BEA674
Data and Business Decision Making

Semester 1, 2014

HOBART CAMPUS
(Face-to-Face Unit)

Teaching Team:

Dr Seu Keow Cheng
(Tutor – to be advised in week 1 during lecture and via MyLO)

CRICOS Provider Code: 00586B
**Contact Details**

**Unit Coordinator and Lecturer:** Dr Seu Keow Cheng  
**Campus:** Hobart  
**Room Number:** 415, Level 4 Commerce Building  
**Email:** seu.cheng@utas.edu.au  
**Phone:** (03) 6226 2307  
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**Consultation Time:** To be advised in week 1 (during lecture and via MyLO)

**Unit Description**

Managers need an understanding of statistics for four key reasons: to know how to properly present and describe information; to know how to draw conclusions about large populations based only on information obtained from samples; to know how to obtain reliable forecasts; and to know how to improve processes. These four reasons form the basis of the structure and content of *Data and Business Decision Making*. The use of mathematics and arithmetical calculations are kept to a minimum for selected topics by using the spreadsheet package Microsoft Excel. The unit stresses the interpretation and applications of the various techniques studied. The use of statistical and spreadsheet software has made very sophisticated analyses possible and the unit adds a dimension of understanding to the assumptions and limitations underlying these analyses.

**Prior Knowledge &/or Skills OR Pre-Requisite Unit(s)**

Pre-requisite unit is not required. However, it is essential that you have basic knowledge of mathematics at high school level, and basic working knowledge of MS Excel software. If you have any concerns with these skills please contact your lecturer early in the semester.

**Enrolment in the Unit**

Unless there are exceptional circumstances, students should not enrol in this unit after the end of week two of semester, as the Tasmanian School of Business and Economics (TSBE) cannot guarantee that:

- any extra assistance will be provided by the teaching team in respect of work covered in the period prior to enrolment; and  
- penalties will not be applied for late submission of any piece or pieces of assessment that were due during this period.
**Intended Learning Outcomes and Generic Graduate Attributes**

<table>
<thead>
<tr>
<th>Intended Learning Outcomes (LO)</th>
<th>Assessment Methods</th>
<th>Graduate Attribute Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In this unit, you will learn to:</strong></td>
<td><strong>In assessing this LO I will be looking at your ability to:</strong></td>
<td><strong>Knowledge:</strong></td>
</tr>
<tr>
<td><strong>LO1. Define, use and interpret key business statistics concepts and techniques</strong></td>
<td>1. Define, measure and interpret key statistical concepts.</td>
<td>1.1 Basic understanding of statistical techniques.</td>
</tr>
<tr>
<td></td>
<td>2. Illustrate key business statistics concepts with real world examples.</td>
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<tr>
<td><strong>LO2. Apply a business statistics way of thinking.</strong></td>
<td>1. Apply statistical methods to business questions.</td>
<td><strong>Knowledge:</strong></td>
</tr>
<tr>
<td></td>
<td>2. Recognize and articulate interesting business questions about the world around you</td>
<td>1.1 Basic, broad subject knowledge.</td>
</tr>
<tr>
<td></td>
<td>3. Communicate statistical results/Excel outputs clearly in a written report.</td>
<td>1.2 Ability to apply statistical methods to simple business situations.</td>
</tr>
<tr>
<td><strong>LO3. Use statistical techniques to analyse a range of business problems and to inform business decision-making, and/or government policy</strong></td>
<td>1. Select the correct statistical test for the problem at hand.</td>
<td><strong>Communication:</strong></td>
</tr>
<tr>
<td></td>
<td>2. Use and interpret descriptive statistics to describe business situations.</td>
<td>1.1 Written communication and statistical skills at a sufficient level to clearly articulate the outcomes and implications of business statistical analysis to peers and academics.</td>
</tr>
<tr>
<td></td>
<td>3. Use probability theory to explain business behaviour.</td>
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<tr>
<td></td>
<td>4. Use statistical methods to test differences in business situations.</td>
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<tr>
<td></td>
<td>5. Use regression and time series models to explain variation in business variables.</td>
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<td></td>
<td>6. Communicate statistical results/Excel outputs and relevant policy advice clearly in a written report.</td>
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<tr>
<td></td>
<td>1. Mid-semester test (Multiple choice questions).</td>
<td><strong>Problem-solving:</strong></td>
</tr>
<tr>
<td></td>
<td>2. Group assignment.</td>
<td>1.1 Able to locate and use needed information.</td>
</tr>
<tr>
<td></td>
<td>3. Final exam (Multiple choice, and problem solving/short-answer questions).</td>
<td>1.2 Able to think logically and use appropriate statistical tests and methods to analyse business questions.</td>
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<tr>
<td></td>
<td></td>
<td><strong>Global perspective:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.1 Able to use statistical methods to analyze global business issues.</td>
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<tr>
<td></td>
<td></td>
<td><strong>Social responsibility:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.1 Applies the ethical requirements of University study.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2 Recognition of the ethical underpinnings of business statistics.</td>
</tr>
</tbody>
</table>
Learning Expectations and Teaching Strategies/Approach

