MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2023-24
Module Code	2001
Module Title	Basic Epidemiology
Module Organiser(s)	Professor Oona Campbell, Dr Giorgia Gon, Dr Jackie Cook,
Faculty	Epidemiology & Population Health
FHEQ Level	Level 7
Credit Value	**CATS:** 10 **ECTS:** 5
HECoS Code	101335
Term of Delivery	Term 1
Mode of Delivery	For 2023-24 this module will be delivered by face-to-face teaching modes. Lectures will be delivered live and recorded. Other sessions, including practical sessions, will also be held in person.
Mode of Study	This module will be taught in-person for the academic year 2023-24. Both full-time and part-time students follow the same schedule. Practicals will take place on Tuesday mornings from 9.30-11am. Live lectures will take place from between 11.30 and 12.30pm on Tuesdays.
Language of Study	English.
Pre-Requisites	An understanding of basic algebra and numerical calculation is required.
Accreditation by Professional Statutory and Regulatory Body	None
Module Cap (indicative number of students)	None (Numbers may be capped at 350 due to limitations in staffing)

Target Audience	**Compulsory module for:** MSc Public Health MSc Public Health for Eye Care MSc Medical Statistics MSc Nutrition for Global Health

	MSc Climate Change and Planetary Health MSc Demography and Health[1] MSc Reproductive and Sexual Health Research[1] MSc Control of Infectious Diseases[1] *[1] Students can opt to take Extended Epidemiology* **Recommended module for:** MSc Health Policy, Planning & Financing
Module Description	This module introduces students to the basic concepts and methods of epidemiology to help them understand, interpret, and apply basic epidemiological methods. It is aimed at students who do not have any background in epidemiology. It is assessed through one formative multiple-choice test, a practice paper review and a summative assessment at the end of the module (to be handed in before Term 2).
Duration	10 weeks at 0.5 days per week
Timetabling slot	Term 1
Last Revised (e.g. year changes approved)	2023

Programme(s) This module is linked to the following programme(s)	**Status**
MSc Reproductive and Sexual Health Research[1]	Compulsory
MSc Public Health (All Streams)	Compulsory
MSc Medical Statistics	Compulsory
MSc Nutrition for Global Health	Compulsory
MSc Public Health for Eye Care	Compulsory
MSc Climate Change and Planetary Health	Compulsory
MSc Demography and Health[1]	Compulsory
MSc Control of Infectious Diseases[1]	Compulsory
MSc Health Policy, Planning & Financing	Recommended
[1] Students can opt to take Extended Epidemiology	

Module Aim and Intended Learning Outcomes

Overall aim of the module
The overall module aim is to: • Introduce the basic concepts and methods of epidemiology.

Module Intended Learning Outcomes
By the end of this module, students should be able to: 1. Describe and apply measures of disease frequency (e.g. incidence and prevalence), measures of effect (e.g. relative and absolute risk), and measures of disease impact (e.g. population attributable fraction) 2. Explain the principles, strengths and limitations underlying the following study designs: ecologic, cross-sectional, cohort, case- control and intervention/randomized controlled trials 3. Identify problems interpreting epidemiologic data: chance, bias, and confounding 4. Be aware of criteria for assessing causality 5. Assess advantages and disadvantages of different preventive strategies, including screening.

Indicative Syllabus

Session Content
The module will include sessions on the following topics: • Measures of disease frequency, exposure effect and exposure impact • Study design: ecological, cross-sectional, cohort, case-control and intervention studies • Interpretation of epidemiologic studies: chance, bias, confounding, causality • Prevention strategies, including screening • Epidemiology in practice

Teaching and Learning

Notional Learning Hours

Type of Learning Time	**Number of Hours**	**Expressed as Percentage (%)**
Contact time	20	20
Directed self-study	30	30
Self-directed learning	20	20
Assessment, review and revision	30	30
Total	**100**	**100**

Student contact time refers to the tutor-mediated time allocated to teaching, provision of guidance and feedback to students. This time includes activities that take place in face-to-face contexts such as lectures, seminars, demonstrations, tutorials, supervised laboratory workshops, practical classes, project supervision as well as where tutors are available for one-to-one discussions and interaction by email.

The division of notional learning hours listed above is indicative and is designed to inform students as to the relative split between interactive and self-directed study.

Teaching and Learning Strategy
Teaching consists of ten half-day sessions generally comprised of a one-hour live lecture with the associated 1.5hr face-to-face practical session the following week. During practical sessions students work synchronously in small groups. Live lectures will be recorded and the recording will be made available following the lecture. We will illustrate methods using epidemiologic data from high-, middle- and low-income countries, investigations of communicable and non-communicable diseases, and aetiologic and public health studies.

Assessment

Assessment Strategy
The assessment for this module has been designed to measure student learning against the module intended learning outcomes (ILOs) as listed above. Formative assessment methods are used to measure students' progress but do not count towards the final grade. The grade for summative assessment only will go towards the overall award GPA. We will have a mid-term assessment which will not count towards the final grade. This will take the form of multiple choice questions and will take place online. Additionally, we will have a formative practice paper review to prepare students for the summative assessment. This will be self-marked. The summative assessment for this module will take place at the end of the module. In the last week of Term 1, there will be an unseen short answer question assessment made available, based on a paper review which will take place online. This will need to be completed before the first week of Term 2.

Summative Assessment

Assessment Type	**Assessment Length (i.e. Word Count, Length of presentation in minutes)**	**Weighting** (%)	**Intended Module Learning Outcomes Tested**
Paper Review	Short answer questions (handed in before Term 2)	100	1 – 5

Resitting assessment
Resits will accord with the LSHTM's Resits Policy For students who are required to resit, or granted a deferral or new attempt, the resit will take either the format of a paper review or an exam question and will take place at the start of Term 3.

Resources

Indicative reading list

10 required lecture note readings are provided to students as PDFs on Moodle.

Recommended texts:
Webb P and Bain C. *Essential Epidemiology: An introduction for Students and Health Professional*. (4th Edition), Cambridge University Press. 2020.

Carneiro, I. *Introduction to Epidemiology* (3rd edition), Open University Press, 2017.

Other resources

Students who desire further depth, or additional revision material, are pointed to EPM101.

Teaching for Disabilities and Learning Differences

Students are provided with access to lecture notes, lecture slides, lecture recordings, and practical resources (practicals and solutions) via Moodle. The format of all these materials are in Word/PDF and PPT/PDF. All lectures are recorded and will be made available on Moodle.

One recommended textbook (Carneiro) is available through LSHTM as an e-book. Suggestions for background reading are tailored to the students' prior training and learning needs. The module provides additional support for students with disabilities and learning differences in accordance with the Student Support Services section of the Student Handbook.

The module-specific site on Moodle provides students with access to lecture notes and copies of the slides used during the lecture prior to the lecture (in pdf format). Materials posted on Moodle areas, including computer-based sessions, have been made accessible where possible. All students have access to "SensusAccess" software which allows conversion of files into alternative formats.

For students who require learning or assessment adjustments and support this can be arranged through the Student Support Services – details and how to request support can be found on the LSHTM Disability Support pages.