FIT1006
Business information analysis

Unit Guide

Semester 1, 2012

The information contained in this unit guide is correct at time of publication. The University has the right to change any of the elements contained in this document at any time.

Last updated: 22 Feb 2012
FIT1006 Business information analysis - Semester 1, 2012

This unit is designed to give students an introduction to statistical and quantitative methods within a business-related framework and to provide students with a sound foundation for more advanced statistical and quantitative studies. The unit will provide opportunities for the student to gain skills in the presentation of business and economic data, the use of frequency distributions, measures of central tendency and dispersion, principles of probability, use of probability distributions, sampling theory, estimation, hypothesis testing, regression analysis, the use of indices and forecasting methods.

Mode of Delivery

Clayton (Day)

Contact Hours

2 hrs lectures/wk, 2 hrs laboratories/wk

Workload

For on campus students, workload commitments are:

Students will be expected to spend a total of 12 hours per week during semester on this unit.

- Lecture: two-hour lecture per week
- Tutorial: two-hour tutorial per week

and up to an additional eight hours private study and reading per week.

Unit Relationships

Prohibitions

BUS1100, ETC1000, ETC1010, ETC2010, ETF2211, ETW1000, ETW1010, ETW1102, ETW2111, ETX1100, ETX2111, ETX2121, MAT1097

Chief Examiner

Dr John Betts

Campus Lecturer

Clayton

John Betts
Tutors

Clayton
Academic Overview

Outcomes

At the completion of this unit students will have -
A knowledge and understanding of:

- typical sources of data such as: market research surveys, mandatory reporting, census and Consumer Price Index, commercial sources;
- sampling techniques, sampling error;
- fundamental statistical concepts such as: probability, mathematical expectation, the Central Limit Theorem, hypothesis testing, correlation and regression.

At the completion of this unit, students will have skills in:

- techniques for basic statistical analysis including: the calculation of summary statistics, graphic display of data including stem-and-leaf plots, boxplots and histograms;
- calculations required for problems based on concepts given in point-3;
- calculation of probabilities by: direct calculation from probability distribution, use of tables and spreadsheets;
- the use of computer software (eg SYSTAT) to perform all statistical techniques covered;
- communicating the results of descriptive statistical analysis through a written report.

Graduate Attributes

Monash prepares its graduates to be:

1. responsible and effective global citizens who:
   a. engage in an internationalised world
   b. exhibit cross-cultural competence
   c. demonstrate ethical values

critical and creative scholars who:

   a. produce innovative solutions to problems
   b. apply research skills to a range of challenges
   c. communicate perceptively and effectively

Assessment Summary

Examination (2 hours): 60%; In-semester assessment: 40%

<table>
<thead>
<tr>
<th>Assessment Task</th>
<th>Value</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written assignment.</td>
<td>15%</td>
<td>March 30 2012</td>
</tr>
<tr>
<td>Test during lecture.</td>
<td>25%</td>
<td>April 23 2012</td>
</tr>
<tr>
<td>Examination 1</td>
<td>60%</td>
<td>To be advised</td>
</tr>
</tbody>
</table>
Teaching Approach

Lecture and tutorials or problem classes

This teaching and learning approach provides facilitated learning, practical exploration and peer learning.

Feedback

Our feedback to You

Types of feedback you can expect to receive in this unit are:

- Informal feedback on progress in labs/tutes
- Graded assignments without comments
- Test results and feedback
- Solutions to tutes, labs and assignments

Your feedback to Us

Monash is committed to excellence in education and regularly seeks feedback from students, employers and staff. One of the key formal ways students have to provide feedback is through SETU, Student Evaluation of Teacher and Unit. The University's student evaluation policy requires that every unit is evaluated each year. Students are strongly encouraged to complete the surveys. The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

For more information on Monash's educational strategy, and on student evaluations, see:
http://www.policy.monash.edu/policy-bank/academic/education/quality/student-evaluation-policy.html

Previous Student Evaluations of this unit

Students feedback has indicated that examples from the real world provide effective motivating cases. I will continue to use these, and incorporate new examples where possible.

If you wish to view how previous students rated this unit, please go to https://emuapps.monash.edu.au/unitevaluations/index.jsp

Required Resources

Please check with your lecturer before purchasing any Required Resources. Prescribed texts are available for you to borrow in the library, and prescribed software is available in student labs.

Students may need to use the university laboratories to access statistical software during private study. Students will use SYSTAT and Microsoft Excel to perform computer-based statistical calculations.
Academic Overview

**Prescribed text(s)**

Prescribed texts are available for you to borrow in the library.


