#### Liverpool John Moores University

Title:	EXPERIMENTAL PSYCHOLOGY	
Status:	Definitive	
Code:	6002HUMPSY (113767)	
Version Start Date:	01-08-2012	
Owning School/Faculty: Teaching School/Faculty:	Natural Sciences & Psychology Natural Sciences & Psychology	

Team	Leader
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Academic Level:	FHEQ6	Credit Value:	24.00	Total Delivered Hours:	48.00
Total Learning Hours:	240	Private Study:	192		

#### **Delivery Options**

Course typically offered: Summer

Component	Contact Hours
Practical	48.000

## Grading Basis: 40 %

#### **Assessment Details**

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	rpt 1	practical report 1	33.0	
Report	rpt 2	practical report 2	33.0	
Report	rpt 3	practical report 3	34.0	

#### Aims

1. To introduce students to the use of a range of advanced experimental laboratorybased techniques in psychological studies.

2. To develop a practical understanding of experimental research methods in psychology.

3. To enable students to gain experience of using advanced computer statistical

packages for the analysis of experimental data.

4. To enable students to obtain practical experience of designing and conducting studies, both individually and in groups.

5. To convey an understanding of complex issues surrounding the validity of investigative work in Psychology.

## Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate an appreciation of experimentation in psychology using techniques such as the Stroop effect or the estimation of time.
- 2 Use Biopac software to collect, analyse and report data relating to physiological measures of daytime sleepiness.
- 3 Demonstrate an understanding of the independence of attentional networks.

#### Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

practical report 1	1
practical report 2	2
practical report 3	3

# **Outline Syllabus**

The module will teach the principles of experimental design, from the formulation of a research question to presenting your research findings. This encompasses creating the question itself, identifying appropriate experimental methods and apparatus to address that question, extracting the data collected and then choosing the correct methods with which to analyse that data, interpreting the output of these statistical tests, and finally reporting and discussing your findings. You will be given the opportunity to familiarise yourself with a wide range of experimental apparatus provided by the psychology department, such as the E-prime software package and the Biopac psychophysiological monitoring equipment.

The course runs over four weeks, and in each week a different tutor will demonstrate their own field of expertise, and assess your ability to achieve the learning outcomes as set out on the following pages. At the beginning of each week, your tutor will introduce the research activities that will be covered over the five days. You are required to submit a report of the research covered in three of the four weeks. You may choose which three experiments to report. The marks of these three pieces will be combined to give you an overall module mark.

#### **Learning Activities**

Laboratory based practicals will provide students with 'hand-on' opportunities to

design experimental investigations of a range of psychological processes (e.g. cognitive processes, psychophysiological processes). They will learn how to use the components of the experiment generating software 'E-prime' and instrumentation (e.g. Biopac) for the measurement of a range of neuropsychological and psychophysiological processes.

#### References

Course Material	Book
Author	Solso, A
Publishing Year	2002
Title	Experimental Psychology: A Case Approach
Subtitle	
Edition	
Publisher	Allyn and Bacon
ISBN	0205319769

Course Material	Book
Author	Field, A. & Hole, G.
Publishing Year	2003
Title	How to Design and Report Experiments.
Subtitle	
Edition	
Publisher	Sage
ISBN	0761973834

#### Notes

On this module you will learn how to design, conduct and report research in psychology using experimentally based advanced quantitative methods. You will also me required to select appropriate statistical procedures for the analysis of experimental data using computer based statistical package (SPSS). You will work independently in conducting psychological investigations and be expected to demonstrate informed criticism of reported investigations found through electronic database searches.