Climate Change and Health Fellowship Program

Curriculum of the Courses

The Climate Change and Health Fellowship Program consist of 5 specialized courses:

Course Code	Course Title
ENVR-40028-WI25	Introduction to Climate Changes, Health, and policy
ENVR-40032-SP25	Vulnerable Communities
ENVR-40030-WI25	Introduction to Public Health Emergency Preparedness
ENVR-40031-SP25	Geographic Information Systems (GIS) for Public Health Decision Making
ENVR-40029-WI25	Sustainability and Healthcare

The materials and syllabi will be available on moodle platform

Course 1: Introduction to Climate Changes, Health, and policy

Course Coordinator

- Dr. Myriam Mrad

Instructors

- Mrs. Lea Kai
- Dr. Maha Hoteit
- Dr. Margaret Handley
- Dr. Myriam Mrad

Course Code

- ENVR-40028-WI25

Timing

- Tuesdays and Thursdays from February 6 till March 4

Description

Provides an in-depth exploration of the relationship between climate change, human health, communication, and policy. Trainees will examine the scientific basis of climate change's environmental impacts and link it to human health. The course aims to equip trainees with a comprehensive understanding of climate adaptation strategies to mitigate health risks and the importance of effective communication in addressing climate change and health concerns. At the end of the course, trainees will be able to interpret and act upon potential climate change interventions and policies. The sessions cover the following topics but are not limited to Climate Change Fundamentals and Health Impacts, Climate Change Mitigation and Adaptation, Climate Resilient Cities, Policy and Governance, and Communication on Climate Change and Health.

Course 2: Vulnerable Communities

Course Coordinator

- Mr. Emile Whaibeh

Instructors

- Dr. Alissar Rady
- Mr. Emile Whaibeh
- Dr. Maha Hoteit
- Dr. Margaret Handley

Course Code

- ENVR-40032-SP25

Timing

- Tuesdays and Thursdays from March 6 till April 3

Description

The course provides participants with the ability to learn and be part of the implementation of early warning systems in their ministries and organizations that focus on the most vulnerable sector of the population. The vulnerabilities focus on climate and infectious diseases, malnutrition and food insecurity, exposure to air pollution, or heatwaves, and the tools for monitoring, early warning alert systems, and policies to protect them. Participants will be able to understand and develop skills in relation to forecasting, prediction, monitoring, and response to warnings.

For monitoring there will be a hands-on demonstration of air pollution measures using monitors as well as developing heat alert warning systems. Participants will also be able to design and implement community-based early warning systems into the process of the cycle of disaster risk reduction. The sessions cover the following topics but are not limited to: Early Warning Systems, Risk Assessment in Emergency Planning, Forecasting Climate Disease Burden, Develop and Implement Climate and Health Adaptation Plans, Community Disaster Management, Evaluation of Vector-Born Diseases, Climate-Related Food Insecurity, and Air Pollution Exposure, Measurement, and Impact.

Course 3: Introduction to Public Health Emergency Preparedness

Course Coordinator

- Ms. Sawsan Bou Fakherdin

Instructors

- Ms. Sawsan Bou Fakherdin
- Dr. Margaret Handley

Course Code

- ENVR-40030-WI25

Timing

- Tuesdays and Thursdays from March 8 till May 13

Description

This course provides an overview of public health emergency preparedness with a focus on risk assessment methods and the management of disasters and humanitarian interventions. Trainees will explore the principles and practices essential for preparing for, responding to, and recovering from public health emergencies, including extreme weather events such as flooding, heatwaves, and wildfires. The sessions cover the following topics but are not limited to Foundations of Public Health Emergency Preparedness, Risk Assessment Methods, Disaster Management, Design and Implementation of Disaster Management Intervention, Humanitarian Intervention, Mitigation and Prevention, and Communication and Public Information

Course 4: Geographic Information Systems (GIS) for Public Health Decision Making

Course Coordinator

- Dr. Georges Mitri

Instructor

- Dr. Georges Mitri
- Dr. Margaret Handley
- Dr. Rouba Ziade

Course Code

- ENVR-40031-SP25

Timing

- Tuesdays and Thursdays from May 15 till June 3

Description

Provides an in-depth exploration of the relationship between climate change, human health, communication, and policy. Trainees will examine the scientific basis of climate change's environmental impacts and link it to human health. The course aims to equip trainees with a comprehensive understanding of climate adaptation strategies to mitigate health risks and the importance of effective communication in addressing climate change and health concerns. At the end of the course, trainees will be able to interpret and act upon potential climate change interventions and policies. The sessions cover the following topics but are not limited to Climate Change Fundamentals and Health Impacts, Climate Change Mitigation and Adaptation, Climate Resilient Cities, Policy and Governance, and Communication on Climate Change and Health.

Course 5: Sustainability and Healthcare

Course Coordinator

- Dr. Myriam Mrad

Course Code

- ENVR-40029-WI25

Instructors

- Mrs. Lea Kai
- Dr. Margaret Handley
- Dr. Myriam Mrad
- Mr. Saleh Rababa

Timing

- Tuesdays and Thursdays from June 5 till June 26

Description

The Sustainability and Healthcare course provides a comprehensive examination of the intersection between sustainability and healthcare. It explores the critical role that healthcare institutions play in promoting environmental stewardship and public health. Trainees will gain insights into sustainable practices within healthcare settings, focusing on waste and energy management, environmentally friendly hospital design, reduction of indoor environmental exposure, and the integration of artificial intelligence (AI) to enhance sustainability efforts while complying with the Sustainable Development Goals (SDGs).

This course will also delve into climate-resilient healthcare systems, climate migration and healthcare accessibility, and healthcare systems during climate crisis adaptation and preventive measures. Using the WHO tool for climate resilient health system to evaluate healthcare centers. The sessions cover the following topics but are not limited to: Introduction to Sustainability in Healthcare, Healthcare Waste and Energy Management, Indoor Environmental Pollution in Healthcare and Health Impacts, Green Hospitals, Integration of artificial intelligence (AI) in Sustainable Healthcare, Healthcare Systems and Climate Crises, Climate-Resilient Healthcare Systems, and Evaluation of Vulnerability of Health Care Syst.