Module Specification

Research Methodology and Statistics

Version: 2025-26, v2.0, Approved

Contents

Part 1: Information

Module title: Research Methodology and Statistics

Module code: USSJQB-15-M

Level: Level 7

For implementation from: 2025-26

UWE credit rating: 15

ECTS credit rating: 7.5

College: College of Health, Science & Society

School: CHSS School of Applied Sciences

Partner institutions: NHS Blood and Transplant

Field: Applied Sciences

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: Yes

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: This module will introduce students to the research design process and selection and implementation of appropriate statistical analysis, required for an MSc project. The module will include the essential components of project design and management, including formulation of research hypothesis, assessment of existing literature, experimental design and analysis and dissemination of results. The module will develop skills in scientific writing and statistical analysis.

Features: This module is available as CPD.

Educational aims: The aim of this module will be to introduce students to the scientific research process using examples from the transfusion and transplantation sector to prepare students to undertake their own MSc project.

Outline syllabus: The indicative syllabus of the module is as follows:

Statistics, including for example the general principles of selecting appropriate data analysis method, and presentation of appropriate data.

Literature searching and evidence hierarchy (including online search engines)

Scientific writing, including for example;
Review and critical appraisal of scientific literature and evidence-based practice
Report writing
Writing for publication
Grant applications

Research design, hypothesis and data management

Project management

Research governance, for example including;
Ethics (including clinical research)
Intellectual property (IP)
Good manufacturing practice (GMP) and health and safety

Research communication and dissemination and the peer-review process

Reflective learning

Part 3: Teaching and learning methods

Teaching and learning methods: Lectures:
This module will incorporate an online lecture series introducing each of the topics; each section will provide the core knowledge that informs good research practice. Guided reading and interactive self-directed learning including quizzes and exercises will be provided in support of lectures and will direct the student to both preparative and supplementary information sources.

Tutorials:
Lectures will be followed by supporting tutorials or workshops to provide a collaborative space for interactive discussion. Tutorials will also help inform and prepare students for the assessment in this module and subsequently within the Research Project module.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Critically evaluate approaches for the analysis of published scientific research and demonstrate Masters level scientific writing skills.

MO2 Demonstrate an advanced knowledge of research design and methodology, and understand the role of project, time and self-management in the success of a research project.

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 114 hours

Face-to-face learning = 36 hours

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ussjqb-15-m.html

Part 4: Assessment

Assessment strategy: Assessment: Written Assignment (Maximum 2000 words) A project proposal. Students will be required to undertake independent research on an area of their choosing within a relevant clinical field and formulate a succinct research proposal. Formative feedback will be given on their proposal to support them in their subsequent Research Project module.

Assessment tasks:

Written Assignment (First Sit)
Description: A research proposal (2000 words)
Weighting: 100 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO2

Written Assignment (Resit)
Description: A research proposal (2000 words)
Weighting: 100 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO2

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Applied Transfusion and Transplantation Science [NHSBT] MSc 2025-26

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