



**MACQUARIE UNIVERSITY
DIVISION OF EFS
UNIT OUTLINE
ACCG860 Quantitative Methods**

2008 Trimester 2

Unit convenor: Anne Karpin

Students in this unit should read this unit outline carefully. It contains important information about the unit.

ABOUT THIS UNIT

Unit Value: Three credit points

This unit aims to convey an understanding of the quantitative and statistical techniques that are frequently used in accounting and financial studies. The techniques require logical reasoning, objective analysis and inference based on empirical evidence. Essential statistical techniques such as probability, sampling, measurement, correlation, regression, analysis of variance, non parametric methods and hypothesis testing are covered. A statistical package is used to analyse data and produce statistical reports.

TEACHING STAFF

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CLASSES

STREAM	LECTURES	TUTORIALS	STAFF	ROOM
A	Wednesday 9-10am	Wednesday 10-12noon	Bala	E4B206
B	Wednesday 12-1pm	Wednesday 1-3pm	Anne	C5A 304
C	Wednesday 3-4pm	Wednesday 4-6pm	Anne	C5A 304
D	Wednesday 6-7pm	Wednesday 7-9pm	Nan	E4B206
E	Thursday 9-10am	Thursday 10-12noon	Nan	E4A206
F	Thursday 12-1pm	Thursday 1-3pm	Bala	E4B206

Students will only be permitted to change classes if authorised by the program convenor and if a computer terminal is available in their desired class time.

Attendance at tutorials is compulsory and will be monitored. Non submission of assignments or poor attendance will jeopardise your final grade.

REQUIRED AND RECOMMENDED TEXTS AND/OR MATERIALS

There are no set texts

Lecture notes will be provided on each topic.

Reference books available in the library are as follows:

A Data Based Approach to Statistics by Iman R L (QA276.12.I48)

Introduction to the practice of Statistics by Moore D and McCabe G (QA276.12.M65)

Economic and Business Statistics: Practical Applications with Minitab and SAS by Round D and Arnold A (QA276.4.R67)

Introduction to Business Statistics by Brite R (HA29.B8265)

Modern Business Statistic by Freund J and Williams (HA29.F684)

Statistics for Business and Economics by Shao S (HA29.S5587)

Introductory Statistics for Business and Economics by Wonnacott T and R (QA29.W622)

LEARNING OUTCOMES

An important objective of the unit is to develop the written and verbal communication skills of students, in line with the generic skills requirements set out by the university. In particular, students will:

- Interpret questions which require statistical analysis and recognise the appropriate statistical procedure to apply in each case.
- Interpret statistical output and write up conclusions based on the output which are relevant to the original problem.
- Develop their generic skills, particularly their analytical, critical, problem-solving, creative thinking and interpersonal skills.

TEACHING AND LEARNING STRATEGY

Students are required to attend one lecture each week. New material will be introduced in each lecture. Students are also required to attend one two hour practical class in the computer lab. During practical classes students are expected to work on problems based on the material presented in lectures and to write up relevant conclusions and summarise results.

Students are expected to have read through the material to be covered in lectures which will be distributed in the previous week's class.

Course material will also be made available online using Blackboard. Blackboard can be accessed at: <http://learn.mq.edu.au>.

A week-by-week list of the topics to be covered is available at the end of this document.

RELATIONSHIP BETWEEN ASSESSMENT AND LEARNING OUTCOMES

The following weightings apply for unit assessment:

	<u>%</u>
Assignments	20
Attendance and Participation	10
Final Examination	<u>70</u>
	<u>100</u>

Assignments

Each assignment requires students to assimilate the procedures, content and methodology covered in the preceding weeks and to apply these to solving the problems presented. If students have satisfied all the objectives for a particular topic they will be able to successfully complete the assignment work based on that weeks' topic. Model solutions will be provided.

There will be two assignments of equal value.

