MACQUARIE UNIVERSITY  
FACULTY OF BUSINESS AND ECONOMICS  
UNIT GUIDE  

Year and Semester: Semester 1, 2012  
Unit convenors: Anne Karpin and Jenny Middledorp  
Credit points: 4 credit points  

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 one of the teaching staff in the unit.

ABOUT THIS UNIT

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, hypothesis testing, analysis of variance and non parametric methods are covered. A statistical package is used to analyse data.

TEACHING STAFF

<table>
<thead>
<tr>
<th>Name</th>
<th>Role in unit</th>
<th>email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anne Karpin</td>
<td>Convenor</td>
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<tr>
<td>Jenny Middledorp</td>
<td>Convenor</td>
<td><a href="mailto:jenny.middledorp@mq.edu.au">jenny.middledorp@mq.edu.au</a></td>
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<td>Bala Pasupathy</td>
<td>Lecturer</td>
<td><a href="mailto:balamehala.pasupathy@mq.edu.au">balamehala.pasupathy@mq.edu.au</a></td>
</tr>
</tbody>
</table>

CONTACTING STAFF

You are encouraged to seek help from a staff member teaching on this unit at a time that is convenient to you and the staff member. Where possible, staff will answer questions by email. Otherwise, please make an appointment with your lecturer. Students experiencing significant difficulties with any topic in the unit should seek assistance immediately.

CLASSES

There are three hours face-to-face teaching per week consisting of a mixture of lecture and practical classes. The timetable for classes can be found at:

http://www.timetables.mq.edu.au/

REQUIRED AND RECOMMENDED TEXTS AND/OR MATERIALS

Required Text:

The textbook is also available as an ebook at:

Recommended Texts:
- Business Statistics by Selvanathan, Selvanathan & Keller
- The Practice of Business Statistics by Moore, McCabe, Duckworth & Alwan
**TECHNOLOGY USED AND REQUIRED**

The statistical package MINITAB will be used and students will learn to analyse data using MINITAB. The package can be downloaded onto students' home computers from the Student Portal.

**UNIT WEB PAGE**

The web page for this unit can be found at:

http://www.accg.mq.edu.au/postgraduate/course_units/accg615

Unit materials, assignments, solutions, announcements and other relevant information can be found on Moodle and students should visit this site regularly at:

http://iLearn.mq.edu.au

**LEARNING OUTCOMES**

On completion of this unit students should be able to:

1. Understand the general principles of sampling and study design.
2. Summarise data graphically and numerically using appropriate techniques.
3. Interpret questions which require statistical analysis and recognise the appropriate statistical procedure to apply in each case.
4. Use a statistical package to analyse data and answer research questions.
5. Interpret statistical output and write up reports based on the output.
6. Apply generic skills, in particular analytical, critical, problem-solving, creative thinking and interpersonal skills.
7. Work cooperatively as a team member to develop communication and problem solving skills.

**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
2. Critical, Analytical and Integrative Thinking
3. Problem Solving and Research Capability
4. Creative and Innovative
5. Effective Communication
6. Engaged and Ethical Local and Global citizens
7. Socially and Environmentally Active and Responsible
8. Capable of Professional and Personal Judgement and Initiative
9. Commitment to Continuous Learning
<table>
<thead>
<tr>
<th>Description</th>
<th>Diagnostic Test</th>
<th>Assignments</th>
<th>Mid-Semester Test</th>
<th>Practical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Online short answer quiz: 50 minutes.</td>
<td>Two assignments to be completed in groups of 4 students. It is expected that each student will work on the entire assignment independently in the first instance and discuss their solutions with their group members before writing up a joint assignment for submission.</td>
<td>Multiple choice test: 45 minutes.</td>
<td>Online quiz using the statistical package MINITAB: 50 minutes.</td>
</tr>
<tr>
<td>Due date</td>
<td>During class in Week 5.</td>
<td>Assignment 1: Week 6 Assignment 2: Week 11.</td>
<td>During class in Week 7.</td>
<td>During class in Week 13.</td>
</tr>
<tr>
<td>% Weighting</td>
<td>5%</td>
<td>5% each</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>Grading method</td>
<td>Mark out of 100. This is an early assessment designed to give feedback to students on their performance so far.</td>
<td>A mark of at least 70% will be awarded the full weighting. If the mark is below 70% then the mark itself as a percentage will be awarded. Some marks will be awarded for presentation.</td>
<td>Assessed and graded on lecture topics 1-6.</td>
<td>Assessed and graded on lecture topics 1-13.</td>
</tr>
<tr>
<td>Submission method</td>
<td>Online submission during relevant class in week 5.</td>
<td>Assignments must be presented as word processed documents and submitted to the office on Level 2 of E4A. Assignments should not be presented in a folder.</td>
<td>To be handed in at end of test.</td>
<td>Online submission during relevant class in week 13.</td>
</tr>
<tr>
<td>Feedback</td>
<td>Feedback will be provided on iLearn.</td>
<td>Model solutions will be provided on iLearn.</td>
<td>Solutions will be provided on iLearn.</td>
<td>Marks will be provided on iLearn.</td>
</tr>
<tr>
<td>Estimated student workload (hours)</td>
<td>Approximately 8 hours although this will vary between students depending on their own time-management for revision.</td>
<td>Approximately 10 hours each assignment.</td>
<td>Approximately 15 hours although this will vary between students depending on their own time-management for revision.</td>
<td>Approximately 15 hours although this will vary between students depending on their own time-management for revision.</td>
</tr>
<tr>
<td>Learning outcomes assessed</td>
<td>1, 2 and 6</td>
<td>1 – 7</td>
<td>1 – 6</td>
<td>1 – 6</td>
</tr>
<tr>
<td>Graduate capabilities assessed</td>
<td>1 – 3</td>
<td>1 – 9</td>
<td>1 – 5</td>
<td>1, 2, 3 &amp; 8</td>
</tr>
</tbody>
</table>

Extensions will only be granted if a medical certificate is presented or there are other extenuating circumstances.

