



MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2023-24
Module Code	2407
Module Title	Epidemiology of Non-Communicable Diseases
Module Organiser(s)	Professor Isabel dos Santos Silva, Dr Helena Carreira, Dr Abena Amoah, Ms Aimilia Exarchakou
Faculty	Epidemiology & Population Health
FHEQ Level	Level 7
Credit Value	CATS: 15 ECTS: 7.5
HECoS Code	101335
Term of Delivery	Term 2
Mode of Delivery	For 2023-24 this module will be delivered by predominantly face-to-face teaching modes. Where specific teaching methods (lectures, seminars, discussion groups) are noted in this module specification these will be delivered by predominantly face-to-face sessions. There will be a combination of live and interactive activities (synchronous learning) as well as recorded or self-directed study (asynchronous learning).
Mode of Study	Full-time
Language of Study	English
Pre-Requisites	Students will be expected to have a good knowledge of epidemiological methods including familiarity with different study designs, their analysis and interpretation. They should normally have attended the Extended Epidemiology (2007) module in Term 1; however, students that attend the Basic Epidemiology (2001) module will also be considered.
Accreditation by Professional Statutory and Regulatory Body	N.A.
Module Cap (indicative number of students)	60 (numbers may be capped due to limitations in facilities or staffing)
Target Audience	This module is intended for those with an interest in the epidemiology, public health, and global burden of non-communicable diseases.

Module Description	Participants will be introduced to and interact with evidence on the <i>status quo</i> , trends, research and policy priorities of both major and neglected non-communicable diseases (NCDs). Through lectures, seminars, and practical sessions, the module covers: introduction to NCDs and their burden; drivers of NCDs; methodological issues in the study of the epidemiology of NCDs; and research and policy priorities for NCDs, and strategies for their control.
Duration	5 weeks at 2.5 days per week
Timetabling slot	Slot D1
Last Revised (e.g. year changes approved)	June 2023

Programme(s)	Status
This module is linked to the following programme(s)	
MSc Epidemiology	Recommended
MSc Health Policy, Planning & Finance	Recommended
MSc Public Health	Recommended
MSc Public Health (Environment & Health)	Recommended
MSc Public Health (Health Promotion)	Recommended
MSc Public Health for Development	Recommended

Module Aim and Intended Learning Outcomes

Overall aim of the module
<p>This module aims to:</p> <ul style="list-style-type: none"> • provide an overview and stimulate critical thinking on the importance of, and trends in, non-communicable diseases globally, including low- and middle-income countries; • generate an appreciation of the drivers of the burden of non-communicable diseases and how this knowledge can be used for control; • identify methodological and conceptual issues for studying, measuring and analysing non-communicable diseases and their control strategies.

Module Intended Learning Outcomes
<p>Upon successful completion of the module a student will be able to:</p> <ol style="list-style-type: none"> 1. Appreciate the growing global importance of non-communicable diseases across low-, middle- and high-income countries; 2. Identify the major determinants of non-communicable diseases and the key challenges faced by epidemiology and public health in studying and controlling these conditions.

Indicative Syllabus

Session Content

The module is expected to cover the following topics:

- Introduction to non-communicable diseases (NCDs) and their burden.
- Drivers of NCDs.
- Methodological issues in studies of the epidemiology of NCDs.
- Strategies to control NCDs and research and policy priorities.
- Formative Assessment: Communicating evidence to policymakers, scientists and/or the general public.
- Summative assessment: Written Exam

Teaching and Learning

Notional Learning Hours

Type of Learning Time	Number of Hours	Expressed as Percentage (%)
Contact time	45	30%
Directed self-study	50	33%
Self-directed learning	17	12%
Assessment, review and revision	38	25%
Total	150	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 and seminars 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

This module consists of a mixture of interactive lectures, seminars, practical sessions and (self) directed study. The module uses a variety of teaching and learning methods to facilitate the learning of different types of students, including:

- Research-informed teaching (using current literature)
- Promoting active learning through:
 - * Peer-to-peer discussions and feedback
 - * Facilitator-led discussions and feedback



Teaching and Learning Strategy

- Flipped classroom approaches

Formative tasks include:

- Seminar presentations;
- Leading classroom discussions on an NCD topic;

Assessment

Assessment Strategy

The module features a combination of formative and summative assessments to stimulate critical thinking, application knowledge on NCDs in various settings, and communicating evidence to various audiences.

