COMM5011
DATA ANALYSIS FOR BUSINESS

Course Outline
Semester 1, 2015

Part A: Course-Specific Information

Please consult Part B for key information on Business School policies (including those on plagiarism and special consideration), student responsibilities and student support services.
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PART A: COURSE-SPECIFIC INFORMATION

1 STAFF CONTACT DETAILS
Lecturer-in-charge: Professor Walter D Fernandez (School of Information Systems, Technology and Management)
Room Quad 2090
Phone No: 9385 7796
Email: w.fernandez@unsw.edu.au
Consultation Times: To be announced in Moodle

Lecturer: Kris Iyer (School of Economics)
Room: TBA
Phone No: TBA
Email: TBA
Consultation Times: To be announced in Moodle.

A full list of tutors will be posted on COMM5011 Moodle Website, if appropriate.

1.1 Communication with Staff
The best way to contact your lecturer or tutor is via email or to see them during their consultation times. Please note that only your UNSW email account will be used for formal notices and correspondence regarding the course, all students and staff are expected to use email responsibly and respectfully. Moodle will to be used for all course communication i.e. notices, questions regarding assignments and course content.

If you need to contact the school urgently, please call 9385-5320 or email istm@unsw.edu.au.

2 COURSE DETAILS

2.1 Teaching Times and Locations
Lectures start in Week 1 (to Week 12)

Tutorials start in Week 2 (to Week 12)

For latest information about lecture and tutorial locations see:
http://www.timetable.unsw.edu.au/current/subjectSearch.html
or
http://www.timetable.unsw.edu.au/current/COMM5011.html

2.2 Units of Credit
The course is worth 6 units of credit.

There is no parallel teaching in this course.
2.3 Summary of Course

This course provides an introduction to the basic analytical skills. The course provides a solid basis from which data analysis techniques and tools can be applied to solve business problems. Therefore, there is an emphasis on problem solving and business analytics by both manual and computer methods. The first six lectures focus on the use of quantitative methods and techniques. The second six lectures focus on the use of qualitative research methods and techniques.

2.4 Course Aims and Relationship to Other Courses

This course is offered as one of the Data Analysis alternatives in the core of the MCom degree. The course aims to develop students’ ability to analyse qualitative and quantitative business data for operations and management purposes. It is designed for students with little or no qualitative or quantitative training in their postgraduate degree but who need to develop these skills for specialisations in the areas of Marketing, Information Systems and Human Resource Management. The skills learned are also relevant for broader specialisations including project management and business decision making. Students wishing to complete a specialisation such as Finance, Economics or Accounting where more quantitative skills are required will usually find COMM5005 or ECON5248 more appropriate as their data analysis core course.

2.5 Student Learning Outcomes

The Course Learning Outcomes are what you should be able to DO by the end of this course if you participate fully in learning activities and successfully complete the assessment items.

| 1. Explain the need for business information |
| 2. Understand methods for collecting business information and reporting results |
| 3. Explain and contrast qualitative and quantitative data analysis methods |
| 4. Analyse quantitative business data using statistical methods |
| 5. Analyse qualitative business data using various modes, techniques and tools |

The Learning Outcomes in this course also help you to achieve some of the overall Program Learning Goals and Outcomes for all postgraduate coursework students in the Business School. Program Learning Goals are what we want you to BE or HAVE by the time you successfully complete your degree (e.g. ‘be an effective team player’). You demonstrate this by achieving specific Program Learning Outcomes – what you are able to DO by the end of your degree (e.g. ‘participate collaboratively and responsibly in teams’).

Business School Postgraduate Coursework Program Learning Goals and Outcomes

1. Knowledge: Our graduates will have current disciplinary or interdisciplinary knowledge applicable in local and global contexts.

You should be able to identify and apply current knowledge of disciplinary or interdisciplinary theory and professional practice to business in local and global environments.
2. Critical thinking and problem solving: Our graduates will have critical thinking and problem solving skills applicable to business and management practice or issues. You should be able to identify, research and analyse complex issues and problems in business and/or management, and propose appropriate and well-justified solutions.