The University is committed to a high standard of professional conduct in all activities, and holds its commitment and responsibilities to its students as being of paramount importance. Likewise, it holds expectations about the responsibilities students have as they pursue their studies within the special environment the University offers. The University’s Code of Conduct for Teaching and Learning states:

Students are expected to participate actively and positively in the teaching/learning environment. They must attend classes when and as required, strive to maintain steady progress within the subject or unit framework, comply with workload expectations, and submit required work on time.

Occupational Health and Safety (OH&S)

The University is committed to providing a safe and secure teaching and learning environment. In addition to specific requirements of this unit you should refer to the University’s policy at: http://www.utas.edu.au/work-health-safety/

Learning Resources

Prescribed Text


Other Recommended Texts/References


Useful Websites

My Learning Online (MyLO)

This unit is web supported, and access to the online MyLO unit is required. Log into MyLO at: http://www.utas.edu.au/learning-teaching-online and then select [INSERT UNITCODE/NAME HERE] from the list of units. For help using MyLO go to http://www.utas.edu.au/learning-teaching-online/new-mylo/home.
Technical requirements for MyLO

For help and information about setting up your own computer and web browser for MyLO, see: http://uconnect.utas.edu.au/

You can access the University network and MyLO via a laptop computer or other mobile device. See: http://uconnect.utas.edu.au/uana.htm

MyLO can be accessed in the Library computers and in computer labs. See: http://www.utas.edu.au/it/computing-distributed-systems/computer-labs-facilities-and-locations

For further technical information and help, contact the UTAS Service Desk on 6226 1818 or at http://www.utas.edu.au/service-desk/

MyLO Expectations

1. Students are expected to maintain the highest standards of conduct across all modes of communication, either with staff or with other students. Penalties may be imposed if the Unit Coordinator believes that, in any instance or mode of communication, your language or content is inappropriate or offensive. MyLO is a public forum. Due levels of respect, professionalism and high ethical standards are expected of students at all times.

2. Submission of assessment tasks via MyLO presumes that students have read, understood and abide by the requirements relating to academic conduct, and in particular, those requirements relating to plagiarism. All work submitted electronically is presumed to be “signed-off” by the student submitting as their own work. Any breach of this requirement will lead to student misconduct processes.

3. MyLO is an Internet service for teaching and learning provided by the University. It is expected that at least once a day students will check MyLO.

Details of Teaching Arrangements

Lectures

A two-hour lecture is scheduled on a weekly basis throughout the semester. Lecture time and venue will be announced via the unit’s MyLO site soon before week 1. The lectures will be conducted in the style of conventional face-to-face contact between students and the lecturer.

The lecture slides for each lecture will be posted on MyLO approximately one week before the commencement of the class. It is essential that you read through the relevant lecture slides before attending the lecture. Note that lecture notes are not an adequate substitute for attending lectures and taking your own notes.
Tutorials/Computer Lab Training Sessions

You are required to sign up for a weekly one-hour tutorial/lab session. You will find the tutorial/lab groups sign-up sheets on the homepage of the BEA674 MyLO site in week 1. To sign up, follow the instructions as shown below:

1. Select the «Groups» tool on the homepage of MyLO. A list containing the time, day of week and room information for each group will be displayed.
2. Click the «Join» button on the right hand side of the screen of the group you wish to attend.
3. Ensure that you make your selection carefully. Changes will only be considered under exceptional circumstances by consulting your lecturer/tutor.

