

# HESO 449

## EcoHealth: Global Implications

Thursdays  
6:00pm- 9:00pm  
Buchanan B316



Conservation Medicine • Human Health • Ecosystem Sustainability



- 3 minute conversations about a topic of your choice
- Once your time is up, pick a word that you feel best describes your partner and write it on their back

# Health

- Physical, mental well-being
- Emotional well-being
- Spiritual well-being (culture)
- state

# Health

- WHO (1948) “Health is the state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”
- Jean Lebel (Ecohealth): “The harmonious participation in the resources of the environment, which allows individuals the full play of their functions and aptitudes.”

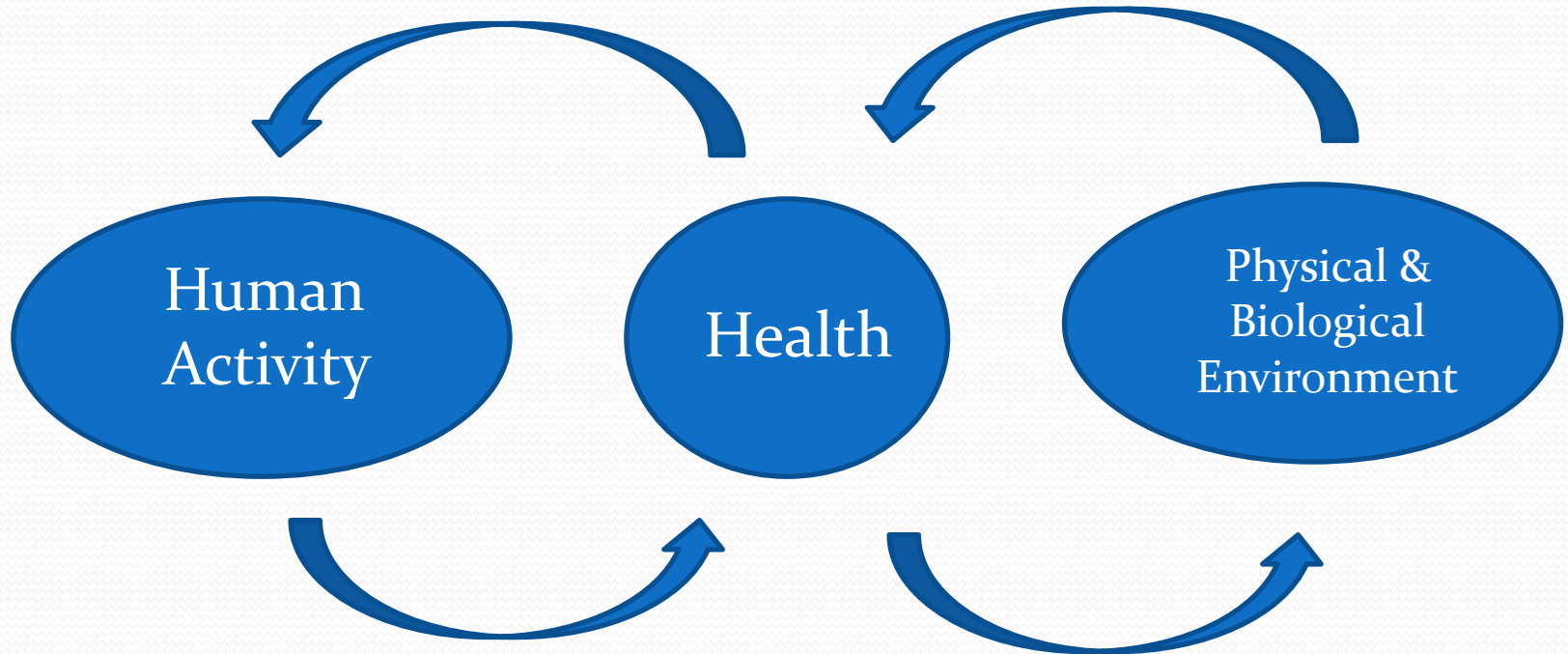
# Environmental Health

- Smooth running of ecosystem
- Equilibrium
- Examples: gulf of mexico, oil spill,
- Sustainability of resource use- species diversity

# Environmental Health

- WHO (1993) “Those aspects of human health, including quality of life, that are determined by physical, biological, social and psychosocial factors in the environment. It also refers to the theory and practice of assessing, correcting, controlling and preventing these factors in the environment that can adversely affect the health of present and future generations.”

