your questions about what you are learning, about what's happening when, etc;
- you will be able to download copies of ACST201 handouts of all kinds;
- copies of problems and sample solutions (workshop problems, tute tests, In-Class Tests, etc);
- posting details of Learning Portfolio tasks from time to time.

Read the Homepage regularly, and also check all messages on the Bulletin Board. You will often find that if you want to ask a question, someone else has already asked the same question, and it's been answered already.

EFS Resource & Information Centre (ERIC)

The EFS Resource & Information Centre (ERIC) is in Room C5C 244, Building C5C. Copies of workshop slides, handouts, problems and solutions, in-class tests and solutions, etc will all be available in ERIC. For more information, including opening hours, visit the ERIC web site at:

<http://www.efs.mq.edu.au/eric.html>

Grading your learning in ACST201

Macquarie University uses the grades HD (High Distinction), D (Distinction), CR (Credit), P (Pass), PC (Pass Conceded) and F (Fail) for grading the achievements of students in units of study. In ACST201, your grade will be determined by how well you show you understand the basic principles and concepts covered. P represents the lowest (basic) level of understanding, CR a higher level than P, D a higher level than CR, and HD the highest level. This table is a guide to the meaning of each grade for the purposes of ACST201:

Grade	Level of understanding represented by that grade
HD	<ul style="list-style-type: none">• Able to apply basic principles to solve unfamiliar, non-standard problems• Able to explain solutions & interpret results in clear, simple, non-technical language• Able to combine two or more unrelated numeric procedures in solving a composite problem• Can give strong evidence of ability to reflect on own learning experiences
D	<ul style="list-style-type: none">• Able to apply basic principles to solve problems which differ significantly from the familiar<ul style="list-style-type: none">• Able to explain solutions & interpret results clearly and concisely• Able to combine two unrelated numeric procedures in solving a composite problem• Can give good evidence of ability to reflect on own learning experiences
CR	<ul style="list-style-type: none">• Able to apply basic principles to solve problems which differ slightly from the familiar<ul style="list-style-type: none">• Able to explain rationale for calculations & interpret results in those cases• Able to combine two related numeric procedures in solving a composite problem• Can provide some evidence of reflecting on own learning experiences
P	<ul style="list-style-type: none">• Able to perform basic numeric procedures on standard problems in familiar scenarios• Able to explain rationale for calculations & interpret results for standard problems
PC	<ul style="list-style-type: none">• Marginally satisfactory achievement of P level understanding• Able to perform basic numeric procedures, but not able to explain them clearly
F	<ul style="list-style-type: none">• No evidence of achieving P level understanding

Assessment in ACST201

There are basically two kinds of assessment, and we use both in ACST201:

- **Formative assessment**, which is designed to give you feedback on your learning so far, so you know whether there are any gaps in your learning that you need to spend more time and effort on. The Tutorial Tests are examples of formative assessment – their main purpose is to give you feedback.
- **Summative assessment**, which aims to “sum up” your learning over a set of topics or over the whole semester. The final exam is the best example of summative assessment.

Some assessment tasks (eg the assignments) are a combination of formative and summative assessment.

Assessment Tasks

In ACST201 you can choose either of two assessment systems. System 1 gives more weight to your work during semester and less weight to the final exam. System 2 gives more weight to the final exam and less weight to your work during semester. You can choose which system you want to be used for your ACST201 assessment. Choose carefully - once you have chosen you will not be able to change your selection.

Assessment component	System 1		System 2	
	Each	Total	Each	Total
Three (3) In-Class Tests	7.5%	22.5%	5%	15%
Five (5) Assignments	3%	15%	2.5%	12.5%
Learning Portfolio		12.5%		12.5%
Final Examination		50%		60%

You will have to decide which assessment system you want by 30/31 August (your Week 5 workshop class). If you do not nominate your preference, System 2 will be used automatically.

In-Class Tests (Formative/Summative)

There will be three In-Class Tests for each workshop stream, as follows:

Workshop stream	In-Class Test	Date and time
Evening (Tuesdays)	Test 1	Tuesday, 30 August at 7pm
	Test 2	Tuesday, 4 October at 7pm
	Test 3	Tuesday, 1 November at 7pm
Day (Wednesdays)	Test 1	Wednesday, 31 August at 8am
	Test 2	Wednesday, 5 October at 8am
	Test 3	Wednesday, 2 November at 8am

Normal University examination rules apply to the conduct of In-Class Tests. These rules are set out under the heading “Rules governing students’ conduct in examinations” in the Macquarie University Handbook. You are responsible for familiarising yourself with these rules prior to the first In-Class Test.

The topics to be covered by each In-Class Test will be advised, in advance, in workshop classes and on the ACST201 WebCT site. The In-Class Test dates and times may be subject to change. Any alterations will be advised in classes and on the ACST201 WebCT site.

Your graded In-Class Tests, with feedback, will be returned to you, and discussed, at your Tutorial class. Your In-Class Test results will count towards your final grade (15% or 22.5% depending on which assessment system you choose).

Tutorial Tests (Formative)

Your tutorial class in each of Weeks 2, 3, 4, 6, 7, 9, 10, 11 and 13 will begin with a short Tutorial Test. This will be marked and discussed during the Tutorial so that you will have immediate feedback on your performance. Each Tutorial Test will be based on the work done in the previous week's workshop class.

Your scores from these Tutorial Tests will **NOT** count directly towards your final result. However, to be eligible for a passing grade in ACST201 **you MUST complete at least 7 of the 9 Tutorial Tests**.

Assignments (Formative/Summative)

There will be five assignments, each consisting of several problems to be solved. You will access the assignments using your internet based e-workbook (published by Perdisco) - the same e-workbook as you will use for your revision and practice problems. The assignments will count either 12.5% or 15% towards your final grade, depending on which assessment system you choose.