3. Communication: Our graduates will be effective communicators in professional contexts. You should be able to:
   a. Produce written documents that communicate complex disciplinary ideas and information effectively for the intended audience and purpose, and
   b. Produce oral presentations that communicate complex disciplinary ideas and information effectively for the intended audience and purpose.

4. Teamwork: Our graduates will be effective team participants. You should be able to participate collaboratively and responsibly in teams, and reflect on your own teamwork, and on the team’s processes and ability to achieve outcomes.

5. Ethical, social and environmental responsibility: Our graduates will have a sound awareness of ethical, social, cultural and environmental implications of business issues and practice. You should be able to:
   a. Identify and assess ethical, environmental and/or sustainability considerations in business decision-making and practice, and
   b. Consider social and cultural implications of business and/or management practice.

6. Leadership: Our graduates will have an understanding of effective leadership. (MBA and MBT programs only). You should be able to reflect on your personal leadership experience, and on the capabilities necessary for leadership.

For more information on the Postgraduate Coursework Program Learning Goals and Outcomes, see Part B of the course outline.

The following table shows how your Course Learning Outcomes relate to the overall Program Learning Goals and Outcomes, and indicates where these are assessed (they may also be developed in tutorials and other activities):

<table>
<thead>
<tr>
<th>Program Learning Goals and Outcomes</th>
<th>Course Learning Outcomes</th>
<th>Course Assessment Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>This course helps you to achieve the following learning goals for all Business School postgraduate coursework students:</strong></td>
<td><strong>On successful completion of the course, you should be able to:</strong></td>
<td><strong>This learning outcome will be assessed in the following items:</strong></td>
</tr>
</tbody>
</table>
| 1 Knowledge                        | Understand and apply survey and sampling techniques. Explain and apply techniques for preliminary analysis of qualitative data along with further exploring, explaining and predicting. Use and interpret descriptive and inferential statistics for quantitative data. | - Tutorial Problems  
- Report  
- Exam |
| 2 Critical thinking and problem solving | Analyse, develop and frame business problems. | - Tutorial Problems  
- Business Report  
- Exam |
### 3 LEARNING AND TEACHING ACTIVITIES

#### 3.1 Approach to Learning and Teaching in the Course

This course aims to develop your ability to analyse business data which comes in both text based and numerical forms and thereby to build your skills in making business decisions. It also aims to prepare you for further MCom courses which require the use of data analysis skills. You will learn how to use relevant software, tools and techniques to carry out this analysis.

Our approach to teaching this course is to give you opportunities to think and analyse like a business person. You will need to be open to:
- Thinking about how different types of business use data
- Trying a variety of data gathering and analysis techniques
- Discussing methods and results with your peers
- Writing reports that explain your findings

#### 3.2 Learning Activities and Teaching Strategies

The lectures will introduce you to the sources and uses of data in a business situation and demonstrate a number of approaches using case studies and other practical examples. The lectures will introduce techniques for both qualitative and quantitative data analysis. We expect that they will be interactive with opportunities for you to participate and ask questions.

You will further develop your understanding of techniques introduced in lectures by thorough preparation and your active participation in tutorials. The focus of the tutorials will be on discussion of methods and output with an emphasis on real life scenarios and case studies. There will be opportunities for you to engage with others through group discussion and oral presentations so that different viewpoints can be thoroughly explored. See Moodle for each week’s tutorial material to prepare.

| 3a | Written communication | Draw, verify and evaluate the quality of conclusions and produce a business report. | • Exam  
• Business Report |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>3b</td>
<td>Oral communication</td>
<td>Communicate ideas in a succinct and clear manner. Explain the key issues of business data analysis</td>
<td>• Part of tutorial participation mark but not separately assessed.</td>
</tr>
<tr>
<td>4</td>
<td>Teamwork</td>
<td>Compare and contrast qualitative and quantitative methods and the information generated from each. Interpret output from analysis performed by themselves or others.</td>
<td>• Part of tutorial participation mark but not separately assessed.</td>
</tr>
<tr>
<td>5a</td>
<td>Ethical, environmental and sustainability responsibility</td>
<td>Not specifically addressed in this course</td>
<td></td>
</tr>
<tr>
<td>5b</td>
<td>Social and cultural awareness</td>
<td>Not specifically addressed in this course</td>
<td></td>
</tr>
</tbody>
</table>
4 ASSESSMENT