# Interactions



# Environmental Protection

- Sustainability
- Renewable resources
- Preservation of biodiversity
- Conservation
- Wildlife protection
- Pollution reduction
- Public awareness of potential environmental threats



# Environmental Protection

- Environmental protection is a practice of protecting the environment, on individual, organisational or governmental level, for the benefit of the natural environment and (or) humans.
- A review of the government's success in tackling pollution, and scenes of ongoing public and private efforts to protect the environment by preventing pollution and recycling waste.
- means taking an action, or a relinquishment from an action that facilitates preservation or restoration of natural balance.

# Environmental Protection in BC

The Environmental Protection Division (EPD) of the Ministry of Environment works to prevent pollution and promote and restore environmental quality. Its business goals are:

- Pollution Prevention
- Reduction of provincial greenhouse gas emissions and increasing British Columbia's capacity to anticipate climate change impacts and to adapt to these impacts
- Continuous Improvement in Air, Land and Water Quality
- Fully Engaged Partners.

# Sustainable Development

- Can't do it: was fine before
- Inputs are depleting from elsewhere
- Localized: communities meeting their needs on their own
- Still need to consider economies of scale (efficiency)
- Stripped of resources
- Examples: solar panels
- Definitions: longevity of resource use such that it reaches max percentage of pop
- Political resolution: better relationships
- Currently focused on the individual (expand ?)
- Ethnocentrism: it's not developed until it's the West
- Energy: biofuels, wind turbines, solar,
- 1000\$ cars in India
- Lack of government support for energy research
- Misbranding of sustainable development by entrepreneurs
- Corporate accountability

# Sustainable Development

- Brundtland Commission: “Meeting the needs of present generation without compromising the ability of future generations to meet their needs.”

# Break



# Eco-Health



# Eco-Health

- “For people to be healthy, they need healthy environments.”
- IDRC: “The Ecosystems and Human Health Program (Ecohealth) promotes research that brings multiple points of view to the table. By bringing a novel transdisciplinary approach to old and new problems, Ecohealth aims to elucidate the links between human health and ecosystems' health so as to protect and improve both.”
  - People’s social and economic aspirations are to be considered because we have the power to control, develop, use or abuse the environment

# Examples of Eco-Health in action?

- Answering the question:
  - Can people live in a world that is sick?



# Food Security, Adequate Care and Environment: Eco-Nutrition Guidelines for Community Action on Climate Change (Tanzania & Malawi)

- collect relevant data on nutritional status and dietary strategies, health care, environmental quality, landscape diversity, food security;
- undertake a situation analysis on the type of agricultural interventions and main sources of food;
- assess needs of the communities for improved food and nutrition security; and
- design an intervention around to respond to those needs and develop guidelines for uptake by other areas.

# Lake Naivasha Sustainability: Ecosystem Improvement for Health and Wellbeing

- Lake Naivasha's chemical composition is shared by water adjacent to the lake and even further South. The Lake's water quality directly affects the quality of drinking water.
- With demand increasing on this Lake system, there is an inherent tension regarding human and ecosystem health: the steady income from jobs can be beneficial for health but pesticide use, mercury loading and eutrophication from industrial and domestic wastes are harmful. There is a real need to create local capacity to maintain the quality of this highly used water source – the ecosystem services of the lake are critical for present and future generations.

# Community of Practice in Ecohealth (CoPEH)

- With a growing capacity in ecohealth methodologies, researchers and practitioners expressed a need for a venue for collaboration. The creation of a CoP focusing on the ecohealth approach (CoPEH) allows individuals to share their experiences and knowledge, avoid duplication, and further develop their skills and knowledge.

