



MODULE SPECIFICATION

Academic Year (student cohort covered by specification)	2023-24
Module Code	2609
Module Title	Fundamentals of Climate Change and Planetary Health
Module Organiser(s)	Roberto Picetti, Patricia Eustachio Colombo and 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
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 & 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, with approximately 0.5 days per week contact hours and approximately 0.5 days per week self-study
Timetabling slot	Term 1
Last Revised (e.g. year changes approved)	N/A

Programme(s)	Status <i>(Compulsory/Recommended Option)</i>
This module is linked to the following programme(s)	
MSc Climate Change and Planetary Health	Compulsory

Module Aim and Intended Learning Outcomes

Overall aim of the module
<p>The overall module aim is to:</p> <ul style="list-style-type: none"> Introduce the basic concept of Planetary Health and summarise, discuss and appraise important challenges arising from the interaction between environment and population health as well as determinants for potential solutions to such challenges.

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. 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. Identify determinants of risk at the health-environment nexus for specific populations and regions, and analyse different forms of sustainable transitions 3. Evaluate how actions (both in terms of mitigation and adaptation) address environment and what co-benefits and/or co-harms they introduce to human health 4. Appraise 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 reduce such impact.

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). Outside of these contact hours students are expected to prepare for lecture and seminar sessions by reading the core (and where of interest the recommended and further) literature listed in the module handbook on Moodle. Furthermore, students will work on their assessments outside the contact hours.

- Lectures: We will use a mixture of internal and guest lectures, including from both high-income and low- and -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 with their peers, and apply concepts covered in the lectures.



Teaching and Learning Strategy

- Reading list: We provide a carefully selected reading list of essential reading, recommended reading and further reading. Essential readings include the seminal work on the session, and recommended and further reading provide more information and specific case studies for the interested student.
- Assessment: We provide several lecture-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 formative assessment will comprise 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.

Summative Assessment will be an individual technical brief for policy makers on the same topic as the chosen group presentation (2000 words \pm 10%) and a brief reflection on the students' personal perceptions of their chosen topic (500 words \pm 10%). The technical brief will account for 80% to the overall mark and the personal reflection 20%.

Students can expect written feedback, which will provide details on the strengths and weaknesses of their report and direction on what they could improve to receive a higher grade.

Summative Assessment

Assessment Type	Assessment Length (i.e. Word Count, Length of presentation in minutes)	Weighting (%)	Intended Module Learning Outcomes Tested
Coursework	2000 words + 500 words	80% and 20% respectively	1 to 5

Resitting assessment

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

For individual students resitting a group assessment there will be an approved alternative assessment as detailed below.



Resources

Indicative reading list (*if applicable*)

- *Planetary Health: Safeguarding Human Health and the Environment in the Anthropocene* by A. Haines and H. Frumkin
- Sarkis, J. *Sustainable Transitions: Technology, Resources, and Society*.
<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'*. DOI: [10.1088/1748-9326/abc2f7](https://doi.org/10.1088/1748-9326/abc2f7)
- Burrows and Kinney. *Exploring the Climate Change, Migration and Conflict Nexus*. DOI: [10.3390/ijerph13040443](https://doi.org/10.3390/ijerph13040443)
- Steffen et al. *Planetary boundaries: Guiding human development on a changing planet*. DOI: [10.1126/science.1259855](https://doi.org/10.1126/science.1259855)
- Whitmee et al. *Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health*. DOI: [https://doi.org/10.1016/S0140-6736\(15\)60901-1](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, Poursadeqiyani 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 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.