MACQUARIE UNIVERSITY

FACULTY OF BUSINESS AND ECONOMICS

ACST356 / 861
Mathematical Theory of Risk

Semester 1, 2011

Department of Applied Finance and Actuarial Studies

Year and Semester:	**Semester 1, 2011**
Unit convenor:	**Associate Professor David Pitt**
Prerequisites (for ACST356):	**STAT272 (P)**
Corequisites (for ACST861):	**STAT810 (P)**
Credit points (for ACST356):	**3**
Credit points (for ACST861):	**4**

Students should note that in 2011 both ACST356 and ACST861 contain new material on Ruin Theory and on Credibility Theory which was not covered in these units in 2006-2010. The material on Experience Rating and No Claim Discount that was covered in ACST356 and ACST861 in 2006-2010 has been moved to ACST357 and ACST862 from 2011.

Students in this unit should read this unit guide carefully at the start of semester. It contains important information about the unit. If anything in it is unclear, please consult the unit convenor.

ABOUT THIS UNIT

This unit examines the use of statistical models in the insurance context. Statistical models of the number of claims and the sizes of the claims are studied. These models are used as a basis for the study of risk theory, ruin theory and the effect of reinsurance. Decision theory and simulation are also studied.

This unit relies heavily on your statistics studies (STAT 272 or STAT 810) and you should ensure that you revise this work if necessary. In particular, you should be familiar with:

- the theory of statistical distributions, including the meaning of a random variable, discrete and continuous random variables, density functions, cumulative density functions;
- basic results relating to expectation, variance, covariance, and moment and cumulant generating functions;
- joint random variables and marginal density functions;
- the use of Normal Distribution and Chi-Squared distribution tables;
- probability theory, including conditional probability; and
- some mathematical techniques and results including integration by parts and the binomial, logarithmic, exponential, and Taylor series approximations.

TEACHING STAFF

A/Prof David Pitt is the unit convenor and will be taking 8 weeks of classes. A/Prof Leonie Tickle will be taking 5 weeks of classes.

Tony Zhang is the teaching administrator for this unit. Administrative questions that are not covered in this unit outline should be directed to him via the private Mail facility of the website. If the questions are of interest to everyone, the question and the reply will be posted to the website, so you should specifically request if you want your message to remain private.

Questions about unit content should be sent to the Discussion Board of the website or raised during tutorials or lectures.

If you need to contact lecturing staff, including to arrange for an in-person meeting, please do so via the private Mail facility of the website.

CONSULTATION TIMES

| Weeks 1 to 5 | Leonie Tickle | Tues 9-11 | E4A608 |
| Weeks 6 to 13 | David Pitt | Wed 2-4 | E4A609 |

You are encouraged to seek help at a time that is convenient to you from a staff member teaching on this unit during their regular consultation hours. In special circumstances, an appointment may be made outside regular consultation hours. Staff will not conduct any consultations by email. You may, however, phone staff during their consultation hours.

Students experiencing significant difficulties with any topic in the unit are encouraged to seek assistance immediately.

CLASSES

The timetable for classes can be found on the University web site at www.timetables.mq.edu.au.

Lectures are held Tuesday 2 – 4 in E7BT5 and Wednesday 11 – 12 in W5A PRICE. The unit material is covered in the three hours of lectures each week.

Tutorials are held Wednesday 12–1, 1–2 and Thursday 10–11, commencing in Week 1. **You must attend the tutorial class in which you are enrolled.** The tutorial is an opportunity for you to attempt the section exercises given at the end of each section of work, and to discuss problems with the tutor.

CLASS ETIQUETTE

Mobile phones should be switched off during all lectures and tutorials. If there is a reason for you to keep your phone on you should request to be allowed to do so before the start of the class. Lectures commence at 5 minutes past the hour and you are expected to be punctual. You are expected to keep talking to a minimum during classes so as not to disrupt your fellow students (and the lecturer!).

Required texts

Lecture Handouts (i.e. notes with gaps) are available for downloading from the ACST356 / 861 teaching website. It is recommended that you print the relevant section of the Lecture Handout in advance of the relevant lecture, and bring it to classes to complete.