# Course Goal

- The goal of this course is to analyze and interpret Ecohealth and to examine its efficacy in terms of addressing environmental, global health and poverty issues as compared to more conventional, unilateral approaches. In addition to the different perspectives offered by the course readings and guest lecturers, participants will be exposed to new opinions by working collaboratively and drawing on one another's strengths and experiences in particular areas in order to carry out multi-dimensional analyses.

# 1. Interactions of health and the environment:

- In this module, we will be introduced to topics in Eco-Health through discussion and debate. Guest lecturers will share their experiences with Eco-Health.

## 2. Region-specific environmental/ health issues

- In this module, we will explore ecosystems in specific regions of the world and the health and development issues that are present.

### 3. Proposing solutions:

## Global Environmental Change

- In this module, we will focus on large-scale environmental changes (climate change, ozone depletion, loss of biodiversity, urbanization, etc) and their effects on human populations.

# *Grade Distribution*



## Unit 1 (January): Interactions of Health and the Environment

- *A Critical Discovery (weeks 3-5): 20%*

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  - *Based on homework readings*
- *Each week: In pairs, students will present a critical perspective of one of the assigned readings*
  - *Integrate with your own outside readings; creativity*
  - *short, informal*
- *Rest of the class: take the pro side (support the author) for the week's assigned readings*
  - *Peer-evaluate the critics*

## Unit 1 (January): Interactions of Health and the Environment

- *A Critical Discovery (weeks 3-5): 20%*

## Unit 2 (February): Region-specific Environmental and Health issues: 25%

- *Group presentations (3 weeks)*
- Groups of 3 students will select a specific region and outline the environmental, developmental, and health implications and interactions. Examples: Extreme weather events and their effects on sanitation systems (Haitian earthquake case study), HIV and nutrition in Swaziland, etc. Groups will be responsible for assigning readings relevant to their presentation and facilitating online discussion following their presentation.
- *No class for Reading Break (February 17)*

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## Unit 2 (February): Region-specific Environmental and Health issues

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- *No class for Reading Break (February 17)*

## Unit 3 (March): Climate Change Solutions

- *Proposal & UN meeting: 35%*
- *students will propose a solution to one of these issues. The idea will be explained in paper and presented to the class in the form of a UN meeting. The suggested solution should be informed by literature.*

***Weekly Blog participation: 10%***

-each entry graded 0-3

***Attendance: 5%***

-strongly encouraged for this discussion-based course  
-no penalty for missing one class; -1% for every class missed thereafter.

***Participation: 5%***

-mid-point and year-end peer evaluation survey  
-active contribution to class discussion throughout the course

# Grade Distribution

- Article Discussion & Debate (partners): 20%
- Regional Presentation (groups of 3): 25%
- Proposal & UN meeting (groups of 4): 35%
- Blog Discussion Entries: 10%
- Participation & Attendance: 10%

# Expectations

- Sharing current news relevant to Ecohealth
- Comment for peer evaluation: constructive
- Respectful debates
- Blog comments: reference if you feel necessary
- Share concerns
- Relevant movie

# Timeline

Date	Speaker	Presentations	Theme
Jan-06			
Jan-13	Dr. Spiegel		<b>Why Ecohealth?</b>
Jan-20	Ben Brisbois	2 article	Ecohealth in the field
Jan-27		4 articles	Nutrition/ Climate Change
Feb-03	<i>Dr. Kamat</i>	2 articles	Water & Sanitation/ Natural Disasters
Feb-10	<i>TBD</i>	2 pres	<b>Regional:</b> Coral Reefs in Tanzania
Feb-24	Kay Teschke	2 pres	Regional: Water Systems in Langley
Mar-03	<i>Dr. Maclean</i>	2 pres	Regional: Nutrition in Sub-Saharan Africa
Mar-10	Dr. Dharamsi		<b>Global Change Solutions</b>
Mar-17		2 UN	
Mar-24		2 UN	
Mar-31		Wrap-up	



# Questions & Concerns?

