MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2024-25
Module Code	2472
Module Title	Social Epidemiology
Module Organiser(s)	Karen Devries, Daniel Carter, Jodie Pearlman, Melissa Neuman
Faculty	Epidemiology & Population Health
FHEQ Level	Level 7
Credit Value	**CATS:** 15 **ECTS:** 7.5
HECoS Code	101335 : 100471
Term of Delivery	Term 2
Mode of Delivery	For 2024-25 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	None
Accreditation by Professional Statutory and Regulatory Body	None
Module Cap (indicative number of students)	60 (numbers may be capped due to limitations in facilities or staffing).
Target Audience	All LSHTM students interested in: • Conducting theory-informed epidemiologic research that explores how social, political and economic contexts affect population health • Conducting research on social determinants of health and health inequalities
Module Description	This module introduces social epidemiology theory, methods, and applications to equip students to study how social,

	political, and economic contexts and health inequities shape population health. First, the module explores the diverse theoretical constructs and frameworks of the social epidemiology discipline alongside lectures and practicals on study design and the measurement of key constructs in social epidemiology (e.g., poverty, health inequities, racism) (weeks 1-2). Then, the module applies social epidemiology theory and methods to a range of examples (e.g., maternal and child health, violence, communicable and non-communicable diseases). This section of the course is taught with input from a range of experts who use, apply, and critique social epidemiology methods (weeks 3-5). All lectures are supported by several practical and discussion sessions, interspersed throughout the course. The end-of-module assessment is through critical appraisal of a scientific paper, based on social epidemiology learnings during the course.
Duration	5 weeks at 2.5 days per week
Timetabling slot	Slot D1
Last Revised (e.g. year changes approved)	August 2022

Programme(s) This module is linked to the following programme(s)	**Status**
MSc Epidemiology	Recommended
MSc Demography & Health	Recommended
MSc Public Health	Recommended
MSc Public Health (Environment & Health)	Recommended
MSc Public Health (Health Promotion)	Recommended
MSc Public Health for Development	Recommended
MSc Reproductive & Sexual Health Research	Recommended

Module Aim and Intended Learning Outcomes

Overall aim of the module
This module aims to enable students to gain an understanding of social epidemiology theory and methods to develop, assess, and critique research on the social determinants of health and health inequalities, with a particular focus on how social, economic and political environments produces health outcomes, how social phenomena can be measured, and how health inequalities can be addressed.

Module Intended Learning Outcomes
Upon successful completion of the module a student will be able to: 1. Understand and critically appraise research into the social determinants of health that generate health inequities and inequalities. In particular, the students will: • Be familiar with some key theories in social epidemiology and be able to apply theory to explain a particular health condition or health inequality • Be familiar with measurement theories and methodologies, and be able to critically appraise some methods to measure complex social variables

Indicative Syllabus

Session Content
The module is expected to cover the following topics: • An introduction to the definition, scope and history of social epidemiology. We will discuss key theories to explain health inequalities (including the Psychosocial, Ecosocial and Life course theoretical approaches) and how to design research to explore how social context affects population health. • The measurement of complex constructs, including poverty, discrimination, and socioeconomic indices used in low, middle, and high income countries for the measurement of socioeconomic position and health inequalities. • The definition and measurement of health inequities and the effects of inequities affect population health (i.e. what are the causal pathways through which poverty, discrimination, and income inequality harm population health) • How to design, conduct, and critique analyses to examine the effects of contexts on health, and an introduction to causal mediation analysis. • Examples of social epidemiology in practice. Lectures, Q&As, and panel discussions will be dedicated to public health issues characterised by strong inequalities and/or strongly influenced by social and economic determinants, including HIV, tuberculosis, mental health, gender violence, cancer, obesity and the health impact of global financial crises.

Teaching and Learning

Notional Learning Hours

Type of Learning Time	Number of Hours	Expressed as Percentage (%)
Contact time	40	27
Directed self-study	36	24
Self-directed learning	38	25
Assessment, review and revision	36	24
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, 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

The teaching and learning strategy is based on a combination of

- Lectures
- Panel discussions and Q&A sessions with lecturers and other experts which are linked to the lectures to enable a) deeper engagement with concepts and constructs discussed in lectures, b) further discussion of how the theory and methods of social epidemiology are applied and inform practice and policy
- Practical sessions: selected quantitative analytical techniques will be demonstrated employing both computer and pen-and-paper methods.
- Group seminars: opportunities further interaction with the module organisers to ask questions, and practice reading and critiquing social epidemiology research and papers, in line with the end-of-module assessment.

