

## ACST400/831 : ACTUARIAL CONTROL CYCLE I

### CAMPUS & CITY CLASSES

First Semester 2005

#### UNIT OUTLINE

##### ACST400/831 Teaching & Support Team

Team Member	Team Role	Room	Telephone	Consultation Hours
Sue Clarke	Unit Coordinator / Lecturer	C5C 496	9850 8575	Via WebCT site
John Shepherd	Lecturer	C5C 491	9850 8573	Via WebCT site
Bruce Edwards	Visiting Lecturer	N/A	N/A	Via WebCT site
Alison Petto-Hamilton	Unit Administrator	C5C 492	9850 9987	

Questions relating to the administration of the unit should normally be posted in the Discussion Area of WebCT under the "Admin" Topic, (provided that they have not already been answered in the Unit Outline, of course), and directed to Sue Clarke as the Unit Coordinator. Only personal administrative questions, ie those that do not relate to anyone else in the course, should be sent via the private email facility of WebCT. Questions relating to the unit content should be posted on the appropriate Topic in the Discussion Area, or put to the relevant lecturer in class. Course content questions sent via private email will not be answered. There are over 100 students and only one lecturer for each part of the course, and while it is true that we eat, sleep and dream in actuarial control cycles that does not mean that we wish to cover each part of the course 100 times.

Note that the ACST400 WebCT site includes ACST831.

**Subject: Actuarial Control Cycle 1****Credit points:** 4**Pre/ Co requisites:**

Non-Award / Completion of a degree in Actuarial Studies (or the equivalent in terms of either the  
 M.Comm Students Part I subjects of The Institute of Actuaries of Australia, or other routes)  
 Undergraduates Pre: ACST344(P) Co: ACST399,ACST300

**Learning Objectives**

The overall aim of the Control Cycle subject is for you to understand the basic principles underlying the actuarial management of financial products, services and schemes across commercial, government and other environments, so that you will be able to apply those principles to a wide range of problems and issues that you may encounter in your professional practice.

The detailed learning objectives, summarised under 18 sub-headings, are in The Institute of Actuaries of Australia's Part 2 Syllabus for the Actuarial Control Cycle, which can be found at

[http://www.actuaries.asn.au/PublicSite/education/education\\_frameset.htm](http://www.actuaries.asn.au/PublicSite/education/education_frameset.htm)

**Classes**

There are two 2-hour classes (campus) or one 3-hour class (city) scheduled for each week.. In addition we will make extensive use of the unit WebCT site to deliver additional material and discussions.

The class times will not be traditional lectures, but will be used for a combination of short lectures, class discussions and small group exercises. These activities are designed to get you thinking about the issues raised and to come up with solutions to the questions asked. This part is fun and allows you to do some (guided) thinking of your own.

To gain the maximum benefit from these classes you should read the relevant textbook chapter(s) beforehand. Discussions are encouraged in the class sessions, so be prepared to participate to gain maximum benefit from this course.

To facilitate your learning there will be an on-line quiz for each Section of the course. Each timed quiz will be available for a limited period only. To avoid being caught out by computer failure or heavy work pressures you should aim to complete each quiz well within the available period.

Campus and City classes will be held as follows:

<b>Enrolment stream</b>	<b>Day</b>	<b>Time</b>	<b>Location</b>
Campus class	Monday	2.00-4.00 pm	E6A102
	Wednesday	2.00-4.00pm	W5C220
City Class	Tuesday	5.30-8.30pm	Portside Centre Level 5, 207 Kent Street

Any alterations to the class time or location will be advised in class and on the ACST400/831 web site.

Students wishing to change their enrolment from City to Campus classes (or vice versa) must first contact the Unit Administrator.

### Assumed knowledge and skills

We assume from the start of this course that you are familiar with what is learned in Part 1 of the Institute of Actuaries of Australia education system.

### Textbook

The textbook for ACST400/831 is available from its publisher, The Institute of Actuaries of Australia ([www.actuaries.asn.au](http://www.actuaries.asn.au)):

- Bellis, Clare, Shepherd, John & Lyon, Richard (2003) *Understanding Actuarial Management: the actuarial control cycle*, Institute of Actuaries of Australia

Some other readings will be made available on the ACST400/831 WebCT site from time to time.

### Assessment tasks

The following table lists the assessment tasks for this Subject and their relative weightings:

Assessment task	Sections mainly addressed (See timetable on page 5 for identification of Sections)	Weighting
Assignment 1	1 & 2	10%
Assignment 2	4	10%
Class Presentation	Assignment 2	5%
On-Line Quizzes	All	5%
Text Book Feedback	All	5%
Final Examination	All, but with focus on those Sections not previously covered	65%

### Mobile Phones

Mobile phones must be switched off during all classes and are not permitted at all in the final exam room.

### Grading used in ACST400/831

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 ACST400/831, 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 of understanding than that for P, D a higher level of understanding than CR, and HD the highest level of understanding.

Grading in this subject is NOT simply a matter of adding up the marks you gain for each of the assessment tasks. Your marks are taken as an initial indicator of the quality of your understanding, but they do not automatically determine your grade. Grading ultimately is based on the quality of the understanding you demonstrate, not on how many marks you can accumulate.

