

Module Details	
Module Title	Epidemiology, Biostatistics and Communicable Diseases
Module Code	NUR7069-C
Academic Year	2022/3
Credits	30
School	School of Nursing and Healthcare Leadership
FHEQ Level	FHEQ Level 7

Contact Hours	
Type	Hours
Independent Study	251
Laboratories	12
Lectures	32
Seminars	5

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 2

Module Aims
To enable the student to develop the theoretical knowledge base and practical skills required to interpret research evidence from quantitative study designs, with a focus on epidemiological research and communicable disease control. To undertake statistical analyses for relatively simple study designs.

Outline Syllabus
Epidemiology - definition and example of landmark studies.
Communicable disease control.
Impossibility of 'proof' and association and causation.
Characteristics of epidemiological study designs.
Bias, confounding, stratification and effect modification.
Descriptive and inferential statistics.
Effect size estimation - point estimates and confidence intervals.
Analysis methods for quantitative and categorical data.
Statistical significance v. clinical importance.
Principles of sample size estimation.

Learning Outcomes	
Outcome Number	Description
01	Critically research and analyse the fundamental principles of epidemiological study design, communicable disease control and statistical data analysis.
02	Critically appraise published epidemiological research.
03	Critically interpret statistical analyses reported in published research.
04	Undertake data management tasks and statistical data analysis on primary research data.

Learning, Teaching and Assessment Strategy

Using a blended learning approach research informed key lectures will deliver core content; providing students with opportunity to acquire knowledge on the principles of epidemiology, statistics and communicable disease control (LO: 1, 2, 3, 4).

Group discussions will enable students to apply this learning to their own role and engage in critical debate, self-reflection and critical evaluation of the key issues associated with designing epidemiological studies, controlling communicable diseases and interrogating public health data sets (LO: 1, 2, 3, 4).

On line blended learning and tutorials will be used to facilitate teacher/learner/peer dialogue and inter-professional discussion to further develop and challenge conceptual understanding through reflection and analysis of epidemiological research and statistical data (LO: 1, 2, 3, 4).

Directed study provides students with opportunity to undertake reading, participate in enquiry based on line learning, address individual learning needs and contextualise learning to the students own area of practice. They will further develop their own portfolio of learning which will enhance transferable skills and knowledge related to the enhancement of statistical analysis, designing epidemiological studies and controlling diseases outbreak (LO: 1, 2, 3, 4).

The VLE will be used to support on line blended learning and provide access to online resources, lecture notes and external links to websites of interest (LO: 1, 2, 3, 4).

Formative assessment and feedback will be provided at individual tutorials, meetings and through electronic communication to facilitate reflection and student self-assessment.

Closed book unseen examination.

Mode of Assessment

Type	Method	Description	Weighting
Summative	Examination - Closed Book	Exam Closed Book (2 Hrs)	100%
Formative	Examination - Closed Book	Closed Book Mock Exam.	N/A
Formative	Examination - Closed Book	Formative assessment and feedback will be provided at individual tutorials, meetings and through electronic communication to facilitate reflection and student self-assessment.	N/A

Reading List

To access the reading list for this module, please visit <https://bradford.rl.talis.com/index.html>

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.

