GRSC6024 Intermediate Quantitative Research Methods (The Humanities & Related Disciplines)

Content:

The course will cover the following topics:

- Identifying relationship between data variables - graphical tools such as scatterplots; measuring association of data variables using correlation coefficients;

- Simple linear regression - concept of a regression model; estimating a simple linear regression model; inference and prediction on a simple linear regression model and their interpretation;

- Multiple regression - inference and prediction on a regression model and their interpretation; model and variable selection; regression model with qualitative variables; regression diagnosis;

- Experimental designs and analysis of variance - a brief discussion on experimental designs; simple techniques, such as randomization and blocking, for experimental designs; analysis of variance model; concept of general linear model; multiple comparisons; contrasts;

- Logistic regression.

This course is designed for students who are conducting research in non lab-based disciplines, including the Arts and Humanities. Students from lab-based disciplines are recommended to take the parallel course designed for them.

Organization:

Each offering of the module comprises a total of twelve hours over four weekly sessions. In the academic year 2013-14, this course will not be offered.

Enrollment:

This module is designed for students who are familiar with basic statistical concepts or have obtained a PASS in Basic Quantitative Research Methods (GRSC6022 or GRSC6023). There is no formal limit to the number of students who can enroll in this module.

Assessment:

Pass/Fail: Continuous assessment

Outcome:

At the end of the course, students should understand intermediate level quantitative research and be able to critically review the statistical analysis in most research papers.