Complete Notes including solutions to Lecture Exercises and solutions to Section Exercises will be available for downloading from the ACST356 / 861 teaching website on Friday at 10 am in the week that the Section is completed (Week 1 for Section 1, …, Week 4 for Section 4, Week 6 for Section 5, ..., Week 9 for Section 8, Week 11 for Section 9, Week 12 for Section 10 and Week 13 for Section 11). This schedule is fixed and will not be varied for individual students unless the formal grounds for Special Consideration or Equity Support are met.

If you decide to purchase the optional texts (the ActEd CT6 notes and / or the Dickson text – see below), it is recommended that you read the relevant sections in advance of the lecture. During the lecture you can then work through the Lecture Handout, which will cover similar ground but expressed in a different way.

Optional recommended text

The following text may be helpful for some sections of the unit, but is not required reading.

Dickson, D. (2005). *Insurance risk and ruin.* Cambridge University Press: Cambridge.

This book is available from the Macquarie University Co-op Bookshop. Copies are also available in the Reserve section of the library.

Optional ActEd material

The ActEd CT6 are not set as required or recommended reading for this unit, since the unit notes are comprehensive and detailed. The ActEd CT6 notes will also NOT be set as recommended reading for ACST357 / 862. If you decide to purchase the ActEd CT6 notes, please make your order on the ASSOC webpage www.mqassoc.org by going to the "Order ActEd Notes" tab on the left. Those who want to view a copy of the ActEd CT6 notes during the semester should contact the teaching assistant using private Mail on the ACST356 / 861 website. Arrangements will be made for you to view them in the Department of Applied Finance and Actuarial Studies. The notes are not available in the library. This reference copy of the notes cannot under any circumstances be photocopied.

Other useful references

- Hossack, I.B., Pollard J.H, and Zehnwirth, B. (1999). *Introductory statistics with applications in general insurance, second edition.* Cambridge University Press: Cambridge.
- Klugman, S.A., Panjer, H.H, and Willmot, G.E. (2004). *Loss models: From data to decisions, second edition.* Wiley: New York.
- Casualty Actuarial Society. (2001). *Foundations of Casualty Actuarial Science, 4th edition.* Casualty Actuarial Society.

These texts are available in the library, with a single copy of each also available in the Reserve section of the library.

TECHNOLOGY USED AND REQUIRED

- MS Excel and MS Word will be used throughout the unit.
- Students will be required to use a non-programmable calculator in the final examination and the in-class tests.

UNIT WEB PAGE

To access the website, go to http://learn.mq.edu.au and login using your usual login and password. You will then have access to the websites for all the units in which you are enrolled. If you have any trouble logging in (e.g. you have forgotten your password), please contact the Student IT Helpdesk.

Before logging in, you should follow the link labelled "Technical Information" and read all the information there, including the Information Technology Security Policy and Rules and the Information Technology Usage Rules. This technical information also mentions a number of "plugins" that may be required. Of those listed, in this unit you will only need Acrobat Reader. Remember to close your browser when you have finished using the site. If you don't, another person can use the still running browser to access the website with your account.

The web site will be used as an integral part of this unit. The main components of the website (listed on the left hand side toolbar) are:

Course Content
- Unit Outline 2011: You can download this unit outline from here.
- Unit Notes: A set of Lecture Handouts, and Complete Notes for each Section, including solutions to Lecture Exercises, and solutions to Section Exercises (posted Friday 10 am according to the schedule given previously) will be posted here for downloading.
- Assignment: Any data or information that you need to complete the assignments will be made available here.
- Revision exercises: Additional revision exercises will be made available here.
- Mock tests: Mock tests and solutions will be made available here.
- Tests and exams: Previous examinations and tests for ACST356 / 861 are available here.
- Links: Any web links you need to use will be made available here.

Announcements. Ensure that you keep up to date with announcements posted here.

Assessments. Enter this section to submit your weekly quizzes and online assignment 1.

Calendar. The calendar will list the dates that some items of assessment become available; however it is your responsibility to familiarise yourself with all assessment requirements including those not listed on the calendar.

Discussions. You should use the Discussion facility, along with the tutorial time, as your resource for asking questions about the content of the unit. Please address your questions to your fellow students – if there is no response or an incorrect response from the class the teaching staff will post a response. You are encouraged to post answers to other students' questions – this is one of the most effective ways to clarify your own understanding of the material. You should consult the Discussions frequently, to contribute to questions and see answers to queries.

