



BUS708 STATISTICS AND DATA ANALYSIS T318- Brief

All information contained within this Subject Outline applies to all students enrolled in the trimester as indicated.

1. General Information

1.1 Administrative Details

Associated HE Award(s)	Duration	Level	Subject Coordinator
Graduate Certificate in Business; Graduate Diploma in Business; Master of Accounting; Master of Professional Accounting; Graduate Diploma of TESOL; Master of Arts (TESOL)	1 trimester	Postgraduate	Dr Krish Muraleedaran muralee.krish@koi.edu.au P: 92833583 (Ext.156) L: Level 1, 545 Kent St. Consultation: via Moodle or by appointment

1.2 Core / Elective

This is a core subject for the Graduate Certificate in Business, the Graduate Diploma of Business, the Master of Accounting, the Master of Professional Accounting, and an elective subject for the Graduate Diploma of TESOL and the Master of Arts (TESOL).

1.3 Subject Weighting

Indicated below is the weighting of this subject and the total course points.

Subject Credit Points	Total Course Credit Points
4	GCBus 16; GDBus 32; GD TESOL 32; MAcc 48; MA(TESOL) 48; MPA 64

1.4 Student Workload

Indicated below is the expected student workload per week for this subject

No. timetabled hours/week*	No. personal study hours/week**	Total workload hours/week***
4 hours/week (2 hour Lecture + 2 hour Tutorial)	6 hours/week	10 hours/week

* Total time spent per week at lectures and tutorials

** Total time students are expected to spend per week in studying, completing assignments, etc.

*** Combination of timetable hours and personal study.

1.5 Mode of Delivery On-campus

1.6 Pre-requisites There are no pre-requisites for this subject.

While not a pre-requisite, numerical literacy is an advantage for this subject. Note: This subject is equivalent to BUS701 Research Methods – Qualitative and Quantitative.

1.7 General Study and Resource Requirements

- Students are expected to attend classes with the required textbook and to read specific chapters prior to the tutorials. Students should read this material before coming to class to improve their ability to participate in the weekly activities.
- Students will require access to the internet and their KOI email and should have basic skills in word processing software such as MS Word, spreadsheet software such as MS Excel and visual presentation software such as MS PowerPoint.

- Computers and WIFI facilities are extensively available for student use throughout KOI. Students are encouraged to make use of the campus Library for reference materials.

Resource requirements specific to this subject: Students should have a non-programmable calculator – applications in smart phones will not be sufficient to perform the required calculations. This subject requires the use of statistical software packages to analyse numerical data.

2. Academic Details









2.1 Overview of the Subject

Data is everywhere and understanding data is a vital asset to an organisation. It can provide valuable insights into areas such as customer behaviour, market intelligence and operational performance. This subject explains how to understand and analyse data in the business context and assess and communicate its significance. It covers the statistical principles behind sampling, hypothesis testing and forecasting. It also includes practice in posing research questions and presenting research reports. These skills of data analysis and decision-making are essential preparation for conducting research and managing work in business settings.

2.2 Graduate Attributes for Undergraduate Courses

Graduates of Postgraduate courses from King's Own Institute will gain the graduate attributes expected from successful completion of a Master's degree under the Australian Qualifications Framework (2nd edition, January 2013). Graduates at this level will be able to apply an advanced body of knowledge in a range of contexts for professional practice or scholarship and as a pathway for further learning.

King's Own Institute's key generic graduate attributes for a master's level degree are summarised below:














	KOI Master's Degree Graduate Attributes	Detailed Description
	Knowledge	Current, comprehensive and coherent knowledge, including recent developments and applied research methods
	Critical Thinking	Critical thinking skills to identify and analyse current theories and developments and emerging trends in professional practice
	Communication	Communication and technical skills to analyse and theorise, contribute to professional practice or scholarship and present ideas to a variety of audiences.
	Research and Information Literacy	Cognitive and technical skills to access and evaluate information resources, justify research approaches and interpret theoretical propositions
	Creative Problem Solving Skills	Cognitive, technical and creative skills to investigate, analyse and synthesise complex information, concepts and theories, solve complex problems and apply established theories to situations faced in professional practice.
	Ethical and Cultural Sensitivity	Appreciation and accountability for ethical principles, cultural sensitivity and social responsibility, both personally and professionally
	Leadership and Strategy	Initiative, leadership skills and ability to work professionally and collaboratively to achieve team objectives across a range of team roles. Expertise in strategic thinking, developing and implementing business plans and decision making under uncertainty
	Professional Skills	High level personal autonomy, judgement decision-making and accountability required to begin professional practice.