Each assignment will be available for a period of ten days. You must complete it within that ten day period. You will have two attempts at each assignment. Assignment availability dates are shown in the e-workbook, and you will be reminded of them in the workshop classes and on the WebCT site.

e-workbook (Formative/Summative)

You will use an internet based electronic workbook in ACST201 this semester. This e-workbook has been specifically designed for ACST201 (with problems written by John Shepherd) to support your learning and to help you understand and practise what you learn in ACST201. It includes Revision Topics (revising assumed knowledge from ACST101) and Practice Topics (giving you practice at applying what you learn in ACST201 to solving financial problems), as well as the five assignments. You can access your e-workbook from the computing labs on campus, from the library, from home, from work, from internet cafes – from anywhere you can get access to the internet. Your e-workbook is available 24 hours a day, 7 days a week.

You need to purchase your e-workbook for \$29.70 (including GST) from its publisher Perdisco. See the separate handout about the ACST201 e-workbook. This tells you how to purchase your copy.

For each major topic in ACST201, you will find a set of Practice problems in your e-workbook. Trying to solve these problems will help you to understand the subject better by giving you practice at applying the basic ideas in solving a range of problems. For each topic, you can tackle as many different sets of problems as you like, without limit. Your e-workbook will not only give you feedback on whether or not your answers are correct, it will provide you with **complete step-by-step solutions** to all problems.

The Revision and Practice problem sets will **NOT** count towards your final grade in this unit. Their purpose is to help you learn and to give you feedback, not to be used in grading your learning. The five assignments you will do with the aid of your e-workbook will count (12.5% or 15%) towards your final grade in ACST201.

Learning Portfolio (Formative/Summative)

A Learning Portfolio is a collection of pieces of work you have done that demonstrate what you have learned. Gradually over the semester you will be given details of several tasks that will make up your Learning Portfolio, and how to go about completing them. Your Learning Portfolio will count 12.5% towards your final grade, no matter which assessment system you choose.

Final exam (Summative)

The final exam will be a 3-hour written paper with ten minutes reading time. The final exam will count either 50% or 60% towards your final grade, depending on which assessment system you choose.

Reference material in Tests and final exam

For the In-Class Tests and the final exam you may bring with you and refer to **one A4-size sheet of paper** containing anything you like (written or printed) on both sides. (This does not apply to Tutorial Tests.)

Calculators

You will need a calculator at workshop classes, at tutorials, at In-Class Tests and at the final exam. In solving Test and exam problems you will have to show clearly the step-by-step working involved in every calculation you perform. Many of the problems you will encounter in this unit can be solved easily if you have access to a spreadsheet program (eg Excel). You can use a spreadsheet program to verify your solutions to many of the problems you are solving.

How to approach your learning in ACST201

The emphasis in ACST201 is not on how many marks you can accumulate over the semester, but on how well you learn – how well you understand, and can apply, the basic principles and concepts of financial mathematics. This means, amongst other things, that we will be asking you not only to do financial calculations, but also to explain what you are doing, why you are doing it, and how the answer would change if some of the underlying data were different. We also want you to be able to explain the results of your calculations to people (like directors, managers and clients) who don't know (and don't want to know) how to do the calculations, but want to know what the results mean.

Mistakes are opportunities to learn. We want you to feel free to make mistakes, because that's how you know you have not learned well, and can do something about it. That's why we give you two attempts at each assignment – if you make mistakes the first time, you can work out why, then try again to make sure you now understand.

This means that when you tackle an assessment task (a Tutorial test, an assignment, a Learning Portfolio task, etc), you should make sure that what you are submitting for feedback or for grading is your own work. We will be giving you as much feedback as we can, but you will be wasting our time – and yours – if you submit someone else's work as your own. Remember that, and make sure that what you are turning in for feedback is your own work – representing your own understanding and efforts. Don't waste your time ... or ours! ACST201 is about learning – you learn by doing it yourself. No one else can do the learning for you.

Special Consideration

If the quality of your learning and work in this subject is adversely affected by illness, accident or some other form of unavoidable disruption, you should familiarise yourself with the special consideration provisions in Macquarie University's Bachelor Degree Rules 7 and 9 in the Macquarie University Undergraduate Studies Handbook (pages 40/41). All requests for special consideration should be made in writing, on the standard form, and submitted to the Student Enquiry Service on level 1 of the Lincoln Building.

You must complete a Professional Authority Form to accompany any application for special consideration based on medical grounds. The special consideration application and professional authority forms are available from the Student Enquiry Service, or from this web site:

<http://www.reg.mq.edu.au/academic-index.htm>

ACST201 Timetable (2005)

Week No	Week Beginning	Topics	In-class Test	Tutorial Test	Assignment becomes available
1	1 August	Where are we starting from, and where are we going?			
2	8 August	Short term financial instruments		1	
3	15 August	Long term financial instruments		2	1
4	22 August	Zeros and yields		3	
5	29 August	Reinvestment risk	Test 1		2
6	5 September	Horizon analysis (bonds & bills) Effect of fees and charges		4	
7	12 September	Duration		5	3
	19 September	NO CLASSES			
	26 September	NO CLASSES			
8	3 October	Uses of duration	Test 2		
9	10 October	Contingent payments		6	
10	17 October	Forward & future contracts (1)		7	4
11	24 October	Forward & future contracts (2)		8	
12	31 October	Option pricing (1)	Test 3		5
13	7 November	Option pricing (2)		9	

Note:

(1) There will be no tutorial classes during Week 1 (beginning 1 August). Your first tutorial class will be during Week 2 (beginning 8 August).

(2) Changes to the timetable may occur. Any alterations will be advised in classes and on the ACST201 WebCT site.

