THE UNIVERSITY OF MELBOURNE

Statistical Consulting Centre

Statistics for Research Workers
16-23 July 2008
Enrolment form for fee-paying participants

YOUR DETAILS:

Title: _____ First Name: _____ Surname: _____

Employer: _____

Department: _____

Address: _____ Postcode: _____

Telephone: _____ Fax: _____Email: _____

Places in the course will be allocated on a first-come-first-served basis, with preference given to those who have previously expressed interest.

Please see the course outline for further information, including course times, content and pre-requisites.

_____ _____
Signature Date

COURSE FEES:

Total Owing (GST incl) Full: $1100 ☐

University of Melbourne PG Student: $880 ☐ Student ID: _____

Method of Payment:

☐ Please send an internal charge-out for **$1000/$800** (GST excl) to ____ (Dept Number).

☐ Cheque for **$1100/$880** (GST incl), payable to Statistical Consulting Centre, enclosed.

☐ Please send/fax me a tax invoice for **$1100/$880** (GST incl).
Name and address for tax invoice, if different from above:
.....
.....

☐ Credit card payment:

☐ VISA ☐ MASTERCARD

Card number: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Expiry date: _ _ / _ _ Amount: **$1100/$880** (GST incl)

Cardholder name: _____

Signature: _____

Payment is required to confirm enrolment.

Statistical Consulting Centre
Richard Berry Building
The University of Melbourne Victoria 3010 Australia
Telephone: +61 3 8344 6995 Fax: +61 3 8344 7499
WWW:http://www.scc.ms.unimelb.edu.au

Statistics for Research Workers

A course of the Statistical Consulting Centre, University of Melbourne

This course is an introduction to statistical methods. The course will cover:

- Descriptive statistics; graphs, tables, summary statistics. Introduction to SPSS.
- Introduction to estimation and confidence intervals.
- The normal distribution; means and variances of sums of random variables; the Central Limit Theorem; the normal approximation to the binomial distribution.
- Confidence intervals for means and proportions.
- Introduction to hypothesis testing.
- Tests for differences in location between two populations with matched samples: sign test, Wilcoxon signed-rank test, *t*-test. The relationship between confidence intervals and hypothesis testing.
- Tests for differences in location between two populations with independent samples: *t*-test.
- Testing for difference in location of more than two populations. Analysis of variance (F-test), multiple comparisons.
- Two-way classifications: analysis of variance (F-test), interaction.
- Determination of sample size.
- Design of experiments: randomization, blocking, replication, confounding. Standard designs.
- Correlation and straight line regression.
- Multiple regression.
- Analysis of categorical data; contingency tables.

Course structure: Dates: Wednesday 16 July to Wednesday 23 July 2008. The six days are deliberately arranged so that there is a weekend break during the course. Each day will consist of four approximately equal-length sessions; the first session of the day will commence at 9:15 a.m. and the final session will end at approximately 4:45 p.m. The sessions will mix lecture presentations with practical work using software; tutorial help will be liberally available.

A full set of notes will be provided. Morning and afternoon teas are included; lunches are not included. A certificate on completion can be provided on request.

Venue: The course will be held in the Wilson Computer Laboratory in the Department of Mathematics and Statistics, Richard Berry Building; more details will be supplied in your acceptance letter. Parking within the University grounds will *not* be available.

Prerequisites: There are no formal prerequisites though it is expected that most participants will have studied mathematics at VCE level, or equivalent. **Participants need to be comfortable with a limited amount of mathematical notation.** The onus is on participants to check that the course suits their needs. Please do this carefully.

Course presenters: Associate Professor Ian Gordon, the Director of the Statistical Consulting Centre and Dr Sue Finch, who have given many similar courses previously.