Assignments are worth 20% of the final assessment and may be completed in groups of up to three students enrolled in the same stream. The assignments are due at the beginning of lectures in weeks 6 and 11. Late assignments will not be accepted without written evidence of illness or misadventure. No assignments can be accepted for credit after assignments have already been handed back to students. Assignments will be returned during the practical class in the week after they are submitted. Non submission of assignments may result in exclusion from the unit and a subsequent fail grade being awarded. The computer package, Minitab, should be used where directed in each assignment. Assignments must be presented as word processed documents.

Examinations

The final examination enables students to display their assimilation and understanding of the objectives for each topic and to demonstrate analytic skills in identifying the statistical methods appropriate to solving problems in a wider context.

70% of the assessment will be allocated to the final examination. Students must pass the final exam in order to pass the unit. *Note:* To be awarded an appropriate grade students are expected to perform to a sufficient standard in the final examination to satisfy the grade definitions, irrespective of the marks obtained for assignments.

The final examination is a three (3) hour written examination. Students may bring into the exam two (2) A4 pages of notes hand written on both sides. Note that dictionaries are not allowed in the exam.

Students are expected to present themselves 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. Timetables can be found at:

<http://www.accg.mq.edu/ss/accg/examinations>

The only exception to not sitting an examination at the designated time is because of documented illness or unavoidable disruption. In these circumstances students may wish to consider applying for Special Consideration. Information about unavoidable disruption and the special consideration process is available at <http://www.accg.mq.edu/ss/accg/examinations>

If a Supplementary Examination is granted as a result of the Special Consideration process the examination will be scheduled after the conclusion of the official examination period

Students 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.

PLAGIARISM

The University defines plagiarism in its rules: "Plagiarism involves using the work of another person and presenting it as one's own." Plagiarism is a serious breach of the University's rules and carries significant penalties. Students should read the University's practices and procedures on plagiarism. These can be found in the *Handbook of Undergraduate Studies* or on the web at:

<http://www.student.mq.edu.au/plagiarism/>

The policies and procedures explain what plagiarism is, how to avoid it, the procedures that will be taken in cases of suspected plagiarism, and the penalties if students are found guilty of plagiarism. Penalties may include a deduction of marks, failure in the unit, and/or referral to the University Discipline Committee.

See Appendix 1 at the end of this document for a more detailed statement on plagiarism.

UNIVERSITY POLICY ON GRADING

Academic Senate has a set of guidelines on the distribution of grades across the range from fail to high distinction. Final result will include one of these grades plus a standardised numerical grade (SNG).

The raw mark for a unit (ie. the total of the marks for each assessment item) may not be the same as the SNG received. Under the Senate guidelines, results may be scaled to ensure that there is a degree of comparability across the university, so that units with the same past performances of their students should achieve similar results. It is important that students realise that the policy does not require that a minimum number of students are to be failed in any unit. In fact it does something like the opposite, in requiring examiners to explain their actions if more than 20% of students fail in a unit.

The process of scaling does not change the order of marks among students. A student who receives a higher raw mark than another will also receive a higher final scaled mark.

For an explanation of the policy see: <http://senate.mq.edu.au/issues.html>

STUDENT SUPPORT SERVICES

Students who feel the need to improve their writing skills for assignment and examination purposes are strongly encouraged to attend the Writing Skills Program run by the Centre for Open Education (9850 7470), as outlined in the Undergraduate Handbook. Macquarie University provides a range of Academic Student Support Services. Details of these services can be accessed at <http://www.mq.edu.au>.

A grade appeal procedure also exists to address very rare cases of procedural irregularity that may have occurred in the assessment of a student's performance. Details can found at: <http://www.accg.mq.edu.au/ss/macc/notices>. More information will be available at the final lecture.

