## Lecturer and Course Coordinator

Cushla Thomson, RH303, phone 463-6855, email: cushla.thomson@vuw.ac.nz, (wks 1-6). Office hours: Weds and Thurs 3pm-4pm in EA128. Other times by appointment.

John Randal, RH308, phone 463-5558, email: john.randal@vuw.ac.nz, (wks 7-12).
Office hours: by appointment.

## Administrator

Francine McGee, RH319, phone 463-5818, email: francine.mcgee@vuw.ac.nz

## Duty Tutor

Kate Hill will be in EA005 on Weds and Thurs from 1.00-2.00 to help with any QUAN 102 questions (except assignments).

## Lecture times

Wednesday and Thursday 12.00-12.50, MCLT103, CRN1482
Wednesday and Thursday 2.10-3.00, MCLT103, CRN 4501

## Tutorial times

To view and sign up to tutorials go to https://signups.vuw.ac.nz/. You should attend one tutorial per week. Tutorial sign up closes on Friday 6 March at 5.00 pm .

## Course website

http://www.blackboard.vuw.ac.nz/

## Readings

The text is: Clark and Randal (2004), A First Course in Applied Statistics, Pearson, ISBN 1877258903 (VUW Library call number QA276 C594 F), available from the Victoria Book Centre for $\$ 56.99$. Second-hand copies may be available.

## Materials and equipment

You must have a calculator. Casio $\mathrm{fx}-82$ is recommended - it is cheap, and capable.

## Assignments

There will be five short assignments, due fortnightly as indicated on the next page. These are marked out of 2 , with $0=$ unacceptable quality, and $2=$ perfect. Everything else $=1$.

- DO head your assignments with
$\star$ your NAME,
$\star$ your TUTOR'S NAME, and
$\star$ the TIME of your tutorial.
- DO staple all sheets together.
- DO NOT fold your assignments or seal them shut.
- DO NOT put your work in a plastic sleeve.
- Submit into your tutor's assignment boxes by MY221.

A mark of less than $5 / 10$ would indicate that you may struggle to pass the test and/or final exam.

## Mandatory course requirements

- receive at least 3 out of 10 for the five assignments
- sit the two tests (details below)


## Assessment requirements

The assignments are worth $10 \%$ of your final grade, determined as follows:

| Assignment mark/10 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :---: |
| Grade contribution \% | 5 | 6 | 7 | 8 |
| Assignment mark/10 | 7 | 8 | 9 | 10 |
| Grade contribution \% | 8 | 9 | 9 | 10 |

Two 60 minute multichoice tests will be held on: Tues 31 March, 6.30pm (L1-6) and Wed 13 May, 6.30pm (L7-14). These are worth $20 \%$ each of your final grade.

The final exam will be two hours. Date and time tba. This will be worth $50 \%$ of your final grade.

## Course content

Chapter references are to Clark \& Randal. Prepare for each lecture by scanning the indicated text book sections - do not try to read it in detail until after the lecture.

| Date | Lecture | Topic | Section | Tutorial |
| :---: | :---: | :---: | :---: | :---: |
| 4 Mar | 1 | Variables; processing data | 2 |  |
| 5 Mar | 2 | Summary statistics | 3.1,3.2 |  |
| 11 Mar | 3 | Standard deviation; boxplots | 3.2.3, 3.4 | L1-2 |
| 12 Mar | 4 | Scatterplots; correlation | 4.1-4.2 |  |
| 18 Mar | 5 | Regression (estimation and assumptions) | 4.3 | L3-4 |
| 19 Mar | 6 | Regression (prediction) | 4.3 |  |
| 23 Mar |  | Assignment 1 due, 5.00pm |  | L5-6 |
| 25 Mar | 7 | Introduction to probability | 5.1-5.2 |  |
| 26 Mar | 8 | Probability trees | 5.3 |  |
| 31 Mar |  | Test, 60 minutes, 6.30pm (Lectures 1-6) |  | L7-8 |
| 1 Apr | 9 | Bayes' rule | 5.4 |  |
| 2 Apr | 10 | Distributions; binomial experiments | 6 |  |
| 6 Apr |  | Assignment 2 due, 5.00 pm |  | L9-10 |
| 8 Apr | 11 | Binomial distribution | 6 |  |
| 9 Apr | 12 | Normal distribution | 7.1 |  |
| Mid -trimester break, 2 weeks |  |  |  |  |
| 29 Apr | 13 | Central limit theorem | 7.2 | L11-12 |
| 30 Apr | 14 | Sampling distribution | 7.3 |  |
| 4 May |  | Assignment 3 due, 5.00pm |  | L13-14 |
| 6 May | 15 | Introduction to inference; intervals for a single mean | 8.1 |  |
| 7 May | 16 | Testing for a single mean | 8.1 |  |
| 13 May | 17 | Small sample testing for a single mean | 8.2 | L15-16 |
| 13 May |  | Test, 60 minutes, 6.30pm (Lectures 7-14) |  |  |
| 14 May | 18 | Inference for a proportion | 8.4 |  |
| 18 May |  | Assignment 4 due, 5.00pm |  | L17-18 |
| 20 May | 19 | Margin of error | 8.5-8.6 |  |
| 21 May | 20 | Comparing two means | 9.1-9.2 |  |
| 27 May | 21 | Paired comparisons | 9.5 | L19-20 |
| 28 May | 22 | Comparing proportions | 9.6 |  |
| 2 June |  | Assignment 5 due, 5.00pm |  | L21-22 |
| 3 June | 23 | Contingency table testing | 11.2 |  |
| 4 June | 24 | Contingency table testing | 11.2 |  |
| TBA |  | Examination |  |  |

${ }^{* * *}$ This document is a quick reference only. The course outline can be found on Blackboard.