**Examination material or equipment**

Calculators (including Graphing calculators) are allowed in the exam.
## Unit Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Activities</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No formal assessment or activities are undertaken in week 0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Introduction. Surveys and data collection.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Introduction to Excel and SYSTAT. Writing a statistical report.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Correlation and regression.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Introduction to probability. Bayes’ Theorem.</td>
<td>Assignment 1: March 30</td>
</tr>
<tr>
<td>6</td>
<td>Binomial and Poisson distributions. The Normal distribution.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Index numbers.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Test during lecture. Introduction to estimation.</td>
<td>Test scheduled: April 23</td>
</tr>
<tr>
<td>9</td>
<td>Estimation.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Hypothesis testing.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Hypothesis testing: categorical data. Time series analysis.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Time series analysis.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SWOT VAC</td>
<td>No formal assessment is undertaken SWOT VAC</td>
</tr>
<tr>
<td></td>
<td>Examination period</td>
<td>LINK to Assessment Policy:</td>
</tr>
</tbody>
</table>

*Unit Schedule details will be maintained and communicated to you via your MUSO (Blackboard or Moodle) learning system.*
Assessment Requirements

Assessment Policy

Faculty Policy - Unit Assessment Hurdles

Assessment Tasks

Participation

• Assessment task 1

  Title:  
  Written assignment.

  Description:  
  Students will be given data to analyse and report on.

  Weighting:  
  15%

  Criteria for assessment:  
  The correctness of calculated statistics. The quality of the explanation. The quality of the written work. Handout will be available on Moodle.

  Due date:  
  March 30 2012

• Assessment task 2

  Title:  
  Test during lecture.

  Description:  
  To be advised in lectures.

  Weighting:  
  25%

  Criteria for assessment:  
  To be advised in lectures. Sample tests will be available on Moodle.

  Due date:  
  April 23 2012

Examinations

• Examination 1

  Weighting:  
  60%

  Length:  
  2 hours

  Type (open/closed book):  
  Closed book

  Electronic devices allowed in the exam:  
  Calculators (including Graphing calculators) are allowed in the exam.
Assignment submission

It is a University requirement (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-procedures.html) for students to submit an assignment coversheet for each assessment item. Faculty Assignment coversheets can be found at http://www.infotech.monash.edu.au/resources/student/forms/. Please check with your Lecturer on the submission method for your assignment coversheet (e.g. attach a file to the online assignment submission, hand-in a hard copy, or use an online quiz).

Online submission

If Electronic Submission has been approved for your unit, please submit your work via the VLE site for this unit, which you can access via links in the my.monash portal.

Extensions and penalties

Submission must be made by the due date otherwise penalties will be enforced.


Returning assignments

Students can expect assignments to be returned within two weeks of the submission date or after receipt, whichever is later.
Other Information

Policies

Monash has educational policies, procedures and guidelines, which are designed to ensure that staff and students are aware of the University’s academic standards, and to provide advice on how they might uphold them. You can find Monash's Education Policies at: http://policy.monash.edu.au/policy-bank/academic/education/index.html

Key educational policies include:

- Plagiarism (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-policy.html)
- Special Consideration (http://www.policy.monash.edu/policy-bank/academic/education/assessment/special-consideration-policy.html)
- Grading Scale (http://www.policy.monash.edu/policy-bank/academic/education/assessment/grading-scale-policy.html)
- Discipline: Student Policy (http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-discipline-policy.html)
- Academic Calendar and Semesters (http://www.monash.edu.au/students/key-dates/)
- Orientation and Transition (http://www.infotech.monash.edu.au/resources/student/orientation/); and
- Codes of Practice for Teaching and Learning (http://www.policy.monash.edu/policy-bank/academic/education/conduct/suppdocs/code-of-practice-teaching-and-learning.html)

Student services

The University provides many different kinds of support services for you. Contact your tutor if you need advice and see the range of services available at www.monash.edu.au/students. For Sunway see http://www.monash.edu.my/Student-services, and for South Africa see http://www.monash.ac.za/current/

The Monash University Library provides a range of services and resources that enable you to save time and be more effective in your learning and research. Go to http://www.lib.monash.edu.au or the library tab in my.monash portal for more information. At Sunway, visit the Library and Learning Commons at http://www.lib.monash.edu.my/. At South Africa visit http://www.lib.monash.ac.za/.

Academic support services may be available for students who have a disability or medical condition. Registration with the Disability Liaison Unit is required. Further information is available as follows:

- Website: http://monash.edu/equity-diversity/disability/index.html
- Email: dlu@monash.edu
- Drop In: Equity and Diversity Centre, Level 1 Gallery Building (Building 55), Monash University, Clayton Campus, or Student Community Services Department, Level 2, Building 2, Monash University, Sunway Campus
- Telephone: 03 9905 5704, or contact the Student Advisor, Student Community Services at 03 55146018 at Sunway
Reading list

A good non-mathematical text is: Statistics Without Tears, Derek Rowntree, Penguin, Harmondsworth, 1981.