MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2024-25
Module Code	2609
Module Title	Fundamentals of Climate Change and Planetary Health
Module Organiser(s)	Roberto Picetti, Rebecca Newbould, Kris Murray
Faculty	EPH
FHEQ Level	Level 7
Credit Value	**CATS: 10** **ECTS: 5**
HECoS Code	101317
Term of Delivery	Term 1
Mode of Delivery	Face to face and online (UK time zone)
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)	None
Target Audience	This module is compulsory for students on the MSc Climate Change and Planetary Health programme.
Module Description	This module introduces the emerging field of planetary health, and the direct and indirect interactions between environmental and human health. Human population growth and increasing consumption have transformed and degraded our planet's ecosystems, and this can have negative impacts on human health. Students will learn about key issues such as climate change, mitigation and adaptation actions, planetary boundaries, and social justice. These issues are relevant in contexts all across the world. No specialist knowledge is needed for this module, but an interest in interdisciplinary learning and integrating concepts from different disciplines is essential.

Duration	10 weeks at 0.5 days per week
Timetabling slot	Term 1
Last Revised (e.g. year changes approved)	August 2024

Programme(s) This module is linked to the following programme(s) *(Lead programme first)*	**Status** *(Compulsory/Recommended Option)*
MSc Climate Change and Planetary Health	**Compulsory**
MSc Control of Infectious Diseases	Recommended
MSc Demography & Health	Recommended
MSc Epidemiology	Recommended
MSc Global Mental Health	Recommended
MSc Nutrition for Global Health	Recommended
MSc One Health: Ecosystems, Humans and Animals	Recommended
MSc Public Health for Development	Recommended
MSc Tropical Medicine & International Health	Recommended
MSc Veterinary Epidemiology	Recommended

Module Aim and Intended Learning Outcomes

Overall aim of the module
The overall module aim is to: • Introduce the basic concept of Planetary Health and summarise some of the issues and potential solutions to the challenges posed by the interaction between environmental and human health.

Module Intended Learning Outcomes
Upon successful completion of the module a student will be able to: 1. Explain and discuss the concepts of planetary health and the direct and indirect pathways that connect human health and the health of the environment 2. Appreciate determinants of risk at the health-environment nexus by populations and regions and analyse different forms of sustainable transitions 3. Explain how actions (both in terms of mitigation and adaptation) address environment and/or human health 4. Discuss how planetary health issues are related to social justice and wider social issues (e.g. intergenerational health equity, vulnerability and resilience) 5. Summarise case studies of health impacts of climate change and approaches to tackle them

Indicative Syllabus

Session Content
The module is expected to cover the following topics: • Concepts of planetary health • Pathways connecting human health and ecosystems • Determinants of health risk • Mitigation and adaptation actions to address climate change • Relationship between planetary health issues and social justice • Approaches to tackle health impacts of climate change

Teaching and Learning

Notional Learning Hours

Type of Learning Time	Number of Hours	Expressed as Percentage (%)
Contact time	**20**	**20%**
Directed self-study	**25**	**25%**
Self-directed learning	**15**	**15%**
Assessment, review and revision	**40**	**40%**
Total	**100**	**100%**

Teaching and Learning Strategy
Teaching consists of ten half-day sessions generally comprised of lectures and seminar/group activities, including class discussions; guided reading; case studies and critical review of the literature (through individual, group and class work). • Lectures: We will use a mixture of internal and guest lectures, including from both high-income and lower-middle income country settings. • Group work/seminar: Some sessions will include group work, so that students can independently address and research specific topic areas, discuss key issues among themselves, and apply concepts covered in the lectures. • Reading list: We provide a carefully selected reading list of essential and additional articles. Essential articles include the seminal work on the session, and additional articles provide more information and further reading for the interested student. • Assessment: We provide several free slots to ensure that the students are able to prepare for their module assessment and time to query course leaders/tutors.

Assessment

Assessment Strategy
The assessment consists of several components. There will be group work over the duration of the module to deliver a group presentation at the end of the module (20 min + 10 min for discussion (Q&A)). Students will be provided a choice of three topics that are tied to the content of the module's lectures. Each group will choose one of the topics provided. The group work will build the scaffolding to an individual piece of written work. The group work will account for 20% of the final grade. Students will then submit an individual piece of written work (technical brief) on the topic chosen based on the group presentation (2000 words). This will account for 80% to the overall mark. Students can expect written feedback, which will provide details on the strengths and weaknesses of their report and direction on what the student could improve to receive a higher grade.

Summative Assessment

Assessment Type *(delete as appropriate)*	**Assessment Length (i.e. Word Count, Length of presentation in minutes)**	**Weighting** (%)	**Intended Module Learning Outcomes Tested**
Technical report	2000 words	80	1 to 5
Group presentation	20 minutes	20	1 to 5

Resitting assessment
Resits will accord with Chapter 8a of the LSHTM Academic Manual. The resit assessment for the technical report will be the same as the first attempt, i.e. an individual piece of written work, but on a different topic. For individual students resitting a group assessment there will be an approved alternative assessment as detailed below.

Assessment being replaced	**Approved Alternative Assessment Type**	**Approved Alternative Assessment Length** (i.e. Word Count, Length of presentation in minutes)
Group presentation	If the overall grade (including both the presentation and the essay) is a pass, there will be no resit for the group presentation. However, if the overall grade is a fail, the resit will consist of an individual written assignment on a different topic, which will count for 100% of the grade.	The assessment length will be the same as specified above.

Resources

Indicative reading list *(if applicable)*

- *"Planetary Health: Safeguarding Human Health and the Environment in the Anthropocene" by A. Haines and H. Frumkin. 2021 (available electronically through the library)*
- *Sarkis, J. Sustainable Transitions: Technology, Resources, and Society. 2019 https://doi.org/10.1016/j.oneear.2019.08.018*
- *Jarmul et al. Climate change mitigation through dietary change: a systematic review of empirical and modelling studies on the environmental footprints and health effects of 'sustainable diets'. 2020* DOI: 10.1088/1748-9326/abc2f7
- *Burrows and Kinney. Exploring the Climate Change, Migration and Conflict Nexus. 2016* DOI: 10.3390/ijerph13040443
- *Steffen et al. Planetary boundaries: Guiding human development on a changing planet. 2015* DOI: 10.1126/science.1259855
- *Whitmee et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health. 2015* DOI:https://doi.org/10.1016/S0140-6736(15)60901-1
- *Moysés SJ, Soares RC. Planetary health in the Anthropocene. Health Promot Int. 2019 Mar 1;34(Supplement_1):i28-i36. doi: 10.1093/heapro/daz012. PMID: 30753440.*
- *Mazhin SA, Khankeh H, Farrokhi M, Aminizadeh M, Poursadeqiyan M. Migration health crisis associated with climate change: A systematic review. J Educ Health Promot. 2020 Apr 28;9:97. doi: 10.4103/jehp.jehp_4_20. PMID: 32509905; PMCID: PMC7271932.*

Teaching for Disabilities and Learning Differences

The module-specific site on Moodle will provide students with access to lecture notes and copies of the slides used during the lecture prior to the lecture in accessible formats (Word/PDF and PPT/PDF). All lectures will be recorded and made available on Moodle.

The LSHTM Moodle has been made accessible to the widest possible audience, using a Virtual Learning Environment (VLE) that allows for up to 300% zoom, permits navigation via keyboard and use of speech recognition software, and that allows listening through a screen reader. All students have access to "SensusAccess" software which allows conversion of files into alternative formats.

The module will provide additional support for students with disabilities and learning differences in accordance with the Student Support Services section of the Student Handbook.