The selected practice questions for the weekly tutorial/lab (i.e. on how to use Microsoft Excel for selected topics) session will be posted on MyLO at approximately one week before the commencement of each session. Answers to the selected practice questions for each tutorial/lab will also be posted on MyLO after the completion of each session.

Communication, Consultation and Appointments

Email Correspondence:
Students are also expected to check their UTAS and MyLO email sites on a regular basis (at least three times a week). Students submitting requests or queries to staff via email should provide very clearly their: Family name: Preferred name; Student ID; Unit code (i.e. BEA674) and allow teaching staff at least two (2) business days to reply. Staff are not required to respond to emails in which students do not directly identify themselves, which are threatening or offensive, and that come from external (non-UTAS) email accounts. Students are advised not to have their UTAS email forwarded to an external email service (such as Gmail or Hotmail). In the past there have been significant issues where this has occurred, resulting in UTAS being blacklisted by these email providers for a period of up to one month.

MyLO News:
MyLO news will be posted as the need arises.

Consultation time:
To be advised in week 1 (during lecture and via MyLO)
Assessment Schedule
In order to pass this unit you must achieve an overall mark of at least 50 per cent of the total available marks. Details of each assessment item are outlined below.

<table>
<thead>
<tr>
<th>Assessment Items</th>
<th>Due date/time</th>
<th>Weighting</th>
<th>Links to Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Class Semester Test</td>
<td>Week 9: Tuesday, 29 April/1pm-2:30pm.</td>
<td>20%</td>
<td>LO1, LO2, LO3</td>
</tr>
<tr>
<td>Group Assignment</td>
<td>Week 12: Monday, 19 May/4pm.</td>
<td>20%</td>
<td>LO1, LO2, LO3</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Examination Period (to be advised).</td>
<td>60%</td>
<td>LO1, LO2, LO3</td>
</tr>
</tbody>
</table>

Assessment Item 1 – In-Class Semester Test

Task Description: The semester test will consist of a set of multiple choice questions to test your knowledge and ability to apply the statistical concepts covered from week 1 to week 7.

Task Length: 90 minutes.

Link to Unit’s Learning Outcomes: LO1, LO2, LO3

Due Date/Time: Week 9: Tuesday, 29 April 2014 (1pm to 2:30pm)

Value: 20%

Assessment Item 2 – Group Assignment

Task Description: In groups of no more than 3 students per group, you will be expected to analyse a set of sample data using various statistical techniques covered from week 1 to week 10. Further detail of the assignment will be provided in week 5 via MyLO.

Task Length: Not exceeding 2,500 words (excluding tables/graphs and calculations).

Assessment Criteria: The assignment will be assessed in terms of the key learning outcomes: defining, measuring and interpreting the results of business data, demonstrate the groups’ ability to apply in a business way of thinking, use statistical techniques to analyse a range of business problems, and inform individual and business decision-making.

Link to Unit’s Learning Outcomes: LO1, LO2, and LO3.

Due Date/Time: Week 12, Monday 19 May/4pm.

Value: 20%
Assessment Item 3 – Final Examination

Task Description: The final exam will cover all the topics delivered from week 1 to week 12. It will consist of a series of multiple choice and problem solving questions.

Task Length: 3 hours.

Due Date: To be advised.

Value: 60%

Your final examination for this unit will be held during the scheduled examination period as indicated by Student Administration in correspondence to you.

Examinations will normally be scheduled Monday to Saturday inclusive. Examinations may be held during the day or evening and students should consult the university information which will be made available towards the end of semester.

You are advised to make any necessary arrangements with employers now for time off during the examination period to sit this examination. Your participation at the scheduled time is not negotiable unless there are exceptional circumstances. Note that you will be expected to sit the examination at your recorded study centre. To find out more go to the Exams Office website: http://www.utas.edu.au/exams/home.

Submission of Assessment Items

Lodging Group Assignment

Your group assignment must be submitted electronically via the TURNITIN icon for this unit in MyLO. Besides submitting your assignment electronically, you MUST also submit a hard copy of your assignment to the lecturer. Lodge your hard copy in the assignment box marked BEA674, which is located on Level 4, Commerce Building.

All assignments must have a TSBE Assignment Cover Sheet, which is available as a blank template from the TSBE website: [http://www.utas.edu.au/business-and-economics/student-resources]. All assignments must include the unit code/title, your name, student ID number, and your lecturer’s name. If this information is missing the assignment will not be accepted and, therefore, will not be marked.

