

Statistics Course: How to Analyse My Data – 2019

Course information and registration form

A 3 day statistics course will be held for University of Newcastle RHD students and staff. The course is designed to help researchers quickly learn the principles and methods needed to analyse their data, without having to learn statistical theory. The teaching focuses on concepts and how to interpret analysis results. The course is most suitable for those with little statistical experience or those who would like to refresh their statistical skills.

Target audience: The course is primarily intended for RHD Students but staff are welcome.

Cost for 3 day course: RHD students or staff: **\$400 (plus 10% GST)**

If you are paying from a university account the GST will not be taken from your account so the costs will be as above.

Time: **Wed-Fri 3rd - 5th - July 2019, 9:00 to 5:00**, (lunch break 12:30 - 1:30 - lunch is not provided)

Where: **Computer lab in CT building: room CT314**

The course will show students how to use graphical and tabular displays to visually answer research questions and perform the correct statistical tests to support the visual analysis. Multiple variable modelling, the way to examine the simultaneous effect of several variables, will be addressed, but not in depth. The principles of data analysis and relationships between variables will be taught with single variable explanatory relationships to make the learning process simpler.

The course will teach students how to

- convert broad research questions into specific questions,
- identify the roles of variables
- choose appropriate visual displays to examine research questions and present the data,
- use these displays to answer research questions visually,
- choose the right statistical tests to demonstrate the effects seen visually are significant (or not),
- interpret the statistical results,
- write up the statistical aspects of their results
- use statistical software (SPSS) to create the displays and perform statistical tests and
- checking for interactions between variables with multiple variable modelling.

The statistical methods that will be taught are

- contingency tables and chi squared statistic for independent and dependent data
- t tests for independent and dependent data
- one way Analysis of Variance for independent data
- correlation for independent and dependent data
- simple and multiple linear regression
- logistic regression
- the general linear model with continuous and categorical variables

Students attending the first 2 of the refresher seminars that precede the course will benefit as they will have been exposed to some of the concepts that will be taught in the course. Video recordings of these will be available if you don't have a chance to attend the seminars.

Send an email to statsupport@newcastle.edu.au to request a link to the seminars.

Instructors: Nic Croce and Fran Baker – both from the Statistical Support Service.

After you have registered for the course and no later than 9am Friday 28th June, you will be emailed a link to Dropbox for you to access the Course Manual. Each student will need to print their own copy or have downloaded an electronic copy prior to the course to bring with them. It will be very helpful for carrying out the course exercises and making notes in the spaces provided within the text. Lecture notes, data sets for analysis during the course and any supplementary material will also be available from the instructors during the course.

If you have any questions about the course please email statsupport@newcastle.edu.au

Registration details are on the next page.

Course Registration

Statistics Course: How to Analyse My Data

3rd to 5th July 2019

Closing Date: 5pm Thu 27th June 2019

Please complete a separate form for each participant

Email information below to statsupport@newcastle.edu.au

Participant Information (ALL sections MUST be completed):

Course participant details	
Title:	
Given Names:	
Last Name:	
Phone:	
Email address:	
Student Number (or Uni ID, eg abc123, for Staff)	
Course if student: eg Masters, Doctorate, PhD	
Faculty (or equivalent)	
School	
Payment for course attendance	
Please complete the section below for the payment method you will using.	
<ul style="list-style-type: none">• Electronic Funds Transfer (EFT) - <u>if paying personally</u>. A form will be emailed to person named below with account details for transfer of \$400 + GST =\$440• Internal transfer (between university cost collectors)	
Payment by EFT	
Name of payer :	
Email address:	
Phone:	
Payment by Internal Transfer	
Name of approver:	
Phone of approver:	
Email of approver:	
Cost Collector Number:	

Regarding payment

Once we know we have sufficient participants to run the course we will contact the person whose details are provided in the second part of the form to provide them with details on how to make a payment on behalf of the course participant.

For more information: statsupport@newcastle.edu.au