Mail. You should use private Mail to send administrative queries to the unit convenor or teaching administrator. Staff will also use Private Mail to contact you individually, if necessary. You may also use this facility to contact your fellow students. It is your responsibility to check the website regularly to make sure that you are up-to-date with messages sent to your Private Mail address.

Search. Use this tool to search the website.

Video iLecture. In 2011, video iLecture will be available for ACST 356 / 861. The recording captures video output from the lecturer's PC and visualiser, and combines and synchronises the video with audio of the lecture.

LEARNING OUTCOMES

The broad learning outcomes of this unit are given below. The learning outcomes as well as the specific learning objectives are given in the lecture notes at the start of each section of work. You should review these in advance of each lecture and after completing each section of work.

On completion of this unit you should be able to do the following.

1. Describe, develop, apply and analyse the modelling of loss distributions both with and without limits and risk-sharing arrangements.

2. Derive, apply, explain and analyse the concepts of Bayesian statistics including Empirical Bayes models.

3. Construct risk models involving frequency and severity distributions and calculate the moment generating functions and moments both with and without risk-sharing arrangements.

4. Use Monte Carlo simulation to model observations from various loss models, calculate the number of simulations required, and extend these techniques to analyse more complex scenarios.

5. Define, explain and analyse the concept of ruin, and describe and explain the relationships between different probabilities of ruin including the effect of simple reinsurance arrangements.

6. Explain and apply the concepts of decision theory.

GRADUATE CAPABILITIES

In addition to the discipline-based learning objectives, all academic programs at Macquarie seek to develop the capabilities the University's graduates will need to develop to address the challenges, and to be effective, engaged participants in their world. This unit contributes to this by developing the following graduate capabilities:

1. Discipline Specific Knowledge and Skills:

    (a) Have a deep intuitive understanding of the meaning of probability and the methods of manipulating probabilities.

    (b) Have skills in fitting and assessing the reliability of statistical models, particularly in the context of financial applications.

2. Critical, Analytical and Integrative Thinking

3. Problem Solving and Research Capability

- The unit is taught using three hours of lectures and a weekly tutorial.
- You are expected to read lecture materials in advance of the lectures and to participate actively in the tutorial classes.

RELATIONSHIP BETWEEN ASSESSMENT AND LEARNING OUTCOMES

This unit is assessed using two class tests, regular short quizzes, two assignments and a final examination. The assessment structure is suitable given the problem–solving and technical nature of the unit, and is also aimed at encouraging you to regularly review the material. An assessment schedule is given in the following pages and any changes to the assessment or assessment due dates will be advised in classes.

In addition to tasks that count for assessment, you will be provided with Lecture Exercises, Section Exercises to attempt during the tutorials and / or in your own time, and two Mock Tests for which solutions will be discussed in the tutorial class prior to each class test.

	Assessment Task 1	**Assessment Task 2**	**Assessment Task 3**
Title/Name	Class Test 1	Class Test 2	Assignment 1
Description	In class test covering Sections 1 to 4.	In class test covering Sections 5 to 8.	Online assignment.
Due date	Held on Tuesday 29 March at 2pm.	Held on Tuesday 17 May at 2pm.	To be submitted online by 5pm on 11 April.
% Weighting	10%	10%	2.5%
Grading method - marking criteria/ standards - expectations in relation to presentation - referencing requirements	Test will be marked against a marking template. Allowance for follow through errors will be given.	Test will be marked against a marking template. Allowance for follow through errors will be given.	Assignment will be marked automatically by a computer program.
Submission method	At conclusion of test.	At conclusion of test.	Online submission.
Feedback	Marked papers and feedback within 12 working days of the class test date.	Marked papers and feedback within 12 working days of the class test date.	Correct and incorrect answers will be highlighted.
Estimated student workload (hours)	15 hours	15 hours	7.5 hours
Learning outcomes assessed	Outcome 1 and 2	Outcomes 3 and 4	Outcome 1
Graduate capabilities assessed	Outcomes 1, 2 and 3	Outcomes 1, 2 and 3	Outcomes 1, 2 and 3

