



## COURSE OUTLINE: CCM107 - CLIMATE & HEALTH

Prepared: A. Piaskoski

Approved: Karen Hudson, Dean, Community Services and Interdisciplinary Studies

<b>Course Code: Title</b>	CCM107: CLIMATE CHANGE AND HUMAN HEALTH
<b>Program Number: Name</b>	5250: CLIMATE CHANGE MIT.
<b>Department:</b>	NATURAL RESOURCES PRG
<b>Academic Year:</b>	2024-2025
<b>Course Description:</b>	Climate changes and disruptions have health effects that can include increased respiratory and cardiovascular disease, injuries and premature deaths related to extreme weather events, changes in the prevalence and geographical distribution of food- and water-borne illnesses and other infectious diseases, and threats to mental health. Students will explore the human health impacts due to climate change with an emphasis on adaptation and mitigation strategies
<b>Total Credits:</b>	3
<b>Hours/Week:</b>	3
<b>Total Hours:</b>	42
<b>Prerequisites:</b>	There are no pre-requisites for this course.
<b>Corequisites:</b>	There are no co-requisites for this course.
<b>Vocational Learning Outcomes (VLO's) addressed in this course:</b>	<b>5250 - CLIMATE CHANGE MIT.</b>
<b>Please refer to program web page for a complete listing of program outcomes where applicable.</b>	VLO 2 Interpret and apply international, national and regional level environmental and climate policy to support mitigation and adaptation strategies.
	VLO 5 Assess potential environmental threats to human health and natural systems due to climate change and propose adaptive strategies to address them.
	VLO 6 Apply an integrated ecosystem management approach to climate change to balance mitigation, intervention and adaptation strategies.
	VLO 8 Facilitate stakeholder engagement and collaboration, across various levels and branches of government and the community to secure support for various initiatives.
<b>Essential Employability Skills (EES) addressed in this course:</b>	EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.
	EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.
	EES 4 Apply a systematic approach to solve problems.
	EES 5 Use a variety of thinking skills to anticipate and solve problems.
	EES 6 Locate, select, organize, and document information using appropriate technology and information systems.
	EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.
	EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others.
	EES 9 Interact with others in groups or teams that contribute to effective working



relationships and the achievement of goals.

EES 10 Manage the use of time and other resources to complete projects.

EES 11 Take responsibility for ones own actions, decisions, and consequences.

**Course Evaluation:**

Passing Grade: 50%, D

A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.

**Other Course Evaluation & Assessment Requirements:**

Academic success is directly linked to attendance. Missing more than 1/3 of the course hours in a semester shall result in an 'F' grade for the course.

**Course Outcomes and Learning Objectives:**

<b>Course Outcome 1</b>	<b>Learning Objectives for Course Outcome 1</b>
1. Explain the impacts of climate change on human health and explore the complex pathways between climate and health outcomes.	1.1 Describe the relationship between human health and the environment and the components of health risk, including vulnerability, exposure, and hazards. 1.2 Define the direct and indirect health impacts of climate change and demonstrate this relationship with a visual model. 1.3 Reflect on the mental health and community health impacts of climate change. 1.4 Examine climate driven changes to the transmission season and geographical range of infectious diseases. 1.5 List and prioritize direct and indirect health impacts of climate change globally, regionally, and locally.
<b>Course Outcome 2</b>	<b>Learning Objectives for Course Outcome 2</b>
2. Assess the factors and conditions that increase vulnerability to the adverse health outcomes of climate change and climate hazards and identify population groups at an increased risk.	2.1 Explain the factors that influence vulnerability to climate-related health impacts, including exposure, sensitivity, and adaptive capacity. 2.2 Examine the social, political, and economic determinants of health and how they relate to climate-health outcomes. 2.3 Discuss the increased health inequities of climate change and recognize the conditions that put different populations and geographic areas at a greater risk.
<b>Course Outcome 3</b>	<b>Learning Objectives for Course Outcome 3</b>
3. Explore climate mitigation and adaptation strategies that protect human health and prevent negative health outcomes.	3.1 Understand the relationship between climate mitigation strategies and population health outcomes, including the health co-benefits of climate change mitigation. 3.2 Describe climate adaptation strategies that are protective of human health and define primary, secondary, and tertiary adaptive prevention. 3.3 List the factors that make up climate resilient health systems and explain why they are necessary. 3.4 Explain early warning systems for those with climate sensitive health impacts.
<b>Course Outcome 4</b>	<b>Learning Objectives for Course Outcome 4</b>
4. Apply health related climate adaptation and mitigation strategies to real	4.1 Explore models and assessment tools that are used to understand the human health impacts of climate change. 4.2 Demonstrate the application of health impact assessments,



	world examples using a variety of tools and methods.	climate vulnerability assessments, and other tools to identify the best course of action. 4.3 Use mapping and surveillance data to identify areas that are vulnerable to health risks associated with climate change. 4.4 Understand the role of public health communication during a climate related event and the components of an effective message. Use this to create key messages for a diverse audience on a climate-health topic.
	<b>Course Outcome 5</b>	<b>Learning Objectives for Course Outcome 5</b>
	5. Understand the current landscape of climate change mitigation and adaptation as it relates to human health.	5.1 Summarize a recent climate event or risk and reflect on the possible effects on human health and well-being, and the potential measures carried out to reduce its impact on human health. 5.2 Outline the roles and responsibilities of various organizations and sectors in addressing climate change and safeguarding human health. 5.3 Describe current health policies and practices (local, provincial, federal, and global) on climate change.

**Evaluation Process and Grading System:**

<b>Evaluation Type</b>	<b>Evaluation Weight</b>
Assignments & In-class Activities	20%
Final Project	30%
Personal Reflections	10%
Quizzes	10%
Tests	30%

**Date:** June 28, 2024

**Addendum:** Please refer to the course outline addendum on the Learning Management System for further information.