



Academic Year 2021-2022

Syllabus

**Globalization and health: scientific, ethical and political challenges**

**Prof. Paolo Vineis**

### Course Description:

#### Learning outcomes

By the end of the course the students should be able to:

- Discuss key issues in public health on a global scale
- Describe and interpret key study design issues in global health
- Appreciate the need for a multidisciplinary approach, spanning biology, socio-cultural approaches, economics and politics, for understanding and researching global health
- Understand and appreciate the role of novel genetic and molecular methodologies in research
- Discuss the main causes of ill health in the developed and developing world
- Discuss ethical models in global public health

#### Teaching Method:

##### General structure of the module

Most topics will be treated according to the following scheme:

- Introductory lecture
- Reading of one paper and discussion in a seminar
- Methodological practical session on study design or theoretical underpinnings of a global health problem

Key articles from journals and books will be discussed in **seminars**, which involve some group work.

- Student active preparation for and participation in seminars and practicals is crucial. Seminar readings expand on the lecture topics and provide additional information and understanding that is needed for assessments
- You are encouraged to express your personal opinions on the readings.

#### Schedule of Topics:

<b>Topic 1</b>	<b>What are the predominant diseases today in the world</b> <ul style="list-style-type: none"><li>-- The epidemiological transition: from infectious diseases to NCD</li><li>-- Conceptual changes in defining and investigating diseases</li><li>-- Defining and assessing causality</li><li>-- The causes of modern diseases</li><li>-- Fetal programming and evolutionary thinking</li></ul>
<b>Topic 2</b>	<b>Health and the environment</b> <ul style="list-style-type: none"><li>-- From clinical medicine to environmental medicine</li><li>-- From RCT to observational evidence</li><li>-- Systematic reviews of environmental causes of diseases: the example of the IARC Monographs</li><li>-- The REACH legislation and the Precautionary Principle</li><li>-- Global governance on health and the environment</li></ul>
<b>Topic 3</b>	<b>Case studies</b> <ul style="list-style-type: none"><li>-- Nutrition, physical activity, obesity (including in children), diabetes</li><li>-- The causes of cancer</li><li>-- Climate change in Bangladesh</li><li>-- COVID-19: interactions between science and policy making</li></ul>

<b>Topic 4</b>	<b>New methods of investigation</b> -- Genetics and epigenetics -- Epidemiology and the laboratory: the exposome -- A brief and simple introduction to study design and biostatistics, including treatment of bias and confounding
<b>Topic 5</b>	<b>Social to biological transitions</b> -- Health inequalities: the intersection of sociology and life-course epidemiology -- The embodiment of social inequalities: from Bourdieu to Krieger -- Syndemics
<b>Topic 6</b>	<b>Climate change and health</b> - Introduction to climate change (IPCC, COP26) - The health consequences of climate change - Heat waves - The politics of co-benefits
<b>Topic 7</b>	<b>Ethics and public health</b> -- Ethical models -- Paternalism vs. decisional autonomy; nudges -- Different views: Latour, Sloterdijk, Descola -- Conflicts of interest and the role of corporations -- Ethical and policy aspects of climate change

**Weekly Reading/Viewing Materials:** The weekly readings include: (1) Theory and Concepts - short articles that familiarize students with some of the main topics in global health; (2) Case Studies - short assigned readings that highlight the weekly theme; (3) Contemporary Challenges and country profiles. **Textbook:** we suggest Paolo Vineis, “Health without borders”, Springer, 2017 as the main textbook; and Paolo Vineis, Luca Carra, Roberto Cingolani, “Prevenire”, Einaudi 2020 as a reference book for Italian students.

**Requirements and Grading:** The class requirements include: in-class discussion, in-class presentation, and take-home writing assignments. (1) Attendance and Participation: Each week every student will be given the opportunity to share their opinions in class discussion. (2) In-class Presentation: Each student will be responsible to deliver a short in-class presentation on the ‘contemporary challenges’ (it can be in the form of a “country profile”). The presentation will require a 10-15 minutes report, which may also include some slides or visual material. Presentations may also require doing some additional reading or research than the weekly syllabus assignment; (3) The class also requires a final paper. (3) Finally, the class requires a ‘research design’ project. This is NOT a fully completed project, but a research proposal. It should ask a question about a real global health problem (it can be a “country profile”). It can take the form of a written paper (10-pages; 2500 words); or a video presentation (20minutes), with supporting materials in power point. You may choose your own question, or several examples will be provided. The breakdown for grading is as follows: (1) Attendance and Participation – 33 percent; (2) In-class Presentation – 33 percent; (3) Research Design project – 34 percent.

**Professor Contact Info:** The best way to make contact is email: [p.vineis@imperial.ac.uk](mailto:p.vineis@imperial.ac.uk)

**NOTE:** Erasmus or non Global Governance students who would like to attend one or more courses and take one or more exams need to contact the Secretariat of Global Governance by e-mail [global.governance@uniroma2.it](mailto:global.governance@uniroma2.it) for registration and inform the Professor of the course. They are required to sign a code of conduct like all Global Governance students, accepting all values and rules. Please read it carefully before enrolling.

Notice that attendance is required from the very first lesson and you need to attend at least 80% of the course to be considered an attending student.