Late submissions will not be accepted.
Examinations

A final examination is included as an assessment task for this unit to provide assurance that:

i. the product belongs to the student and
ii. the student has attained the knowledge and skills tested in the exam.

A 3 hour final examination for this unit will be held during the University Examination period. Students are permitted to take one A4 page of notes, handwritten on both sides, into the exam. It should be noted that students must pass the final exam in order to pass the unit, regardless of their performance on other assessment tasks.

The University Examination period in Second Half Year 2012 is from 12 November to 3 December.

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 exams.

http://exams.mq.edu.au/

The only exception to not sitting an examination at the designated time is because of documented illness or unavoidable disruption. In these circumstances you may wish to consider applying for Special Consideration. The University’s policy on special consideration process is available at:

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

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. (Individual Faculties may wish to signal when the Faculties’ Supplementary Exams are normally scheduled.)

The Macquarie university examination policy details the principles and conduct of examinations at the University. The policy is available at:

http://www.mq.edu.au/policy/docs/examination/policy.htm

Learning and Teaching Activities

New material will be introduced in each lecture. During practical classes students will work on problems based on the material presented in lectures and write up relevant summaries of results. Students are expected to have read through the material to be covered in class each week. Course material will be made available online using Blackboard which 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.

Research and Practice

This unit uses research from external sources.
This unit gives you practice in applying research findings in your assignments.
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:


Students will be awarded one of these grades plus a Standardised Numerical Grade (SNG). The SNG is not necessarily a summation of the individual assessment components.

The final grade and SNG that are awarded reflect the corresponding grade descriptor in the Grading Policy.

In addition, there is a requirement to pass the final examination to be awarded a final grade of a Pass or a higher grade.

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 valid grounds for appeal before appealing your grade:

http://www.businessandeconomics.mq.edu.au/new_and_current_students/undergraduate_current_students/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/policy.html

STUDENT SUPPORT SERVICES

Macquarie University provides a range of Academic Support Services. Details of these and other services for students can be accessed at:

http://students.mq.edu.au/home/

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 using 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 approved units 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.
### Semester 2 2012
#### UNIT SCHEDULE

<table>
<thead>
<tr>
<th>Week commencing</th>
<th>Week</th>
<th>Topics Covered</th>
<th>Textbook Chapter</th>
<th>Assessment Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 July</td>
<td>1</td>
<td>Introduction to Statistics</td>
<td>1, 5, 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Graphical Techniques</td>
<td>3 (omit pp59-61 &amp; 3.2)</td>
<td></td>
</tr>
<tr>
<td>6 August</td>
<td>2</td>
<td>Numerical Summaries</td>
<td>4 (omit 4.4, 4.5, 4.6, 4.7)</td>
<td></td>
</tr>
<tr>
<td>13 August</td>
<td>3</td>
<td>Probability</td>
<td>6 (omit 6.4,)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Probability Distributions</td>
<td>7 (omit 7.2, 7.3, 7.5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 (omit 8.3, 8.4)</td>
<td></td>
</tr>
<tr>
<td>20 August</td>
<td>4</td>
<td>Sampling Distributions</td>
<td>9 (omit 9.3)</td>
<td></td>
</tr>
<tr>
<td>27 August</td>
<td>5</td>
<td>Estimation</td>
<td>8 (pp 291-297 only)</td>
<td>Diagnostic Test</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Confidence Intervals</td>
<td>9 (9.1 pp 317-319 only)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>10 (omit 10.3)</td>
<td></td>
</tr>
<tr>
<td>3 September</td>
<td>6</td>
<td>Testing Hypotheses - Single Samples</td>
<td>11 (omit 11.3)</td>
<td>Assignment 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12 (omit 12.2)</td>
<td></td>
</tr>
<tr>
<td>10 September</td>
<td>7</td>
<td>Testing Hypotheses - Two Samples</td>
<td>13 (omit 13.4)</td>
<td>Mid Semester Test</td>
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<td>SEMESTER BREAK: 15 September – 2 October (Monday 1 October is a Public Holiday)</td>
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<tr>
<td>1 October</td>
<td>8</td>
<td>Analysis of Variance</td>
<td>8 (pp301-304 only)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>14 (omit 14.3 onwards)</td>
<td></td>
</tr>
<tr>
<td>8 October</td>
<td>9</td>
<td>Categorical Data Analysis</td>
<td>8 (pp297-300 only)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>15 (15.4 is optional)</td>
<td></td>
</tr>
<tr>
<td>15 October</td>
<td>10</td>
<td>Simple Linear Regression</td>
<td>4 (4.4 only)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>16 (omit 16.3)</td>
<td></td>
</tr>
<tr>
<td>22 October</td>
<td>11</td>
<td>Multiple Regression</td>
<td>17 (omit 17.4)</td>
<td>Assignment 2</td>
</tr>
<tr>
<td>29 October</td>
<td>12</td>
<td>Non-parametric Methods</td>
<td>Lecture notes</td>
<td></td>
</tr>
<tr>
<td>5 November</td>
<td>13</td>
<td>Revision</td>
<td></td>
<td>Practical Test</td>
</tr>
</tbody>
</table>