

## Liverpool John Moores University

Title: DATA ANALYSIS AND INFORMATICS  
Status: Definitive  
Code: **5538NCCG** (129501)  
Version Start Date: 01-08-2021

Owning School/Faculty: Nursing and Allied Health  
Teaching School/Faculty: Accrington Campus

Team	Leader
James Evans	Y

**Academic Level:** FHEQ5  
**Credit Value:** 20  
**Total Delivered Hours:** 48  
**Total Learning Hours:** 200  
**Private Study:** 152

### Delivery Options

Course typically offered: S1, S2 and NS2 (S2 for Jan)

Component	Contact Hours
Lecture	48

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Case Study	Case Study Analysis	50	
Report	Assignment	Assignment	50	

### Aims

*This module aims to enable students to use, and evaluate the use of, information within a health and/or social care context. The module will enable students to show an understanding of concepts, methods and knowledge related to health informatics, to integrate and apply their understanding to the practice and problems of using health information and associated methods and technologies, to analyse problems and opportunities, and to collect, use, analyse and present information, evaluate and use appropriate research methodologies.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate knowledge of the role of information, information management and technology within health and social care
- 2 Apply quantitative and qualitative research methods to healthcare scenarios
- 3 Apply advanced IT skills including data modelling
- 4 Develop an information strategy.

## Learning Outcomes of Assessments

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

Case Study Analysis	1	2
Assignment	3	4

## Outline Syllabus

### *Context*

*o Care records: clinical coding, manual and electronic care records*

*o Barriers to 'joined-up' care*

### *Information and analysis*

*o Introduction to statistical methods*

*o Use of IT tools in data analysis*

*o Qualitative and quantitative research methods*

### *IT Systems*

*o Information systems development methodologies*

*o Data security and encryption*

*o Human computer interaction*

*o Change management for IT systems*

### *Using information in healthcare*

*o Digital skills*

*o Information-based decision making*

*o Resource allocation and planning*

*o Identification and mitigation of risks*

*o Knowledge management in healthcare*

### *Using information for enhancement*

*o informed governance*

*o Empowering clients*

*o Using knowledge to deliver sustainable service improvement*

### *Contemporary issues, for example*

*o Lessons learned from the Covid-19 pandemic about informatics and the delivery of healthcare*

*o Understanding and applying Health Statistics*

## Learning Activities

These will not normally be traditional didactic lectures in which the student plays little active part, but will be delivered in small groups of up to 20 students in which their interaction with their tutor is a key ingredient of their learning experience. Students will receive approximately 30 hours of taught material, supported by in-class exercises and discussions designed to help student assimilate learning and to provide early informal feedback on their progress.

#### Independent Study

Students are expected to undertake personal reading and research into topic areas that have been stimulated from the lectures and seminars. This reading will enhance their academic work and enable valid contribution to lectures and seminars.

#### VLE support

This will provide links to academic web-sites and on-line journals, facilitate group discussion outside of the classroom, access to outline lecture notes, and provide students with assessment details.

#### **Notes**

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