	Assessment Task 4	**Assessment Task 5**	**Assessment Task 6**
Title/Name	Assignment 2	Quizzes	Final exam
Description *(including length or similar if applicable)*	Written assignment.	Online quizzes designed to test understanding of lecture material.	Three hour written exam.
Due date	To be submitted to BESS by 5pm on 9 May.	See schedule.	During the university exam period.
% Weighting	2.5%	5% in total for all 10 quizzes.	70%
Grading method - marking criteria/ standards - expectations in relation to presentation - referencing requirements	Assignment will be marked against a marking template. Allowance for follow through errors will be given.	Quizzes will be graded automatically by a computer program.	Exam will be marked against a marking template. Allowance for follow through errors will be given.
Submission method	To BESS.	Online.	Exam period
Feedback *(type, method, date)*	Marked papers and feedback within 12 working days of the assignment due date.	Correct and incorrect answers will be highlighted.	Final result communicated to students for entire assessment.
Estimated student workload (hours)	7.5 hours	10 hours	30 hours
Learning outcomes assessed	Outcomes 1, 3 and 4	Outcomes 1, 2, 3, 4 and 5	Outcomes 1, 2, 3, 4, 5 and 6
Graduate capabilities assessed	Outcomes 1, 2 and 3	Outcome 1	Outcomes 1, 2 and 3

Week	Week Beginning	Due Monday 5 pm	Lecturer	Tuesday 2-4 class	Wednesday 11-12 class	Tutorial
1	21 Feb	-	LT	Lecture: Section 1 *Loss Models – I*	Lecture: Section 1 (cont)	Section 1 Exercises
2	28 Feb	Quiz 1	LT	Lecture: Section 2 *Loss Models – II*	Lecture: Section 2 (cont)	Section 2 Exercises
3	7 March	Quiz 2	LT	Lecture: Section 3 *Loss Models - III*	Lecture: Section 3 (cont)	Section 3 Exercises
4	14 March	Quiz 3	LT	Lecture: Section 4 *Loss Models - IV*	Lecture: Section 4 (cont)	Section 4 Exercises
5	21 March	Quiz 4	LT/DP	Lecture: Section 5 *Reinsurance and Deductibles*	Lecture: Section 6 *Simulation*	Mock Test 1 Solutions
6	28 March	-	LT/DP	Test 1	Lecture: Section 6 (cont)	Section 5 Exercises
7	4 April	Quiz 5	DP	Lecture: Section 6 (cont) Lecture: Section 7 *Individual Risk Model*	Lecture: Section 7 (cont)	Section 6 Exercises
STUDY BREAK	11 April 18 April	Assignment 1 Quiz 6				
8	25 April	-	DP	No class: ANZAC Day Holiday	Lecture: Section 8 *Collective Risk Model*	Section 7 Exercises
9	2 May	Quiz 7	DP	Lecture: Section 8 (cont)	Lecture: Section 8 (cont)	Section 8 Exercises
10	9 May	Quiz 8; Assignment 2	DP	Lecture: Section 9 *Ruin Theory*	Lecture: Section 9 (cont)	Mock Test 2 Solutions
11	16 May	-	DP	Test 2	Lecture: Section 10 *Credibility Theory*	Section 9 Exercises
12	23 May	Quiz 9	DP	Lecture: Section 10 (cont)	Lecture: Section 11 *Decision Theory*	Section 10 Exercises
13	30 May	Quiz 10	DP	Lecture: Section 11 (cont)	Unit surveys, Exam information, Revision	Section 11 Exercises

Quiz questions, Lecture Exercises and Section Exercises are aimed at helping you to understand the fundamental concepts before moving on to more difficult material. **They are not necessarily indicative of the difficulty of questions you could expect in the class tests and on the final exam** (i.e. they are mostly easier, to assist your initial learning). Past class tests and examinations with full solutions are available from the website, and give you a good source of practice questions that are of examination difficulty.

Non-assessable Tasks: Lecture Exercises, Section Exercises, Mock Tests

The Lecture Exercises and Section Exercises are aimed at developing your understanding of the unit material so that you are able to successfully complete the assessable tasks.

Any student coming to lectures or tutorials is expected to do so with the intention of actively participating. This includes bringing all necessary materials (Lecture Notes, calculators etc.) and making a sincere and engaged attempt at Lecture and Section Exercises during class time.

The Mock Tests are to be attempted outside lecture time. You are advised to attempt them under examination conditions. The aim of the Mock Tests is to give you practice at attempting questions under examination conditions, so that you test your understanding of the content as well as your ability to manage your time and stress.