4.1 Formal Requirements

In order to do this course you must comply with the following requirements:

- Attendance at tutorial/laboratories is compulsory. The roll will be taken in each of these classes. Students are reminded that they are required to attend 80% of all classes or a failure in the course will be recorded.
- Any of the results of the assessment tasks may be scaled to a mean of 60%.
- All components of assessment must be completed at a satisfactory level (normally a minimum mark of 45%). If this level of performance is not achieved in any component a UF will be awarded.
- Team members are expected to work in a professional manner, showing care and respect for each other while engaging in debates and exchanging viewpoints.
- Peer assessment will be used to weight marks for individual students. Individual marks are private and will not be disclosed under any circumstances to team members.
- This subject will be assessed in accordance with the School's assessment policies that can be found at: www.sistm.unsw.edu.au.

4.2 Assessment Details

<table>
<thead>
<tr>
<th>Assessment Task</th>
<th>Weighting</th>
<th>Length</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial Preparation and Participation</td>
<td>10%</td>
<td>See 4.3 below</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Assignment Quantitative Report</td>
<td>20%</td>
<td>Refer to Specification</td>
<td>Week 8</td>
</tr>
<tr>
<td>Qualitative Activities (part of tutorials)</td>
<td>20%</td>
<td>Refer to Specification</td>
<td>Weeks 8 to 13</td>
</tr>
<tr>
<td>Final Exam</td>
<td>50%</td>
<td>3 hours total</td>
<td>University Exam Period</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3 Assessment Format

Tutorials

Tutorial participation will be assessed on the basis of contribution to teamwork and group discussion, at least one oral presentation per person and preparation of homework. Tutorial preparation will be collected and marked in at least two weeks on the basis of the effort made as well as accuracy of answers. Please use a different coloured pen in class so the tutor can distinguish what you have added in class.

Assignment

There will be one major assignment tasks which will allow you to explore a set of data and to apply critical thinking and evaluation. For details and report style refer to Moodle information and https://www.business.unsw.edu.au/Students-Site/Documents/Writingareport.pdf
Assignment Report:
You will be required to use Excel to investigate quantitative data and to write a business report which demonstrates your findings. For further details will be posted on Moodle by Week 3.

Qualitative Activities
A set of four qualitative activities will be assessed as part of you continuing learning of qualitative coding techniques — two in the form of questionnaires and two as practical coding exercises. These activities will be integrated with, or related to, the material and practical activities of the qualitative tutorials (from week eight to week thirteen). These activities are designed to test your ability to analyse and critically evaluate business data and their details will be specified in Moodle. The best three results out of the four activities will be computed towards the available marks for the set of activities (20%).

Final Exam
The final exam will consist of calculation and essay/report style questions. Further details will be provided later in the semester on the course website. Some examples of the type of questions to expect will be provided. The exams will be open book but computers are not permitted so e-book materials you wish to use may need to be printed.

4.4 Late Submission
The late submission of assignments carries a penalty of 10% of the maximum marks for that assignment per day of lateness (including weekends and public holidays), unless an extension of time has been granted. An extension of time to complete an assignment may be granted by the course co-ordinator in case of misadventure or illness. Applications for an extension of time should be made to the course co-ordinator by email or in person. You will be required to substantiate your application with appropriate documentary evidence such as medical certificates, accident reports etc. Please note that work commitments and computer failures are grounds for an extension.

Quality Assurance
The Business School is actively monitoring student learning and quality of the student experience in all its programs. A random selection of completed assessment tasks may be used for quality assurance, such as to determine the extent to which program learning goals are being achieved. The information is required for accreditation purposes, and aggregated findings will be used to inform changes aimed at improving the quality of Business School programs. All material used for such processes will be treated as confidential and will not be related to course grades.
5 COURSE RESOURCES

The prescribed textbook for the quantitative component of this course (first half of the semester) is:

Title: Basic Business Statistics: Concepts and Applications
Authors: Berenson, M., Levine, D., Krehbiel, T., Stephan, D., O'Brien, M., Jayne, N. and Watson, J.
Edition 3rd
ISBN: 9781442548473
ISBN 10 1442548479
Published 24/08/2012
Published by Pearson Australia
(also available as a VitalSource e-book with ISBN 9781486002443

Be aware that a hardcopy version of the textbook is allowed to be brought to the final examination. You may not however bring computers with e-books.

