

## MODULE DESCRIPTOR

<b>MODULE TITLE</b>	Advanced Methods in Psychology		
<b>MODULE CODE</b>	PS4700 (L7)	<b>CREDIT VALUE</b>	40 / 20 ECTS
<b>SCHOOL</b>	SCHOOL OF SCIENCE		

### MODULE AIMS

The aims of this module are:

To enable students to develop their knowledge and skills in research methods and statistics to a professional level by providing students with:

1. An up-to-date knowledge of a broad range of methodological and advanced statistical techniques.
2. The ability to carry out analyses using SPSS for Windows to interpret and report the findings appropriately.
3. A more critical approach to the psychological research literature and to research design and analysis.

### MODULE CONTENT

The module will cover a variety of methodologies, univariate and multivariate statistical techniques, as well as important theoretical and methodological issues. Initial sessions will review techniques typically covered at undergraduate level (for instance, two sample designs, correlational designs and factorial designs), however, a more critical approach will be adopted from the outset. For example, greater emphasis will be placed upon such issues as reliability, validity, effect sizes, statistical power and significance. Theoretical and methodological issues introduced on the course will be set in context by way of examples drawn from the current literature. More advanced techniques, reflecting recent developments in research design and statistics will be introduced later in the course (for instance, qualitative methods, multiple regression and structural equation modelling). Appropriate computer software will be introduced where appropriate and extensive use will be made of statistical software, particularly SPSS for Windows.

### INTENDED LEARNING OUTCOMES

On successful completion of this module a student will be able to:

1. Provide a methodological and statistical critique of psychological research articles, which demonstrates an understanding of important contemporary theoretical and methodological issues.
2. Enter and manipulate data, perform a range of statistical analyses and graphically illustrate statistical output using SPSS for Windows.
3. Explain the rationale for, and appropriateness of, the univariate and multivariate analytical techniques introduced in the module and select appropriate analyses for different areas of application.
4. Interpret the output of SPSS analyses introduced in the module and report the results appropriately.
5. Demonstrate a technical and critical knowledge of methodologies introduced in the module (assessed via coursework) such as: qualitative, multiple regression and structural equation modelling.

### TEACHING METHODS

Module delivery will be by means of weekly lectures, demonstrations, group discussion, and 'hands-on' computer statistics workshops and by written assignments. On occasions, students will be required to read an academic research article prior to the lecture.

### ASSESSMENT METHODS

This module is assessed through a Research Design & Statistics Portfolio (40%), a data screening (20%) and an interview (40%).