The following table is a guide to the meaning of each grade in the context of ACST400/831:

Grade	Level of understanding represented by that grade
HD	As for grade D, plus: <ul style="list-style-type: none"><li>• Able to recognise &amp; explain the application of actuarial principles to types of problem not seen before</li><li>• Able to apply basic principles/concepts to scenarios widely different from the familiar</li></ul>
D	As for grade CR, plus: <ul style="list-style-type: none"><li>• Able to apply basic principles/concepts to scenarios which differ significantly from the familiar</li><li>• Able to explain actuarial principles/concepts in clear, simple, non-technical language</li></ul>
Cr	As for grade P, plus: <ul style="list-style-type: none"><li>• Able to apply basic principles/concepts to scenarios which differ slightly from the familiar</li><li>• Able to identify the most important aspects of the context of actuarial work a particular scenario<ul style="list-style-type: none"><li>• Able to recognise &amp; explain professional issues arising in actuarial work</li></ul></li></ul>
P	<ul style="list-style-type: none"><li>• Able to state clearly basic actuarial principles/concepts</li><li>• Able to apply basic principles/concepts to scenarios which are familiar</li><li>• Able to explain basic principles/concepts of actuarial work</li></ul>
PC	<ul style="list-style-type: none"><li>• Marginally satisfactory evidence of achievement of P level understanding</li><li>• Insufficient understanding to be likely to succeed in ACST401/832</li></ul>
F	<ul style="list-style-type: none"><li>• No evidence of achieving P level understanding</li></ul>

### Assignments

The due dates for the two assignments, which together with the class presentation on the second assignment are weighted 25%, are spread over the first 8 weeks of the semester. This gives us time to give you feedback on your performance before you tackle the final exam. In order to achieve a passing grade for this subject you must submit a genuine attempt at each assessment task.

## Final Exam

The Final Exam will be a 3-hour closed-book, written paper (with ten minutes reading time), and it will be weighted 65% towards your overall grade. The Final Exam will be held on a date to be announced by Macquarie University during the period 15 to 29 June. The exam timetable will be available some time during May. Both City and Campus students will sit for a common final exam at Macquarie University in North Ryde.

## IAAust exemptions

Macquarie University subjects ACST400/831 and ACST401/832 together are accredited by The Institute of Actuaries of Australia for exemption from its Part II subject "The Actuarial Control Cycle". You will automatically gain exemption from Part II if you achieve a grade of CR (Credit) or better (HD or D) in both ACST400/831 and ACST401/832. If you already have credit for one of these units, with through Macquarie in a previous year or through some other institution, you should contact Sue Clarke with your details following the release of grades at the end of the semester.

## ACST400/831 WebCT site

You will need a web browser such as:

- Netscape 4.76, 6.2 or 7.0; or
- Microsoft Internet Explorer 5.0 or higher (including 6.0)

Before using the ACST400/831 WebCT site, you should read and understand the document called "*Security Policy and Rules Governing the Use of the Computing and Communications Facilities at Macquarie University*" which you received at enrolment and which is available at:

<http://www.ocs.mq.edu.au/POLICIES/mqrules.html>

The WebCT site for ACST400/831 can be accessed at: <http://online.mq.edu.au/pub/ACST400/>

## Plagiarism

You should note carefully Macquarie University's policy on plagiarism, because it applies to all work you submit for assessment in this subject (including the Final Exam). Make sure you read, understand and comply with the plagiarism policy set out in the separate document available on this web site. Macquarie University now licenses the anti-plagiarism software, Turnitin, which will be used in this course.

## 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 on pages 91-92 in the 2005 Handbook of Undergraduate Studies. **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.registrar.mq.edu.au/academic-index.htm>

## Calculators

In this subject you may use a calculator at the Final Exam provided it is portable, silent and battery operated. However, in any question requiring calculations, you will be expected to show clearly the steps involved in arriving at a calculated result.

## ACST400/831 Semester 1 Timetable

Week No	Week Beginning	Section	Topics Covered	Textbook Chapter	Teacher	Assignment Due
1	28 Feb	1	Overview: Control Cycle	1	JS	
2	7 March	2	Context of Actuarial Work	3 (& 2)	JS	
3	14 March	3	Meeting Consumers' Needs	5	BE	
4	21 March	4	Assessing Risk	6	SC	Assignment 1
5	28 March	4	Assessing Risk	6	SC	
6	4 April	5	Product Design	7	BE	
7	25 April	6	Regulation	4	BE	
	11 April		<b>STUDY BREAK</b>			
	18 April		<b>STUDY BREAK</b>			
8	2 May		Class Presentations		SC/JS/BE	Assignment 2
9	9 May	7	Modelling	8	SC	
10	16 May	7/8	Modelling/Pricing	8/11	SC	
11	23 May	8	Pricing	11	SC	
12	30 May	9	Need for Capital	9	BE	
13	6 June	10	Being Professional	2	BE	

### Note:

Changes to the timetable may occur. Any alterations will be advised in classes and on the ACST400 web site.