Please remember that you are responsible for lodging your group assignment on or before the due date. We suggest you keep a copy of your assignment for your own record.
Late Assessment and Extension Policy

In this Policy

(a) ‘day’ or ‘days’ includes all calendar days, including weekends and public holidays;
(b) ‘late’ means after the due date and time; and
(c) ‘Assessment items’ includes all internal non-examination based forms of assessment

2. This Policy applies to all students enrolled in Faculty of Business Units at whatever Campus or geographical location.

3. Students are expected to submit assessment items on or before the due date and time specified in the relevant Unit Outline. The onus is on the student to prove the date and time of submission.

4. Students who have a medical condition or special circumstances may apply for an extension. Requests for extensions should, where possible, be made in writing to the Unit Coordinator on or before the due date. Students will need to provide independent supporting documentation to substantiate their claims.

5. Late submission of assessment items will incur a penalty of 10% of the total marks possible for that piece of assessment for each day the assessment item is late unless an extension had been granted on or before the relevant due date.

6. Assessment items submitted more than five (5) days late will not be accepted.

7. Academic staff do NOT have the discretion to waive a late penalty, subject to clause 4 above.

Academic Referencing and Style Guide

In your written work you will need to support your ideas by referring to scholarly literature, works of art and/or inventions. It is important that you understand how to correctly refer to the work of others and maintain academic integrity.

Failure to appropriately acknowledge the ideas of others constitutes academic dishonesty (plagiarism), a matter considered by the University of Tasmania as a serious offence.

The appropriate referencing style for this unit is: the Harvard style. For information on presentation of assignments, including referencing styles: http://utas.libguides.com/referencing

Review of Assessment and Results

Review of Internal Assessment

It is expected that students will adhere to the following policy for a review of any piece of continuous/internal assessment. The term continuous/internal assessment includes any assessment task undertaken across the teaching phase of any unit (such as an assignment, a tutorial presentation, and online discussion, and the like), as well as any capstone assignment or take-home exam.

Within five (5) days of release of the assessment result a student may request a meeting with the assessor for the purpose of an informal review of the result (in accordance with Academic Assessment Rule No. 2 Clause 22 – www.utas.edu.au/university-council/university-governance/rules). During the meeting, the student should be prepared to discuss specifically the
marks for the section(s) of the marking criteria they are disputing and why they consider their mark(s) is/are incorrect. The assessor will provide a response to the request for review within five (5) days of the meeting.

If the student is dissatisfied with the response they may request a formal review of assessment by the Head of School, with the request being lodged within five (5) days of the informal review being completed. A Review of Internal Assessment Form must be submitted with the formal review (http://www.studentcentre.utas.edu.au/examinations_and_results/forms_files/review_of_assessment.pdf).

**Review of Final Exam/Result**

In units with an invigilated exam students may request a review of their final exam result. You may request to see your exam script after results have been released by completing the Access to Exam Script Form, which is available from the TSBE Office, or at the following link – http://www.utas.edu.au/business-and-economics/student-resources. Your unit coordinator will then contact you by email within five (5) working days of receipt of this form to go through your exam script.

Should you require a review of your final result a formal request must be made only after completing the review of exam script process list above. To comply with UTAS policy, this request must be made within ten (10) days from the release of the final results (in accordance with Academic Assessment Rule No. 2 Clause 22 – www.utas.edu.au/university-council/university-governance/rules). You will need to complete an Application for Review of Assessment Form, which can be accessed from www.studentcentre.utas.edu/examinations_an_results/forms_files/review_of_assessment.pdf.

Note that if you have passed the unit you will be required to pay $50 for this review.

*The TSBE reserves the right to refuse a student request to review final examination scripts should this process not be followed.*

**Further Support and Assistance**

If you are experiencing difficulties with your studies or assessment items, have personal or life-planning issues, disability or illness which may affect your study then you are advised to raise these with your lecturer or tutor in the first instance.

