



Module Specification

Quantitative Health Research

Version: 2023-24, v3.0, 14 Apr 2023

Contents

Module Specification	1
Part 1: Information	2
Part 2: Description	2
Part 3: Teaching and learning methods	3
Part 4: Assessment.....	5
Part 5: Contributes towards	6

Part 1: Information

Module title: Quantitative Health Research

Module code: UZVSML-15-M

Level: Level 7

For implementation from: 2023-24

UWE credit rating: 15

ECTS credit rating: 7.5

Faculty: Faculty of Health & Applied Sciences

Department: HAS School of Health and Social Wellbeing

Partner institutions: None

Field: Health, Community and Policy Studies

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 provides an introduction and critical examination of quantitative approaches to health research, with particular focus on epidemiology and population-based public health research. The module explores the key features of epidemiological investigation, examines key terminology, ideas and concepts concerning quantitative methodology, and teaches quantitative methods and skills for undertaking primary research and for interpreting published epidemiological

research. Epidemiology is the study of patterns of disease and ill-health in populations, and of the factors that influence these patterns. This includes not only the study of risk factors that predispose populations to ill-health or disability, but also evaluation of interventions designed to improve health. The module examines how epidemiological knowledge and skills are useful for a wide spectrum of professionals whose work impacts population health.

Features: Not applicable

Educational aims: To teach the principles of epidemiology and quantitative research methodologies.

To explore the value and utility of epidemiology and quantitative methodologies to public and population health research.

To understand and develop critical insight into the strengths and limitations of quantitative research

To learn how to use and interpret basic statistical methods, particularly inferential statistics.

To apply epidemiological principles and methods to quantitative health research designs.

Outline syllabus:

The syllabus typically covers the following:

Introduction to epidemiology and quantitative methodologies

Characteristics, strengths and weaknesses of epidemiological studies.

Quantitative research design and methods

Basic descriptive and inferential statistics

Controlling for bias and confounding in epidemiological studies

The concept of evidence-based policy and practice.

Searching for epidemiological and quantitative evidence in public health

Tools and techniques in critical appraisal

Quantitative evidence synthesis including systematic review

Sourcing and retrieving public health data ethically

Part 3: Teaching and learning methods

Teaching and learning methods: Scheduled learning includes for example lectures, seminars, group work and workshops. The teaching draws upon academic expertise from across the programme team and seeks to build knowledge and understanding through didactic and group-based active learning workshops. These interactive sessions are designed to support students in clarifying and reinforcing their knowledge and understanding, in interpreting and critiquing published evidence and for actively engaging in problem solving exercises. Independent learning includes guided essential reading, workshop preparation, online tests and assignment preparation and completion. All timetabled teaching is supplemented with online learning materials, including recorded lectures, instructional videos and podcasts, and technical resources and "walkthroughs" including SPSS and Qualtrics. Tutor support is also provided via an online discussion board.

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

MO1 Demonstrate critical awareness and understanding of the principles and methods utilised in epidemiology and quantitative health research.

MO2 Demonstrate critical insight into quality and rigour in epidemiology and quantitative research including ability to critically appraise public health evidence.

MO3 Demonstrate understanding, interpretative skills and the ability to undertake basic statistical analysis for public health research.

MO4 Demonstrate critical understanding of methods and approaches to be able to effectively design an epidemiological or quantitative research project.

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 114 hours

Face-to-face learning = 36 hours

Total = 150

Reading list: The reading list for this module can be accessed at [readinglists.uwe.ac.uk](https://rl.talis.com/3/uwe/lists/0CB45065-F866-6D68-17C2-0DC79B3FE9CE.html?lang=en-GB) via the following link <https://rl.talis.com/3/uwe/lists/0CB45065-F866-6D68-17C2-0DC79B3FE9CE.html?lang=en-GB>

Part 4: Assessment

Assessment strategy: A two hour in-class test including structured and short answer questions to assess the candidates knowledge and understanding of epidemiological concepts and quantitative techniques. This will include a structured critical appraisal of an abridged, unseen research paper, and interpretation of statistical results (Assesses all Learning Outcomes).

There will be several formative exercises during the taught sessions that will not be scored but will enhance students' confidence to achieve the intended learning outcomes. The formative assessments will include short multiple-choice quizzes, and structured critical appraisals.

The assessment details will be published in the module handbook at the start of the module.

The module is supported by a discussion board through which students can ask questions.

Assessment tasks:

In-class test (First Sit)

Description: Structured and short answer questions

Weighting: 100 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

In-class test (Resit)

Description: Structured and short answer questions

Weighting: 100 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Public Health [Frenchay] MSc 2023-24

Environmental Health [Frenchay] MSc 2023-24

Public Health [Frenchay] MSc 2022-23

Environmental Health [Frenchay] MSc 2022-23

Public Health {JEP}[Hainan] MSc 2022-23