Across the course, these skills are developed progressively at three levels:

- **Level 1 Foundation** – Students learn the skills, theories and techniques of the subject and apply them in stand-alone contexts.
- **Level 2 Intermediate** – Students further develop skills, theories and techniques of the subject and apply them in more complex contexts, beginning to integrate the application with other subjects.
- **Level 3 Advanced** – Students have a demonstrated ability to plan, research and apply the skills, theories and techniques of the subject in complex situations, integrating the subject content with a range of other subject disciplines within the context of the course

2.3 Subject Learning Outcomes

Listed below, are *key* knowledge and skills students are expected to attain by successfully completing this subject:

Subject Learning Outcomes	Contribution to Course Graduate Attributes
a) Critically review the data requirements for a business project and identify approaches for collecting and analysing the data	  
b) Use a variety of statistical methods to make inferences about business data and solve business problems	   
c) Construct hypotheses, test them and interpret the findings	 
d) Critically review a data set, report, illustrate and present the results of analysis of data and make suggestions about further research and management action	   

2.4 Subject Content and Structure

Below are details of the subject content and how it is structured, including specific topics covered in lectures and tutorials. Reading refers to the text unless otherwise indicated.

Weekly Planner:

Week (beginning)	Topic covered in each week's lecture	Reading(s)	Expected work
1 05 Nov	Basic Concept of Statistics	Lock, Ch. 1	Tutorial Exercises Online Quizzes
2 12 Nov	Gathering Data	Lock, Ch.1 & 2	Tutorial Exercises Online Quizzes
3 19 Nov	Descriptive Statistics	Lock, Ch.2	Tutorial Exercises Online Quizzes
4 26 Nov	Probability Distributions	Lock, Ch. 5	Tutorial Exercises Online Quizzes
5 03 Dec	Sampling distribution	Lock, Ch. 3 & 4	Tutorial Exercises Online Quizzes
6 10 Dec	Confidence Interval	Lock, Ch. 3 & 6	Mid-trimester Exams

7 17 Dec	Hypotheses Testing	Lock, Ch. 4 & 6	Tutorial Exercises Online Quizzes
23 Dec 2018 – 06 Jan 2019	Mid trimester break		
8 07 Jan	ANOVA and Chi-Square tests	Lock, Ch. 7 & 8	Tutorial Exercises Online Quizzes
9 19 Jan	Simple Linear Regression	Lock, Ch. 9	Tutorial Exercises Online Quizzes Deferred Mid Trimester Exams - see Section 2.6 below for more information
10 21 Jan	Multiple linear regression	Lock, Ch. 10	Tutorial Exercises Online Quizzes Statistical Modelling Assignment Due
11 28 Jan	Statistical modelling	TBA Moodle	Tutorial Exercises Statistical modelling assignment presentation
12 04 Feb	Revision		Tutorial Exercises Online Quizzes
13 11 Feb	Study review week		
14 18 Feb	Final Exam Week	Please see Exam Timetable for exam date, time and location	
15 25 Feb	Student Vacation begins Enrolments for T119 open		
16 04 Mar	Results Released 05 Mar 2019 Certification of Grades 08 Mar 2019		
T119 begins 11 Mar 2019			
1 11 Mar	Week 1 of classes for T119 Friday 08 Mar 2019 – Review of Grade Day for T318 – see Sections 2.6 and 3.6 below for more information.		

2.7 Teaching Methods/Strategies

Briefly described below are the teaching methods/strategies used in this subject:

- *On-campus lectures* (2 hours/week) are conducted in seminar style and address the subject content, provide motivation and context and draw on the students' experience and preparatory reading.
- *Tutorials* (2 hours/week) include class discussion of case studies and research papers, practice sets and problem-solving and syndicate work on group projects. Tutorial participation is an essential component of the subject and contributes to the development of graduate attributes (see section 2.2 above). It is intended that specific tutorial material such as case studies, recommended readings, review questions etc. will be made available each week in Moodle.
- *Online* teaching resources include class materials, readings, model answers to assignments and exercises and discussion boards. All online materials for this subject as provided by KOI will be found in the Moodle page for this subject. Students should access Moodle regularly as material may be updated at any time during the trimester
- *Other contact* - academic staff may also contact students either via Moodle messaging, or via email to the email address provided to KOI on enrolment.

2.8 Student Assessment

Provided below is a schedule of formal assessment tasks and major examinations for the subject.

Assessment Type	When assessed	Weighting	Learning Outcomes Assessed
Online Quizzes Individual assessment	Weekly	10%	b, c
Mid-trimester exam	Week 6	10%	a, b, c
Statistical modelling assignment – individual report (2000 words) <ul style="list-style-type: none"> ○ Formulation of problem ○ Data requirements and analysis ○ Statistical methods ○ • Report including tables and figures 	Week 10	30%	a, b, c, d
Final examination (3 hours)	Final Exam Period	50%	a, b, c

Requirements to Pass the Subject:

To gain a pass or better in this subject, students must gain a *minimum of 50%* of the total available subject marks.

2.9 Prescribed and Recommended Readings

Prescribed Text:

Lock, Robin H., Lock, Patti Frazer, Morgan, Karl Lock, Lock, Eric F. and Lock, Dennis F., 2013, *Statistics: Unlocking the Power of Data*, Wiley.