If you do not feel comfortable contacting one of these people, or you have had discussions with them and are not satisfied, then you are encouraged to contact the Director of Postgraduate Programs:

- **Name:** Dr Rob Hecker
- **Room:** 307, Commerce Building, Hobart
- **Phone:** 03 6226 1774
- **Email:** rob.Hecker@utas.edu.au

There is also a range of University-wide support services available to students, including Student Centre Administration, Careers and Employment, Disability Services, International and Migrant Support, and Student Learning and Academic Support. Please refer to the Current Students website (available from www.utas.edu.au/students) for further information.
If you wish to pursue any matters further then a Student Advocate may be able to assist. Information about the advocates can be accessed from [www.utas.edu.au/governance-legal/students-complaints](http://www.utas.edu.au/governance-legal/students-complaints).


### Academic Misconduct and Plagiarism

**Academic misconduct** includes cheating, plagiarism, allowing another student to copy work for an assignment or an examination, and any other conduct by which a student:

- (a) seeks to gain, for themselves or for any other person, any academic advantage or advancement to which they or that other person are not entitled; or
- (b) improperly disadvantages any other student.

Students engaging in any form of academic misconduct may be dealt with under the Ordinance of Student Discipline. This can include imposition of penalties that range from a deduction/cancellation of marks to exclusion from a unit or the University. Details of penalties that can be imposed are available in the Ordinance of Student Discipline – Part 3 Academic Misconduct, see [http://www.utas.edu.au/universitycouncil/legislation/](http://www.utas.edu.au/universitycouncil/legislation/).

**Plagiarism** is a form of cheating. It is taking and using someone else’s thoughts, writings or inventions and representing them as your own, for example:

- using an author’s words without putting them in quotation marks and citing the source;
- using an author’s ideas without proper acknowledgment and citation; or
- copying another student’s work.
- using one’s own work from previously submitted assessment items if repeating a unit.

If you have any doubts about how to refer to the work of others in your assignments, please consult your lecturer or tutor for relevant referencing guidelines, and the academic integrity resources on the web at [http://www.academicintegrity.utas.edu.au/](http://www.academicintegrity.utas.edu.au/)

The intentional copying of someone else’s work as one’s own is a serious offence punishable by penalties that may range from a fine or deduction/cancellation of marks and, in the most serious of cases, to exclusion from a unit, a course, or the University.

The University and any persons authorised by the University may submit your assessable works to a plagiarism checking service, to obtain a report on possible instances of plagiarism. Assessable works may also be included in a reference database. It is a condition of this arrangement that the original author’s permission is required before a work within the database can be viewed.

For further information on this statement and general referencing guidelines, see [http://www.utas.edu.au/plagiarism/](http://www.utas.edu.au/plagiarism/) or follow the link under ‘Policy, Procedures and Feedback’ on the Current Students homepage.
<table>
<thead>
<tr>
<th>Week</th>
<th>Chapter/Topic (Text: Levin et al. 7th edition)</th>
<th>Tutorial/Lab Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to the unit.</td>
<td>No tutorial/lab session.</td>
</tr>
<tr>
<td></td>
<td>Chapter 1: Defining and Collecting Data.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Chapter 3: Numerical Descriptive Measures.</td>
<td>Organising and Visualising Data. (Tutorial and lab training)</td>
</tr>
<tr>
<td>4</td>
<td>Chapter 4: Basic Probability.</td>
<td>Numerical Descriptive Measures. (Tutorial and lab training)</td>
</tr>
<tr>
<td>5</td>
<td>Chapter 5: Discrete Probability Distributions.</td>
<td>Basic Probability.</td>
</tr>
<tr>
<td>7</td>
<td>Chapter 7: Sampling Distributions.</td>
<td>The Normal Distribution and other Continuous Distributions.</td>
</tr>
<tr>
<td>8</td>
<td>Chapter 8: Confidence Interval Estimation.</td>
<td>Sampling Distributions.</td>
</tr>
<tr>
<td>9</td>
<td><em>Semester Test (during lecture hours).</em></td>
<td>Confidence Interval Estimation.</td>
</tr>
<tr>
<td>12</td>
<td>Chapter 14: Introduction to Multiple Regression.</td>
<td>Simple Linear Regression. (Tutorial and lab training)</td>
</tr>
<tr>
<td>13</td>
<td>Chapter 16: Introduction to Time-Series Forecasting.</td>
<td>No tutorial/lab session.</td>
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<tr>
<td></td>
<td>Discuss answers for tutorial practice questions on ‘multiple regression’.</td>
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<tr>
<td></td>
<td>Feedback/Information on Examination.</td>
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</table>