

Liverpool John Moores University

Title: RESEARCH METHODS
Status: Definitive
Code: **7101COMP** (121320)
Version Start Date: 01-08-2021

Owning School/Faculty: Computer Science and Mathematics
Teaching School/Faculty: Computer Science and Mathematics

Team	Leader
Rubem Pereira	Y

Academic Level: FHEQ7
Credit Value: 20
Total Delivered Hours: 33
Total Learning Hours: 200
Private Study: 167

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	11
Practical	11
Tutorial	11

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	A critical review of a range of academic sources on a subject of choice.	40	
Report	AS2	Writing of a research proposal for the student's dissertation.	60	

Aims

To develop knowledge of effective and academic research design at masters level and provide guidance on the purpose and design of literature reviews; the use of theory; writing strategies; citation and ethical considerations.

To provide an understanding of how the range of qualitative, quantitative and mixed

*method data approaches can be most appropriately applied
To provide help on establishing the most effectual research design and method for
the dissertation project and write a successful research proposal.*

Learning Outcomes

After completing the module the student should be able to:

- 1 Search, critically analyse and summarise published research in the disciplines of Computing and Information Systems, and identify relevant Legal, Social, Ethical and Professional Issues associated with published research.
- 2 Demonstrate how critical analysis of advanced scholarship and published research can be used to develop a project proposal that contributes to academic or professional knowledge and understanding, and identify relevant Legal, Social, Ethical and Professional Issues related to the proposed project.
- 3 Critically evaluate the range of qualitative and quantitative data and information collection strategies that can be used and make informed decisions about which are relevant for different purposes.

Learning Outcomes of Assessments

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

Critical review	1	
Research proposal	2	3

Outline Syllabus

*Research principles and design;
Identifying research issues and developing research questions;
Identifying Legal, Social, Ethical and Professional Issues related to computing and computing research;
Relevant aspects of Entrepreneurship;
Critiquing research and Research ethics;
Literature searching, reviewing and citation;
Research planning: writing project proposals, time management, costing;
Qualitative methods and data analysis;
Quantitative methods and data analysis;
Performance Analysis and Simulation;
Sampling and Presentation of data;
Dissertation and report writing.*

Learning Activities

Formal lectures will introduce core topics. Tutorials and in-class practical, Lab based activities will provide exercises to develop skills

Notes

This module provides generic and specific research methods skills, which will help equip the student for the project module and also for possible future research career.