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

Trimester Two 2008 COURSE OUTLINE

Week commencing	Week	Topics Covered
5 May	1	Data Collection and Display
12 May	2	Numerical Summaries
19 May	3	Probability and Distributions
26 May	4	Sampling Distributions
2 June	5	Estimation
9 June	6	Testing Hypotheses- Single Samples
16 June	7	Testing Hypotheses - Two Samples
23 June	8	Correlation and Regression
30 June	9	Correlation and Regression
7 July	10	Analysing Counted Data
14 July	11	Analysis of Variance
21 July	12	Non parametric Methods

APPENDIX 1

THE DANGERS OF CHEATING AND PLAGIARISM AND HOW TO AVOID THEM

To cheat in the context of university assignments, tests and examinations is to attempt to gain an unfair advantage by violating the principles of intellectual and scholarly integrity. Cheating also encompasses plagiarism, which is the appropriation or imitation of another person's ideas and manner of expressing them.

WHAT IS PLAGIARISM?

The Academic Senate in June 2001 approved policies and procedures to ensure that the University takes a consistent and equitable approach to plagiarism. The Senate adopted the following definition of plagiarism.

Definition: Plagiarism involves using the work of another person and presenting it as one's own. Any of the following acts constitutes plagiarism unless the source of each quotation or piece of borrowed material is clearly acknowledged.

- a) copying out part(s) of any document or audio-visual material (including computer based material);
- b) using or extracting another person's concepts, experimental results, or conclusions;
- c) summarising another person's work;
- d) in an assignment where there was collaborative preparatory work, submitting substantially the same final version of any material as another student.

Encouraging or assisting another person to commit plagiarism is a form of improper collusion and may attract the same penalties which apply to plagiarism.

Opportunities and temptations for plagiarism have increased with the spread of internet access. Plagiarism is a serious threat to the teaching and accreditation process, and seriously undermines the collegial and ethical principles which underpin the work of a University.

WHY IS IT WRONG?

If you take and use the work of another person without clearly stating or acknowledging your source, you are falsely claiming that material as your own work and committing an act of plagiarism. This is wrong because:

- it violates the principle of intellectual and scholarly integrity.
- it devalues the grades and qualifications gained legitimately by other students.

PREVENTING CHEATING

All students and staff have a responsibility to prevent, discourage and report cheating. Typically students cheat because they are having difficulty with the unit content, the language of the unit, or both. Cheating and/or plagiarism can be a temptation when students are experiencing difficulty with a heavy workload in the unit and seek to save time by using others work.

To avoid having students resort to cheating, the University provides many services to help students with their course or to make thoughtful decisions about whether to continue. Within the Division of Economic and Financial Studies, students should first seek assistance from their tutor and/or lecturer. The University also offers help through the Dean of Students or the University Health and Counselling Services.

There is a difference between getting help and cheating. You are encouraged to get help if you need assistance to understand the material and any set work so that you are in a better position to create your own answers.

HOW TO PLAY IT SAFE

To maintain good academic practice, so that you may be given credit for your own efforts, and so that your own contribution can be properly appreciated and evaluated, you should acknowledge your sources and you should *ALWAYS*:

- (i) State clearly in the appropriate form where you found the material on which you have based your work, using the system of reference specified by the Division in which your assignment was set;
- (ii) Acknowledge the people whose concepts, experiments or results you have extracted, developed or summarised, even if you put these ideas into your own words;
- (iii) Avoid excessive copying of passages by another author, even where the source is acknowledged. Find another form of words to show that you have thought about the material and understood it, but remember to state clearly where you found the ideas.

There is nothing wrong with working with other students in a group; indeed sometimes you will be encouraged to do so. But after a certain point, each student must work on their own to produce their own written answers. If no specific guidelines for group-work have been given, a reasonable interpretation is that it is acceptable for two or more students to discuss a problem among themselves or with a staff member. The group may then agree that the answer should include certain points. But then each member of the group must independently write their own answer to the problem.

PENALTIES

Offences of plagiarism will attract penalties which at a minimum, will result in the deduction of all marks for the test and/or assignment, to ultimately a failure in the unit and reference to the University Discipline Committee. The penalty will depend upon the extent of the plagiarism, whether it is a first or repeated offence, whether there is evidence of deliberate deceit and whether advantage has been taken of another student. In some cases this can result in the suspension of the student from enrolment in the university. In all cases however, a record of any offence and/or incident, along with correspondence will be placed permanently on the students' individual record file held at the university.