Formative Assessments:

- After the first week of lectures, students will select a topic for their written formative assessments. They will be introduced to technical briefs, scientific posters and public engagement proposals and decide on a format to match their topic. They will work in groups throughout the module on communicating their evidence to policy makers, academic audiences or the general public, thereby demonstrating their understanding of the wider NCD evidence base, its interpretation and the relevance for various audiences.

Summative Assessments:

- In Week 5, students will sit a timed open book exam covering all lectures, seminars and practical sessions.

Summative Assessment

Assessment Type	Assessment Length (i.e. Word Count, Length of presentation in minutes)	Weighting (%)	Intended Module Learning Outcomes Tested
Timed Test (in-module test)	Short essay questions (choice of 2 out of 4) – 3 hours	100	ILO 1 & 2

Resitting assessment

Resits will accord with the LSHTM's [Resits Policy](#)

Resit/deferred/new attempts – The task will be a timed exam. All resits will take place in September.



Resources

Indicative reading list

Roman AV, Perez W, Smith R. A scorecard for tracking actions to reduce the burden of non-communicable diseases. *The Lancet*. 2020; 386: 1131-1132.

GBD 2019 Collaborators. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet*. 2020; 396: 1204–22.

Omran AR. The epidemiologic transition theory revisited thirty years later. *World Health Statistics Quarterly*. 1998; 51: 99-119.

Roth GA, Mensah GA, Johnson CO, Addolorato G, et al. Global Burden of Cardiovascular Diseases and Risk Factors, 1990–2019. *J Am Coll Cardiol*. 2020; 76(25): 2982-3021.

Bray F, Jemal A, Grey N, Ferlay J, Forman D. Global cancer transitions according to the Human Development Index (2008–2030): a population-based study. *Lancet Oncology*. 2012; 13(8): 790-801.

GBD 2019 Collaborators. Spatial, temporal, and demographic patterns in prevalence of smoking tobacco use and attributable disease burden in 204 countries and territories, 1990-2019: a systematic analysis from the Global Burden of Disease Study 2019. *The Lancet*. 2021; 397: 2337-2360.

Bhaskaran K, dos-Santos-Silva I, Leon DA, Douglas I, Smeeth L. Association of BMI with overall and cause-specific mortality: a population-based cohort study of 3·6 million adults in the UK. *Lancet Diabetes Endocrinol*. 2018; 6(12): 944-953.

Guthold R, Stevens GA, Riley LM, Bull FC. Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1·9 million participants. *Lancet Glob Health*. 2016; 6(10): e1077-e1086.

Frumkin H, Haines A. Global Environmental Change and Noncommunicable Disease Risks. *Annual Review of Public Health*. 2019; 40(1): 261-282.



Other resources

Module information can be found on the Virtual Learning Environment (Moodle) containing information about each session and key references for the module. Course information, timetable, lecture notes, key literature for each session, seminar information and assessment examples from previous years. In addition, access to the distance learning Epidemiology of Non-Communicable Diseases (ENCD) module is provided as optional additional material.

Teaching for Disabilities and Learning Differences

The module-specific site on Moodle gives students access to lecture notes and copies of the slides used during the lecture. Where appropriate, lectures are recorded and made available on Moodle. All materials posted on Moodle, including computer-based sessions, have been made accessible where possible.

LSHTM Moodle is accessible to the widest possible audience, regardless of specific needs or disabilities. More detail can be found in the [Moodle Accessibility Statement](#) which can also be found within the footer of the Moodle pages. All students have access to “SensusAccess” software which allows conversion of files into alternative formats.

Student Support Services can arrange learning or assessment adjustments for students where needed. Details and how to request support can be found on the [LSHTM Disability Support pages](#).