

# **MODULE SPECIFICATION**

Academic Year (student				
cohort covered by	2021-22			
specification)				
Module Code	2472			
Module Title	Social Epidemiology			
Module Organiser(s)	Dr Tara Beattie, Dr Karen Devries and Dr Bilal Avan			
Faculty	Epidemiology & Population Health/Public Health and Policy			
FHEQ Level	Level 7			
Credit Value	<b>CATS:</b> 15			
	ECTS: 7.5			
HECoS Code	101335 : 100471			
Term of Delivery	Term 2			
Mode of Delivery	For 2021-22 this module is planned to be delivered online.			
	Teaching will comprise 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	None			
Professional Statutory and				
Regulatory Body				
Module Cap (indicative	60 (numbers may be capped due to limitations in facilities or			
number of students)	staffing).			
Target Audience	All LSHTM students interested in conducting research on social			
	determinants of health and health inequalities in both rich and			
	poor countries.			
Module Description	The module conceptually has two blocks of lectures. First, an			
	understanding the diverse theoretical constructs and frameworks			
	of the social epidemiology discipline is developed, along with			
	employment of these concepts in the measurement of health			
	inequalities (weeks 1-2). This is followed by examples of the			
	application of social epidemiology in diverse thematic areas			
	(weeks 2-3). All lectures are supported by several practical and			
	discussion sessions, interspersed throughout the course. 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	September 2021	
changes approved)		

Programme(s)	Status		
This module is linked to the following programme(s)			
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

The overall module aim is to:

• enable students to critique research into the social determinants of health and health inequalities, with a particular focus on theoretical understandings of how the social environment 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:

• Week 1: After an introduction to the definition, scope and history of social epidemiology, students will be provided with an overview of selected key theories to explain health inequalities (including the psychosocial, ecosocial and life course approach) and examples



#### **Session Content**

of socioeconomic indices used in low and high income countries for the measurement of socioeconomic position and health inequalities.

- Week 2: Students will receive lectures on the measurement and understanding of health inequalities, that is: how health inequalities can be quantified and how health inequalities are perpetrated (i.e. what is the causal pathway through which being poor makes an individual sick, what is the distinction between confounders and mediators in the causal pathway). These lectures will be complemented with practicals on the construction of indices of socioeconomic position and an introduction to causal mediation analysis.
- Weeks 3-5: Examples of social epidemiology in practice. Lectures 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**

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	

### Notional Learning Hours

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. Student contact time also includes tutor-mediated activities that take place in online environments, which may be synchronous (using real-time digital tools such as Zoom or Blackboard Collaborate Ultra) or asynchronous (using digital tools such as tutor-moderated discussion forums or blogs often delivered through the School's virtual learning environment, Moodle).

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



#### **Teaching and Learning Strategy**

The teaching and learning strategy is based on a combination of

- Recorded lectures followed by live online Q&A sessions: the first two weeks will focus on understanding the theoretical underpinnings of social epidemiology, and weeks 3-5 will be dedicated to learning about the practical application of these concepts in the various domains of public health and research. Online lectures will be made available a week before the live Q&A session.
- 2. Practical sessions: selected analytical techniques will be demonstrated employing both computer and pen-and-paper methods.
- 3. Group seminars: opportunities for student group interaction with the module organisers and practice sessions along the lines of the end-of-module assessment task.

### 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.	Weighting	Intended Module
	Word Count, Length of	(%)	Learning Outcomes
	presentation in minutes)		Tested
Critical appraisal of a	The max word count for the	100	1
journal article from social	review is 1500 words, and		
epidemiology perspective	cite 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.		



#### **Resitting assessment**

Resits will accord with the LSHTM's Resits Policy

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.
- 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 lowand 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 <u>Moodle Accessibility Statement</u> 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 <u>LSHTM Disability Support</u> pages.