Past class test and examination questions and revision questions, all with fully worked solutions, are also available from the website.

Quizzes and Assignments

There are 10 online quizzes to complete. Quiz 1 is based on material in Section 1, Quiz 2 is based on material in Section 2, … Quiz 10 is based on material in Section 10; Section 11 will not be assessed by quiz. Note that each quiz may also rely on earlier work. The quizzes in total are worth 5% of the final assessment for the unit; the weighting of each quiz varies according to the length of the Section on which it is based.

Please use quizzes 1 and 2 as early diagnostic tools to assess how well you are understanding the unit material and whether you need to revise pre-requisite material or to reconsider your enrolment in the unit. Please contact the unit convenor if you need advice.

There are two assignments in this unit, both to be made available under the Assignments section of the website.

- Assignment 1 will involve fitting models to data for claim numbers and amounts, based on material covered in sections 1 to 4. It is due 5 pm Monday 11 April and is worth 2.5% of the assessment for the unit. It will be submitted online.
- Assignment 2 involves written responses to questions covering the first 8 sections of the unit. It is due 5 pm Monday 9 May and is worth 2.5% of the assessment for this unit. It will be submitted to BESS.

At the start of each quiz / assignment you are required to certify that the answers you are submitting are totally your own work, and that you have not made available, to classmates or others, your answers to the quiz / assignment. **Making this certification when it is not true will be regarded as a serious breach of the assessment conditions.**

Quizzes and assignment 1 are to be submitted online by the due dates shown on the schedule. You will notice that there is an assignment or quiz due every Monday at 5 pm -

with the exception of the first week of term, the first week after the break, and the weeks in which there is a class test – and that there are two items due in week 10.

You should not leave the submission of quizzes or assignments to the last minute in case there are IT problems that cause delays. (In the rare case of prolonged University-wide technology problems, allowances will be made for all students). You should ensure that you fully submit each item of assessment and receive the acknowledgement "Thank you for submitting Quiz 1" etc., otherwise you may not receive credit.

You must ensure that you answer quiz / assignment 1 questions in the correct format (details are given in the certification at the start of each quiz) and with the rounding specified. Answers will not score credit unless they are in the correct format and with the correct rounding. **Marks cannot be reinstated for these errors so please do not request this**.

Feedback on each quiz / assignment 1 will be available online once the assessment has been submitted and the deadline for the assessment has passed. In order to be able to access quiz / assignment questions, solutions and feedback later in the semester, you must submit the quiz / assignment. Therefore please ensure that you submit an attempt if you want to be able to access this material. **Quizzes / assignments cannot subsequently be made available to students who do not submit an attempt, so please do not request this.**

Class tests

There will be two class tests, each worth 10% of the final assessment for the unit.

- Test 1 will be held Tuesday 29 March at 2 pm. It will cover Sections 1, 2, 3 and 4.
- Test 2 will be held Tuesday 17 May at 2 pm. It will cover Sections 5, 6, 7 and 8.

Marked papers including individual feedback will be returned to BESS. Class feedback and a marking guide will be provided on the website. It is hoped that marked papers and feedback will be returned within 12 working days of the class test date.

Exam

The final examination is worth 70% of the final assessment for the unit. It will be a three-hour written paper with ten minutes reading time held during the University Examination period.

The University Examination period in First Half Year 2011 is from 6 June to 26 June. You are expected to present yourself for examination at the time and place designated in the University Examination Timetable. The timetable will be available in Draft form approximately eight weeks before the commencement of the examinations and in Final form approximately four weeks before the commencement of the examinations from http://www.timetables.mq.edu.au/exam.

You are advised that it is Macquarie University policy not to set early examinations for individuals or groups of students. All students are expected to ensure that they are available until the end of the teaching semester, that is, the final day of the official examination period.

SPECIAL CONSIDERATION FOR ASSESSMENTS AND EXAMS

If illness or unavoidable disruption affects your ability to submit an assessment task or sit the tests or exam, you should read the information at

http://www.businessandeconomics.mq.edu.au/new_and_current_students/undergraduate/how_do_i/special_consideration

immediately. Allowances may be made where a formal application for Special Consideration is approved. For your application to be considered, you must ensure that you meet the requirements specified, including providing a Professional Authority Form for applications based on medical grounds.

