

# School of Accounting and Commercial Law

# MMPA 507 STATISTICS

Trimester 1, 2014

## **COURSE OUTLINE**

Names and Contact Det	Office	Telephone	
Course Coordinator & Lecturer	Nathaniel Robson RH 210 463 5233 x7515 <a href="mailto:nathaniel.robson@vuw.ac.nz">nathaniel.robson@vuw.ac.nz</a> Office Hours: Tuesdays 3-5pm or by appointment		
Course Administrator	Pinky Shah  pinky.shah@vuw.ac.nz  Office hours: Monday-Friday, 9am-5	RH 728 .30pm	463 6921

## **Trimester Dates**

Teaching Period: Monday 3 March – Friday 6 June Study Period: Monday 9 June – Thursday 12 June

Examination Period: Friday 13 June – Wednesday 2 July (inclusive)

## Withdrawal from Course

- 1. Your fees will be refunded if you withdraw from this course on or before Friday 14 March 2014.
- 2. The standard last date for withdrawal from this course is Friday 16 May 2014. After this date, students forced to withdraw by circumstances beyond their control must apply for permission on an 'Application for Associate Dean's Permission to Withdraw Late' including supporting documentation. The application form is available from either of the Faculty's Student Customer Service Desks.

## **Class Times and Room Numbers**

**Tuesdays:** 5.40-8.30pm

**Venue:** GB LT 3 (Government Buildings Lecture Theatre 3), Pipitea Campus

## **Course Delivery**

The course will consist of lectures, two assignments, two multiple choice tests, and a final examination that focuses on solving problems similar to those in the assignments. Assignments are designed to help students to master course material through practice and also to aid in preparation for the tests and exam. Formal lecture time will be used to explain all key statistical ideas, as well as providing examples of their application. Part of the scheduled lecture time will be devoted to an informal tutorial style discussion of problems appearing in the assignments, tests, and text exercises as well as demonstrating the use of Excel. Solutions to assignments and tests will be provided in the form of Excel spreadsheets.

## **Group Work**

Collaboration on individual assignments is not allowed beyond general discussion as to the nature of the assignment question. Please do not work together to produce any written work and do not loan out your completed assignments.

## **Expected Workload**

This course is a 15-point course. One point is equated to 10 hours of work, which means a total of 150 hours is expected for this course, spread over the 12 teaching weeks, mid-trimester break, study week and the examination period. This involves attending the lectures and tutorials every week, completing all assignments, and preparations for all exams.

## **Prescription**

Statistical techniques useful in accounting research or practice.

## **Course Learning Objectives**

Students who are successful in this course will be able to:

- (a) Understand the potential for statistical data analyses to contribute towards business management decisions;
- (b) Apply the results of statistical data analyses in business applications, including planning, forecasting, decision-making, controlling, and reporting;
- (c) Describe data using graphs;
- (d) Summarise data using numerical measures;
- (e) Analyse data using a variety of inferential analysis techniques including probability rules, sampling distributions of a mean and a proportion, confidence intervals for a single mean and proportion;
- (f) Describe and analyse data using a variety of bi-variate analysis techniques including correlation and linear regression;
- (g) Demonstrate an understanding of basic data collection methods.

#### **Course Content**

This course covers statistical techniques useful in business research or practice. The schedule on page 6 indicates the topics we shall be covering, the order of coverage, and the approximate timing. Note that we will be working through the entire Clark & Randal textbook so it is recommended to start reading the text early and remain ahead of the schedule on page 6.

## **Readings**

The prescribed text for this course is: Clark, M. & Randal, J., A First Course in Applied Statistics, 2nd edition, Pearson, 2011, which is available in the library as well as in the Victoria book store (ground floor of Rutherford House at the Pipitea Campus). Since we shall be covering the entire text in this course, it is vital to have convenient access to this text.

## **Materials and Equipment**

The assignments must be solved using Excel. Students will be permitted to use electronic calculators during tests and the exam. These calculators must be non-programmable and cleared of memory prior to the tests and exam. Any formulae and tables needed for the tests or exam will be provided. Lecture slides, solutions to tests, and solutions to assignments will be posted on Blackboard.

#### Assessment

From Trimester 1, 2014, a revised Assessment Handbook will apply to all Victoria courses: see <a href="http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf">http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf</a>.

In particular, there will be a new grade scheme, in which the A+ range will be 90-100% and 50-54% will be a C-.

Item	Specifications	%	Date	Course Learning Objectives
Assignment 1	Chapters 2-8.	15%	Due: Thursday 10 April 5pm	(a),(b),(c),(d),(g)
Test 1	50 mins, closed book	15%	Tuesday 15 April	(a),(b),(c),(d),(g)
Assignment 2	Chapters 9-12.	15%	Due: Thursday 29 May 5pm	(a)-(g)
Test 2	50 mins, closed book	15%	Tuesday 3 June	(a)-(g)
Exam	2 hours, closed book	40%	TBA (see 'Examinations' below)	(a)-(g)

- The course is divided into three main sections:
  - (i) descriptive statistics (chapters 2-5)
  - (ii) probability and sampling (chapters 6-8) and
  - (iii) inference (chapters 9-13).

Course learning objectives (a)-(d) and (g) are covered in all three sections of the course. Course learning objectives (e) and (f) are covered in sections (ii) and (iii).

