

Global Perspectives for Climate and Health



UNIVERSITY OF
EASTERN FINLAND

University of Eastern Finland, Kuopio, Finland



CENTRE FOR
ENVIRONMENTAL
HEALTH

Public Health Foundation of India



University of Port Harcourt, Port Harcourt, Nigeria



Villanova University, United States of America

Course name: Global Perspectives for Climate and Health
 Date/Time of Class: January 17, 2022 to April 30, 2022
 Asynchronous
 Three Live Seminar Discussions (via Zoom)
3 February, 3 March, and 31 March
7:00 – 8:00 AM US ET

One on-line live seminar on April 22, 2022 (via ZOOM).
 US Eastern Time 7:00-10:00 AM
 Nigeria 1200-1500
 Finland 1400-1700
 India 1630- 1930

PREREQUISITES: None, open global health minor or graduate students.

OVERVIEW:

This interdisciplinary (medical, nursing, and public health), international course will examine the impact of climate change on human health in Finland, India, Nigeria, and the U.S. Faculty (professors) and students from different regions of the world (Finland, India, Nigeria, & US) will study climate health science; strategies of mitigation and adaptation; local, national, and international policy; and real-time ground-level climate realities from each participating nation.

OBJECTIVES:

1. Describe key stakeholders and historical context of global climate action.
2. Analyze the climate science as it relates to regional changes and projected changes in temperature, weather patterns, air and water quality, and food security.
3. Articulate the relationship between economic, political, social, and cultural factors that influence climate change local, national responses, and international responses.
4. Describe the implications of climate change on human health.
5. Evaluate policies, legislation and regulations that address climate change on human health in Finland, India, Nigeria & the U.S, and the impact of these policies on international community.
6. Develop plans to address climate change strategies for selected groups that include social, economic, geographic, lifespan, occupational, and gender vulnerabilities.
7. Analyze programs that mitigate, adapt, and build resilience to the health impacts of climate change at the local, regional, national, and global levels.

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EVALUTION CRITERIA:

Class participation & preparation (YellowDig)	30%
Pre & Post Test (Pass/Fail)	10%
Climate Science test (Pass/Fail)	10%
Reflection of climate, health, and culture	20%
Group class seminar presentation	30%

Class participation (30%):

You are expected to be informed and participate in on-line class discussions. To prepare for each class students are expected to complete required readings, view videos, and examine the current reputable media (newspapers, radio, web sources). Your YellowDig responses are quantified based on number of words you write. Course faculty expect the posts contain the following qualities:

- Primary posts are completed by Wednesday.
- Questions/comments and/or responses to fellow students' posts are completed by Saturday.
- Posts are thoughtful, substantive, and incorporate module content and required readings/lectures/videos.
- Posts make connections to other content, readings, previous modules, and real-life situations.

- Posts build on other responses and contribute to the online learning environment.
- Comments are logically reasoned and substantiated.
- Posts are grammatically correct and proofread for spelling errors.
- Posts offers new perspectives, helpful suggestions and or raises questions and /or answers them to promote discussion.
- Posts reflect additional review of scholarly resources.
- Posts are respectful of different thoughts and ideas. If something is not understood that is posted you are encouraged to ask clarifying questions: “Can you explain what you mean by...”

Pre & Post-test (Pass/Fail) (10%)

There will be a pre-test at the beginning of the course and a post-test at the end of the course to determine your overall learning in the course. You must complete the pre-test at the beginning of the course **and** the post-test at the end of the course to earn the overall grade for this evaluation criteria.

Climate science test (Pass/Fail) (10%).

After the climate science unit, there will be a multiple-choice exam to determine basic competence in climate science. You must earn an 80% by week 4. You may retake the climate science test up to three times.

Reflection of climate, health, and culture essay (20%).

We are fortunate to learn about climate change and health with students from Finland, India, Nigeria, and the U.S. From your class discussions and group work, answer the question: How does the economic, political, and cultural status of a country/region influence climate and health responses? Your response should be 4-5 pages typed, double spaced with citations to support your answer and consider the essay question from the perspective of one developing and one developed country that is discussed in this class (Finland, India, Nigeria, and the U.S.).

Group class seminar presentation (30%)

This is a culminating assignment. Within your assigned student group, develop a policy or program recommendation to a national or international organization to improve, support, or protect the health of the population from a particular climate impact (i.e. food sustainability, heatwaves, health system resilience, air pollution). Your work should demonstrate the using, analysis, and integration of the current literature, science, data, and official documents. You may use whatever media to make your presentation that your group feels would best make the point and convince the identified organization (i.e. PowerPoint, video, brochures,.....) to make the policy change or program implementation.

Selected On-Line Sources

International

Intergovernmental Panel on Climate Change <https://www.ipcc.ch/>

International Council of Nurses Statement on Climate Change:

<https://www.icn.ch/sites/default/files/inline-files/ICN%20PS%20Nurses%252c%20climate%20change%20and%20health%20FINAL%20.pdf>

Global Consortium for Climate and Health Education

<https://www.mailman.columbia.edu/research/global-consortium-climate-and-health-education>

Health Care Without Harm <https://noharm.org/>

Lancet Countdown: <http://www.lancetcountdown.org/>

UNICEF (climate change) <https://www.unicef.org/topics/climate-change>

World Bank (climate change) <https://www.worldbank.org/en/topic/climatechange>

World Health Organization www.who.int

India

National Health Portal - https://www.nhp.gov.in/health-and-climate-change_pg

National Action Plan on Climate Change India - Ministry of Environment, Forests and Climate Change - http://moef.gov.in/wp-content/uploads/2018/07/CC_ghosh.pdf