For the qualitative component of this course (second half of the semester) you will be provided with electronic copies of relevant readings compiled specially for this course. You will be given instructions to download the Qualitative Readings from the Course Website by week six.

Links to additional and suggested readings will be provided on the course website.

5.1 Website
The website for this course is on UNSW Moodle at:
moodle.telt.unsw.edu.au/

5.2 Calculator
An approved scientific calculator will be required for use in some lectures, tutorials and the final exam. For a list of approved calculators see
#Calculatorsinexams
You should take the calculator to the Business School Student Centre to have an approval sticker applied.

6 COURSE EVALUATION AND DEVELOPMENT

Each year feedback is sought from students and other stakeholders about the courses offered in the School and continual improvements are made based on this feedback. UNSW's Course and Teaching Evaluation and Improvement (CATEI) Process is one of the ways in which student evaluative feedback is gathered. In this course, we will seek your feedback through end of semester evaluations.
# COURSE SCHEDULE

Lectures and tutorials **start in Week 1 and finish in Week 12.** Attending lectures and tutorials is critical to your success in this course; please be aware that lectures are interactive and not a simple repeat the textbook content.

## COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture Topic</th>
<th>Lecturer</th>
<th>References</th>
<th>Tutorial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 2 March</td>
<td>Information for Business use</td>
<td>Kris Iyer</td>
<td>Berenson Ch. 1</td>
<td>NO TUTORIALS</td>
</tr>
<tr>
<td>Week 2 9 March</td>
<td>Drawing, verifying and reporting conclusions</td>
<td>Kris Iyer</td>
<td>Berenson Ch. 2</td>
<td>Tutorial A1: Details in Moodle</td>
</tr>
<tr>
<td>Week 3 16 March</td>
<td>Describing quantitative data</td>
<td>Kris Iyer</td>
<td>Berenson Ch. 3</td>
<td>Tutorial A2: Details in Moodle</td>
</tr>
<tr>
<td>Week 4 23 March</td>
<td>Introduction to regression and probability</td>
<td>Kris Iyer</td>
<td>Berenson 12.1-12.4, Ch. 4</td>
<td>Tutorial A3: Details in Moodle</td>
</tr>
<tr>
<td>Week 5 30 March</td>
<td>The normal distribution and sampling distributions</td>
<td>Kris Iyer</td>
<td>Berenson 6.1-6.3, Ch. 7</td>
<td>Tutorial A4: Details in Moodle</td>
</tr>
</tbody>
</table>

**Mid-semester break: Good Friday 3\(^\text{rd}\) April - Sunday 12 April**

| Week 6 13 April | Making inferences about the population | Kris Iyer | Berenson 8.1, 8.3 9.1-9.3, 9.5, 9.7 | Tutorial A5: Details in Moodle |
| Week 7 20 April | Qualitative Methods: Purpose, nature and data. | Fernandez | Qualitative Readings 1 | Tutorial A6: Details in Moodle |
| Week 8 27 April | Formulating problems/Design Thinking | Fernandez | Qualitative Readings 2 | Tutorial B1: Details in Moodle |
| Week 9 4 May | Techniques of Qualitative Data Analysis | Fernandez | Qualitative Readings 3 | Tutorial B2: Details in Moodle |
| Week 10 11 May | Preliminary Analysis of Qualitative Data | Fernandez | Qualitative Readings 4 | Tutorial B3: Details in Moodle |
| Week 11 18 May | Explaining and Predicting Business Data | Fernandez | Qualitative Readings 5 | Tutorial B4: Details in Moodle |
| Week 12 25 May | Analysis of information across methods | Fernandez | Qualitative Readings 6 | Tutorial B5: Details in Moodle |
| Week 13 1 June | **NO LECTURES** | - | - | **NO TUTORIALS** |