

## Liverpool John Moores University

Title: RESEARCH METHODS IN PHARMACY AND  
PHARMACEUTICAL SCIENCE  
Status: Definitive  
Code: **6000PDPHAR** (113113)  
Version Start Date: 01-08-2014

Owning School/Faculty: Pharmacy & Biomolecular Sciences  
Teaching School/Faculty: Pharmacy & Biomolecular Sciences

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**Academic Level:** FHEQ6      **Credit Value:** 12.00      **Total Delivered Hours:** 29.00

**Total Learning Hours:** 120      **Private Study:** 91

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	14.000
Workshop	14.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	Lit Rev	Research Methods Assignment 2 Literature review	20.0	

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	EResAss	Research Methods Assignment 1 E resources & assessment	30.0	
Exam	Exam	Examination	50.0	1.00

## Aims

*To enable students to (i) understand how pharmacy and pharmaceutical science research is carried out, (ii) appraise research critically and (iii) be able to plan the execution and analysis of research.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Describe and understand the strengths and weaknesses of different types of research
- 2 Locate and critically evaluate appropriate scientific literature
- 3 Design a protocol for a research project
- 4 Design a clear and interpretable questionnaire
- 5 Design a statistical analysis plan
- 6 Make judgements concerning research ethics and understand the processes of research governance and ethical approval
- 7 Communicate research material verbally and in writing

## Learning Outcomes of Assessments

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

Literature review	2	3	4
E resources use & Assessment	7		
Examination	1	5	6

## Outline Syllabus

*Philosophical basis of scientific discovery. Planned experiments, surveys, qualitative research, clinical trials and epidemiology. Literature searching and evaluation. Protocol design, including time management. Questionnaire design. Statistical analysis plans and statistical packages. Research ethics and governance. Writing scientific papers, creating posters and oral communication of research outcomes.*

## Learning Activities

Lectures, tutorials, seminars and workshops. Practical development of literature

searching and review skills. Development of a plan for a research project including time management.

## References

<b>Course Material</b>	Book
<b>Author</b>	Bassett, C
<b>Publishing Year</b>	2004
<b>Title</b>	Qualitative research in health care
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Wiley-Blackwell
<b>ISBN</b>	1861564406

<b>Course Material</b>	Book
<b>Author</b>	Coggan, D; Rose, G & Barker, D
<b>Publishing Year</b>	2003
<b>Title</b>	Epidemiology for the uninitiated
<b>Subtitle</b>	
<b>Edition</b>	5th
<b>Publisher</b>	Wiley-Blackwell
<b>ISBN</b>	0727916041

<b>Course Material</b>	Book
<b>Author</b>	Daly, J; McDonald, I; & Willis, E
<b>Publishing Year</b>	1992
<b>Title</b>	Researching health care
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Routledge
<b>ISBN</b>	0415070783

<b>Course Material</b>	Book
<b>Author</b>	Greenhalgh, T
<b>Publishing Year</b>	2006
<b>Title</b>	How to read a paper
<b>Subtitle</b>	
<b>Edition</b>	3rd
<b>Publisher</b>	Wiley Blackwell
<b>ISBN</b>	1405139765

<b>Course Material</b>	Book
<b>Author</b>	McNeill, P
<b>Publishing Year</b>	2005
<b>Title</b>	Research Methods
<b>Subtitle</b>	
<b>Edition</b>	3rd

<b>Publisher</b>	Routledge
<b>ISBN</b>	0415340764

<b>Course Material</b>	Book
<b>Author</b>	Oppenheim, A
<b>Publishing Year</b>	1992
<b>Title</b>	Questionnaire Design, Interviewing and Attitude Measurement
<b>Subtitle</b>	
<b>Edition</b>	2nd
<b>Publisher</b>	Pinter
<b>ISBN</b>	1855670445

<b>Course Material</b>	Book
<b>Author</b>	Peat, J
<b>Publishing Year</b>	2001
<b>Title</b>	Healthcare Science Research: A Handbook of Quantitative Methods
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Sage
<b>ISBN</b>	0761974032

<b>Course Material</b>	Book
<b>Author</b>	Research Councils UK
<b>Publishing Year</b>	2009
<b>Title</b>	RCUK Policy and Code of Conduct on the Governance of Good Research Conduct'
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	
<b>ISBN</b>	www.rcuk.ac.uk

<b>Course Material</b>	Book
<b>Author</b>	Rowe P
<b>Publishing Year</b>	2007
<b>Title</b>	Essential Statistics for the Pharmaceutical Sciences
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Wiley
<b>ISBN</b>	0470034688

<b>Course Material</b>	Book
<b>Author</b>	Schwartz L, Preece P & Hendry R
<b>Publishing Year</b>	2002
<b>Title</b>	Medical Ethics: A Case-Based Approach
<b>Subtitle</b>	

<b>Edition</b>	
<b>Publisher</b>	Saunders
<b>ISBN</b>	0702025437

<b>Course Material</b>	Book
<b>Author</b>	Smith, F
<b>Publishing Year</b>	2006
<b>Title</b>	Conducting Your Pharmacy Practice Research Project
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Pharmaceutical Press
<b>ISBN</b>	0853696063

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### Notes

The module is generic and prepares students for any type of research project in level M.