National Action Plan for Climate Change and Human Health-Ministry of health and Family Welfare -

<https://ncdc.gov.in/WriteReadData/l892s/27505481411548674558.pdf>

Climate Change: perspectives from India-UNDP-

https://www.undp.org/content/dam/india/docs/undp_climate_change.pdf

<https://www.adaptation-undp.org/explore/india>

Assessment of Climate Change over the Indian region -

<https://www.springer.com/gp/book/9789811543265>

Lancet Countdown 2018 India Policy Brief -

<https://www.ceh.org.in/publication/lancet-countdown-2018-report-briefing-for-indian-policy-makers>

/Lancet Countdown 2018 India Policy Brief -

<https://www.ceh.org.in/publication/the-lancet-countdown-on-health-and-climate-change-2019-policy-brief-for-india/>

India Meteorological Department (IMD) - <https://mausam.imd.gov.in/>

Integrated Disease Surveillance Programme (IDSP) - <https://idsp.nic.in/>

Nigeria

Department of Climate Change, Nigeria <https://climatechange.gov.ng/>

Environmental Health Practice, Nigeria <https://ehorecon.gov.ng/Environmental-Health-Practice>

Federal Ministry of Health, Nigeria <https://fmohconnect.gov.ng/>

Finland

<https://www.climatechangepost.com/finland/climate-change/>

Climate Adapt Finland: <https://climate-adapt.eea.europa.eu/countries-regions/countries/finland>

Finland's National Climate Change Adaptation Plan 2022:

<http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/laws/8196.pdf>

Finnish Government: Finnish Government Appoints New Climate Panel (2019)

https://valtioneuvosto.fi/en/article/-/asset_publisher/valtioneuvosto-nimitti-uuden-ilmastopaneelin-puheenjohtajana-jatkaa-markku-ollikainen

Finnish Meteorological Institute: <https://en.ilmatieteenlaitos.fi/climate>

United States

Alliance of Nurses for Healthy Environments (Climate Change)

<https://envirn.org/climate-change/>

Center for Disease Control and Protection (Climate & Health Program):

https://www.cdc.gov/nceh/information/climate_and_health.htm

Environmental Protection Agency (Climate Change Indicators)

<https://www.epa.gov/climate-indicators>

Healthy People 2030 (environmental health)

<https://health.gov/healthypeople/objectives-and-data/browse-objectives/environmental-health>

Global Change: National Climate Assessment (US)

<https://www.globalchange.gov/nca4>

Lancet Countdown Policy Brief US http://www.lancetcountdownus.org/wp-content/uploads/2020/12/FINAL-2020_12_02_Lancet-Countdown-Policy-Document-USA-ENG.pdf?hsCtaTracking=3d902c23-c855-441f-ab5d-61f4f76a2ea1%7C6d90df30-4bf7-42f3-a282-f61d5292a03e

http://www.lancetcountdownus.org/wp-content/uploads/2020/12/FINAL-2020_12_02_Lancet-Countdown-Policy-Document-USA-ENG.pdf?hsCtaTracking=3d902c23-c855-441f-ab5d-61f4f76a2ea1%7C6d90df30-4bf7-42f3-a282-f61d5292a03e

Medical Society Consortium on Climate & Health

<https://medsocietiesforclimatehealth.org/>

Useful website:

Time and Date Converter

<https://www.timeanddate.com/worldclock/converter.html>

Weekly Schedule Spring 2022

Each unit opens on Monday and closes on Sunday

Module	Topic	Assigned faculty	Homework/Assignments
1 Jan 17	Introduction to the course	Ruth (VU)	Complete the pre-test by 30 January
2 Jan 24	Climate Science Historical Context	Richa (PHFI)	
3 Jan 31	Examining & Analyzing the Climate data	Richa (PHFI)	Complete the climate science test by 14 Feb Live Session 3 Feb
4 Feb 7	Climate vulnerabilities (people, systems) Migration of people/conflict	Ruth (VU)	Live
5 Feb 14	Extreme of temperatures: heat & cold	Dr. Ambarish Dutta - heat (PHFI) Ruth - cold (VU)	
6 Feb 21	Air Quality and Climate Change	Enembe (UC)	
7 Feb 28	Mental Health	Lauri Kuosmanen (UEF)	Live Session 3 March
8 March 7	Non-Communicable Diseases (NCDs)	Enembe (UC)	
9 March 14	Infectious disease, zoonotic diseases, COVID-19	Enembe (UC)	Reflection on Climate, Health, & Culture due by 28 March.
10 March 21	Food sustainability Flooding & Droughts	Ruth (VU)	Easter Break begins April 1 for Villanova Students (Ruth post by March 27)
11 March 28	Health Systems preparedness, response, resilience	Poornima Prabhakaran (PHFI)	Live Session 31 March
12 April 4	Public Health impact & response	Poornima Prabhakaran (PHFI)	
13 April 11	Trends in Climate Science and Response	Richa (PHFI)	Complete the post-test by 25 April.
14 April 18	Student conferencing	Ruth	We will plan on Thursday April 21 for the live session . 3 hours. US Eastern Time 7:00-10:00 AM Nigeria 1200-1500 Finland 1400-1700 India 1630- 1930

The course instructor reserves the right to make changes in the topical outline as needed. Each module is one week.