The only exception to sitting an examination at the designated time is where an application for Special Consideration due to documented illness or unavoidable disruption is approved. By submitting a request for special consideration you are agreeing to be available to sit a Supplementary Examination if required. If a Supplementary Examination is granted as a result of the Special Consideration process then

- The examination will be scheduled after the conclusion of the official examination period.
- You do not have the right to request an alternative time, unless the scheduled time clashes with another Macquarie University supplementary exam that you are required to attend.
- Your performance in the Supplementary Examination replaces your performance in the original examination (if any). You do NOT have the right to subsequently request that your result be based on the original examination rather than the Supplementary Examination.

RULES REGARDING TESTS AND EXAMINATIONS

Normal examination rules apply to the conduct of class tests and the final examination. These rules are set out under the heading "Conduct of Examinations" in the Student Information–Assessment section of the current Macquarie University Handbook of Undergraduate Studies. Students are responsible for familiarising themselves with these rules prior to the class test and final examination.

You should ensure that your handwriting in the class tests and in the final examination is legible. Sections of work that are not legible will not be marked. For true/false questions, answers that are not clearly legible as either T or F will be assumed to be wrong and marked accordingly.

Calculators will be allowed in the class tests and the final examination but a clear indication of the steps involved in every calculation must be shown. Any machines that have a text-retrieval capacity, whether or not they have a full alphabet on the keyboard, are not allowed. Calculators may be checked at the commencement of the class tests and final exam, and the make/model may be recorded.

Dictionaries will not be permitted in the class tests or the final examination.

A Formulae Sheet will be provided in the class tests and final examination. No other reference material is permitted. This Formulae Sheet will be identical to the one provided on the teaching website.

Academic Senate has resolved that mobile phones should not be used in classrooms or be brought into examination rooms. Communication devices, including but not restricted to mobile phones, text message receivers, pagers and wireless-equipped calculators, may not be brought into the class tests or exam. If a student is found to have brought such a device into the examination room, the argument that the device was turned off will NOT be regarded as an acceptable excuse.

ELECTRONIC COMMUNICATION AND YOUR STUDENT FILE

Every business keeps a record of its correspondence with its customers. The University is no exception and it maintains a file for every student. Staff are required to ensure that copies of all correspondence with you are added to your file. Historically, "correspondence" meant letters, but nowadays it also includes electronic communication such as email. Staff have some discretion here and might not file copies of trivial emails, but it is difficult to define precise boundaries here, so it is safer to assume that any email you send to a staff member will be added to your file.

Some people regard email as more ephemeral than a letter and thus tend to take less care with issues such as clarity of expression, grammar and spelling. Before sending an email to a staff member, a good question to ask yourself is: "If a member of staff is reviewing my student file prior to writing a reference for me, and they see a copy of this email, would that staff member gain a favourable impression of my level of communication skills?"

In this context, email includes communications you send to staff with the mail tool in the unit's web site. It does not normally include postings you make to the discussion area. However, in those very rare cases where a student makes an inappropriate posting to the discussion area, a copy of the posting would be added to that student's file.

ACADEMIC HONESTY

The nature of scholarly endeavour, dependent as it is on the work of others, binds all members of the University community to abide by the principles of academic honesty. Its fundamental principle is that all staff and students act with integrity in the creation, development, application and use of ideas and information. This means that:

- all academic work claimed as original is the work of the author making the claim
- all academic collaborations are acknowledged
- academic work is not falsified in any way
- when the ideas of others are used, these ideas are acknowledged appropriately.

Further information on the academic honesty can be found in the Macquarie University Academic Honesty Policy at http://www.mq.edu.au/policy/docs/academic_honesty/policy.html

GRADES

Macquarie University uses the following grades in coursework units of study:

HD - High Distinction
D - Distinction
CR - Credit
P - Pass
F - Fail

Grade descriptors and other information concerning grading are contained in the Macquarie University Grading Policy which is available at:

http://www.mq.edu.au/policy/docs/grading/policy.html

Your final result will include one of these grades plus a standardised numerical grade (SNG). The numerical marks resulting from assessment of your work in this unit will be used as an initial indicator of the quality of your learning and understanding. The use of these numerical marks is, however, only a starting point in determining the appropriate grade. **In particular, note that the SNG ranges mentioned in the University Grading Policy are not the raw marks. To obtain a grade you must satisfy the qualitative definition of that grade. Once your grade has been determined, you are allocated an SNG indicating your approximate position amongst students assigned that grade.**

EXEMPTIONS

The units ACST356 / 861 and ACST357 / 862 together correspond to the professional subject CT6. The exemption will be recommended if and only if a SNG of at least 60 is achieved in both units and the average SNG is at least 65.