- Assignment 1 is due by 5pm on Thursday 10 April. Your assignment must be solved using Excel and the Excel spread-sheet must be submitted by email to <a href="mailto:nathaniel.robson@vuw.ac.nz">nathaniel.robson@vuw.ac.nz</a>. Solutions to Assignment 1 will be provided to assist preparations for Test 1. No late submissions will be accepted.
- **Test 1** will be held on **Tuesday 15 April** in class (50 minutes) and will cover all material up to and including week 6: lectures, text readings, and Assignment 1.
- Assignment 2 is due by 5pm on Thursday May 29. Your assignment must be solved using Excel and the Excel spread-sheet must be submitted by email to <a href="mailto:nathaniel.robson@vuw.ac.nz">nathaniel.robson@vuw.ac.nz</a>. Solutions to Assignment 2 will be provided to assist preparations for Test 2. No late submissions will be accepted.
- **Test 2** will be held on **Tuesday 3 June** in class (50 minutes) and will cover all material up to and including week 12: lectures, text readings, Test 1, and Assignments 1 and 2.
- **The final examination** is a 120 minute comprehensive exam that will cover **all** material covered in the lectures, text readings, tests and assignments.

## **Penalties**

## • Assignments

Assignments must be handed in on or before the due date and time. In fairness to other students, and because solutions to assignments are distributed, any assignment submitted after the deadline will not be marked.

An extension or waiver (with no penalty) will be considered on the grounds of exceptional personal circumstances. Students must complete the 'Assignment Extension/Waiver Application Form' available on Blackboard and submit the form (with the relevant supporting documentation) to Pinky Shah, preferably before the assignment due date.

**Note:** The submission of an application does not mean that the extension has been approved. Penalties, as detailed above, will apply if the extension is not granted.

## Tests

Unjustifiable absences from tests will result in a mark of 'zero' for that test and may result in a student not meeting mandatory course requirements.

Students unable to take scheduled tests due to exceptional circumstances, must complete the 'Consideration of Exceptional Personal Circumstances for Tests Application Form' available on Blackboard. Submit this form to Pinky Shah as early as possible, preferably before the test date.

**Note:** The submission of an application does not mean that the test requirement has been changed or waived. Penalties, as detailed above, will apply if it is not successful.

**Exceptional Personal Circumstances** include an impairment assessed by Disability Services, illness, bereavement, circumstances involving the health or wellbeing of a relative or close friend, compulsory attendance at court, national or international representative commitments, significant cultural commitments, or activities in which the student is representing the University.

*Note:* Not being organised or failing to plan ahead are **not** exceptional circumstances.

## **Use of Turnitin**

Student work provided for assessment in this course may be checked for academic integrity by the electronic search engine <a href="http://www.turnitin.com">http://www.turnitin.com</a>. Turnitin is an on-line plagiarism prevention tool which compares submitted work with a very large database of existing material. At the discretion of the Head of School, handwritten work may be copy-typed by the School and submitted to Turnitin. A copy of submitted materials will be retained on behalf of the University for detection of future plagiarism, but access to the full text of submissions will not be made available to any other party.

## **Examinations**

Students who enrol in courses with examinations are obliged to attend an examination at the University at any time during the formal examination period. The final examination for this course will be scheduled at some time during the following period:

Friday 13 June – Wednesday 2 July (inclusive)

## **Mandatory Course Requirements**

In addition to obtaining an overall course mark of 50% or better, students must:

• obtain a minimum of 40% on each individual piece of assessment in order to pass this course

If you cannot complete an assignment or sit a test or examination, refer to www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat

## **Class Representative**

A class representative will be elected in the first class, and that person's name and contact details made available to VUWSA, the course coordinator and the class. The class representative provides a communication channel to liaise with the course coordinator on behalf of students.

## **Communication of Additional Information**

Additional information concerning this course will be provided in lectures and posted on Blackboard: http://blackboard.vuw.ac.nz. Urgent notices will be circulated by email.

## Student feedback

Any feedback is considered and followed up on.

Student feedback on University courses may be found at www.cad.vuw.ac.nz/feedback/feedback\_display.php

## Link to general information

For general information about course-related matters, go to http://www.victoria.ac.nz/vbs/studenthelp/general-course-information

## **Note to Students**

Your assessed work may also be used for quality assurance purposes, such as to assess the level of achievement of learning objectives as required for accreditation and academic audit. The findings may be used to inform changes aimed at improving the quality of VBS programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

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## **Course Schedule**

Week	Date	Торіс	Readings	
1	4 Mar	Univariate Descriptive Statistics.	Chapters 2, 3.	
2	11 Mar	Bivariate Descriptive Statistics.	Chapter 4.	
3	18 Mar	Time Series Descriptive Statistics.	Chapter 5.	
4	25 Mar	Probability Foundations Of Sampling.	Chapter 6.	
5	1 Apr	The Binomial Distribution And Sampling Distributions.	Chapter 7.	
6	8 Apr	The Normal Distribution, The Central Limit Theorem And Sampling Distributions.	Chapter 8.	
6	10 Apr	Assignment 1 due by 5pm on Thursday 10 April		
7	15 Apr	Test 1 (in class)		
7	15 Apr	Sampling Distributions And Inference: Generalities.	Chapter 9.	
MID-TRIMESTER BREAK (Friday 18 April – Sunday 4 May)				
8	6 May	Inference For One Population.	Chapter 9.	
9	13 May	Inference For Two Populations.	Chapter 10.	
10	20 May	Inference For Many Populations.	Chapters 11.	
11	27 May	Inference For Categorical Data.	Chapter 12.	
11	29 May	Assignment 2 due by 5pm on Thursday 29 May		
12	3 Jun	Test 2 (in class)		
12	3 Jun	Inference For Linear Regression Models.	Chapter 13.	