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. The grade for summative assessment will go towards the overall award GPA. The assessment for this module will be online.

Summative Assessment

Assessment Type	Assessment Length (i.e. Word Count, Length of presentation in minutes)	Weighting (%)	Intended Module Learning Outcomes Tested
Critical appraisal of a journal article from social epidemiology perspective	The max word count for the review is 1500 words, with no more than 10 references. The word limit should be split approximately 50:50 between the two sections: a) Theoretical Approach: health inequality models, and b) Methods & Measures employed in the paper.	100	1

Resitting assessment
Resits will accord with Chapter 8a of the LSHTM Academic Manual. Resit/deferred/new attempts – the resit assessment will be similar in nature to the original assessment but will be a critical appraisal of a different epidemiology paper; the next assessment deadline will be the standard School-recommended date in mid/late September.

Resources

Indicative reading list

1. Kawachi I, Subramanian, SV. Social epidemiology for the 21st century. Social Science and Medicine 2018; 196:240-245
2. Krieger N. A glossary for social epidemiology. J Epidemiol Community Health. 2001;55(10):693-700.
3. Krieger, Nancy, 'Historical roots of social epidemiology: socioeconomic gradients in health and contextual analysis', International Journal of Epidemiology (2001) 30: pages 899-900 only
4. Moore & Evans (2017) "What theory, for whom and in which context? Reflections on the application of theory in the development and evaluation of complex population health interventions Social Science and Medicine: Population Health. 3:132-135.
5. Krieger, N. 2008. "Proximal, distal, and the politics of causation: what's level got to do with it?" American Journal of Public Health, 98 (2): 221-229.
6. Ben-Shlomo Y, Kuh D. A life course approach to chronic disease epidemiology: conceptual models, empirical challenges and interdisciplinary perspectives. Int J Epidemiol. 2002 Apr;31(2):285-93.
7. Victora CG, Huttly SR, Fuchs SC, Olinto MTA. (1997) The role of conceptual frameworks in epidemiological analysis: a hierarchical approach. International Journal of Epidemiology 26, 224- 7.
8. Vyas S, Kumaranayake L. Constructing socio-economic status indices: how to use principal components analysis. Health Policy Plan. 2006;21(6):459-68.
9. Hernán, M. A definition of causal effect for epidemiological research. J Epidemiol Community Health 2004. 58: 265.271.
10. Krieger, N. Genders, sexes, and health: what are the connections—and why does it matter?. International Journal of Epidemiology 2003;32:652–657 DOI: 10.1093/ije/dyg156

Other resources

- Bailey, Z., Krieger, N., Agenor, M, et al (2017) Structural racism and health inequities in the USA: evidence and interventions. Lancet. 389:1453-63.
- Bor, Jacob, et al. "Police killings and their spillover effects on the mental health of black Americans: a population-based, quasi-experimental study." The Lancet 392.10144 (2018): 302-310.
- Paolo Vineisa, Cyrille Delpierre, Raphaële Castagné, Giovanni Fiorito, Cathal McCrory, Mika Kivimaki, Silvia Stringhini, Cristian Carmeli, Michelle Kelly-Irving Health inequalities: Embodied evidence across biological layers Social Science and Medicine 246 (2020) in press
- Goldfeld S, O'Connor M, Cloney D, Gray S, Redmond G, Badland H, Williams K, Mensah F, Woolfenden S, Kvalsvig A, Kochanoff AT. Understanding child disadvantage from a social determinants perspective. J Epidemiol Community Health. 2018 Mar;72(3):223-229.
- Devries et al (2013). The global prevalence of intimate partner violence. Science. 10.1126/science.1240937
- Avan BI, Kirkwood BR. Review of the theoretical frameworks for the study of child development within public health and epidemiology. J Epidemiol Community Health. 2010 May;64(5):388-93.
- Howe LD et al. (2012) Measuring socio-economic position for epidemiological studies in low- and middle-income countries: a methods of measurement in epidemiology paper. International Journal of Epidemiology 2012;41(3): 871-886

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.