GRADING APPEALS AND FINAL EXAMINATION SCRIPT VIEWING

If, at the conclusion of the unit, you have performed below expectations, and are considering lodging an appeal of grade and/or viewing your final exam script please refer to the following website which provides information about these processes and the cut off dates in the first instance. Please read the instructions provided concerning what constitutes a valid grounds for appeal before appealing your grade.

http://www.businessandeconomics.mq.edu.au/new_and_current_students/undergraduate/how_do_i/grade_appeals.

SPECIAL CONSIDERATION

The University is committed to equity and fairness in all aspects of its learning and teaching. In stating this commitment, the University recognises that there may be circumstances where a student is prevented by unavoidable disruption from performing in accordance with their ability. A special consideration policy exists to support students who experience serious and unavoidable disruption such that they do not reach their usual demonstrated performance level. The policy is available at:

http://www.mq.edu.au/policy/docs/special_consideration/procedure.html

STUDENT SUPPORT SERVICES

Macquarie University provides a range of Academic Student Support Services. Details of these services can be accessed at http://www.student.mq.edu.au.

BESS. Business and Economics Student Services (BESS) is located in room E4B106. Information about facilities and services is at:

http://businessandeconomics.mq.edu.au/for/new_and_current_students/undergraduate/bess

In this unit, class tests / assignments / etc. will be returned via BESS.

ACSTINFO. This ACSTINFO site is used to distribute information to all students majoring in actuarial studies. The information supplied may include administrative information and job advertisements. You will retain access to this site during the vacation following the end of this semester. It is to your advantage to ensure you read information on this web site regularly. You should not assume that information posted there will also be repeated in lectures. To access the site, login at: http://learn.mq.edu.au/ and the site should appear among your list of units. When you first login, please read the section labelled "How to use this site." This contains useful information which will help you determine when there is new information on the site which you should read.

IT CONDITIONS OF USE

Access to all student computing facilities within the Faculty of Business and Economics is restricted to authorised coursework for approved units. Student ID cards must be displayed in the locations provided at all times.

Students are expected to act responsibly when utilising University IT facilities. The following regulations apply to the use of computing facilities and online services:

●   Accessing inappropriate web sites or downloading inappropriate material is not permitted. Material that is not related to coursework for an approved unit is deemed inappropriate.
●   Downloading copyright material without permission from the copyright owner is illegal, and strictly prohibited. Students detected undertaking such activities will face disciplinary action, which may result in criminal proceedings.

Non-compliance with these conditions may result in disciplinary action without further notice.

Students must use their Macquarie University email addresses to communicate with staff as it is University policy that the University issued email account is used for official University communication.

INSTITUTE OF ACTUARIES OF AUSTRALIA

The Institute of Actuaries of Australia (IAAust) allows students to become IAAust University Subscribers free of charge. Full time undergraduates studying at an Institute accredited university who are members of a university student actuarial society are eligible. To sign up, go to

http://www.actuaries.asn.au/Membership/MembershipoftheInstitute/Subscriber.aspx

The University Subscriber offer is not a membership of the IAAust but a subscription to receive information on career opportunities, invitations to selected IAAust events and online publications. You might also consider joining the IAAust – there are advantages in doing so while a full-time student. For membership information, go to

http://www.actuaries.asn.au/Membership/MembershipoftheInstitute.aspx

FEEDBACK

I would welcome your feedback on any aspect of the unit. If you see that something could be improved, don't sit back and complain to your friends! Come and see me and let me know your ideas and if I agree that your ideas are good I will make changes. You can give me feedback in lectures or by contacting me via Mail on the website.

Significant changes have been made to the unit in recent years in response to feedback, including changing the format of tutorials, introducing Mock Tests, introducing iLecture and introducing quizzes. These changes will be discussed in more detail in classes.

I hope not to see any feedback in the end-of-semester unit evaluations that I haven't heard about already and therefore had the opportunity to incorporate to improve the unit. Please get involved in making this unit as useful and rewarding as possible.

David Pitt
7 February 2011