Module Title **Research: Statistics And Data Analysis** **Keywords** Data Analysis, Descriptive Statistics, Inferential Statistics	Reference SS2013 SCQF Level SCQF 8 SCQF Points 15 ECTS Points 7.5 Created May 2002 Approved June 2002 Amended August 2004 Version No. 2

This Version is No Longer Current

The latest version of this module is available here

Prerequisites for Module

None.

Corequisite Modules

None.

Precluded Modules

None.

Aims of Module

To introduce the student to descriptive and inferential statistics used in social science research.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

Mode of Delivery

Lecture/Seminar format. Seminars will be used to provide the opportunity to use statistical techniques by hand and by using computer facilities.

Assessment Plan

	Learning Outcomes Assessed
Component 1	1,2,3
Component 2	1,2,3

Component 1 will be assessed by Exam

Component 2 will be assessed by Coursework

Indicative Bibliography

1. Explain and appreciate the role of statistics and data in research.
2. Discuss and use key statistical and data analysis techniques.
3. Select and apply appropriate statistical and data analysis techniques.

Indicative Module Content

The role of statistics and data in hypothesis testing: descriptive/inferential approach. Types of data: quantitative and qualitative. Data visualisation: descriptive statistics (measures of central tendency and dispersion and how to present them). Populations and samples, frequency distributions. Types of statistical tests; parametric/non parametric; design factors and choice of test. Correlation, regression and introduction to ANOVA and multivariate analysis. Computer packages and their use. Introduction to qualitative analysis.

Indicative Student Workload

Contact Hours	Full Time
Lectures	12
Seminars	24

Directed Study	
Directed Study	54

Private Study	
Private Study	60

1. DANCEY, C., 2020. *Statistics without maths for psychology.* 8th ed. USA: Pearson.
2. GRIMM, L. G., 1993. *Statistical Applications for the Behavioural Sciences*. 4th ed. USA: John Wiley and Sons.
3. HOWELL, D. C., 2012. *Statistical Me Statistical Methods for Psychology.* 8th ed. Belmont, C.A: Duxbury Press
4. KINNEAR, P. and GRAY, C. D., *SPSS (Versions 19-25 are applicable) Made Simple*. East Sussex: Psychology Press.
5. PALLANT, J., 2016. *SPSS Survival Manual.* 6th ed. Maidenhead, England: McGraw-Hill Education.