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CURRICULUM GUIDE: OFFICIAL COURSE OUTLINE

Course Code	HSCI 216	Course Title	Ecological Determinants of Human Growth, Development and Health			
Credit Value	3	Department	Mathematics and Science			
No. of weeks	14	Hrs. per week	*Lecture*	*Tutorial*	*Laboratory*	*Total*
			3	1	0	4
Course Description	Human growth, development, and health are impacted by different social and physical factors. This course focuses on the genetic, evolutionary, ecological, and epidemiological factors related to human health and development. Important events in human history such as natural disasters, industrialization, globalization, war, and climate change are examined in relation to their impact on human health.					
Prerequisite(s)	ENGL 100, HSCI 130 or BIOL 101					

Initial Articulation Targets	*UBC*	*SFU*	*UVic*	*UNBC*	*TRU*
	ELEV 1st (3)	HSCI 216 (3)	HINF 2XX (3)	HHSC 2XX (3)	HLTH 2XXX (3)
	For updated information on the transferability of this course, please consult the BC Transfer Guide, www.bctransferguide.ca				

Learning Outcomes

Upon successful completion of this course, the student will be able to:

- Explain the relationship of genetics and evolution to human health.
- Evaluate how ecological and environmental factors determine human health and development.
- Assess the changes in public health in communities affected by social and ecological challenges.
- Describe how different healthcare systems address public health concerns.
- Formulate potential solutions to address the ecological factors that impact human health

Content

Core topics – all of the following will be covered:

- Basic models for Genetics and Evolution
- Evolution and Health
- Human health demographics
- Evolution and Epidemiology
- Ecological factors affecting reproduction, growth, and development
- Migration and epidemiology
- Socio-economic factors that affect health
- Impacts of natural calamities and catastrophes on health
- Impacts of industrialization and globalization on health
- Impact of war on health

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- Climate change and health

Additional topics may also be covered, at the discretion of the instructor:

- Ecological impacts on Canadian health
- Indigenous perspectives on health

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<tr><td>Methods of Instruction</td><td colspan="3">Lectures and tutorial. Contact time will involve interactive learning activities such as group discussion, project, reading assignments, quizzes and tests, written assignments.</td></tr>
<tr><td>Required Textbook(s)</td><td colspan="3">The following textbook(s) is/are required, or approved equivalent(s).

Zimeri, A.M. (2018). Introduction to Environmental Health (2nd ed.). Solana Beach, CA: Cognella Academic Publishing.

Supplemental Text(s):

Moeller, D. (2011). Environmental Health (4th ed.). Cambridge: Harvard University Press.</td></tr>
<tr><td>Required Equipment and Technology</td><td colspan="3">Students are required to have a computer with internet access.
The following resources are provided by the College:
• Office 365
• Student email</td></tr>
<tr><td>Homework Hours</td><td colspan="3">At minimum, students can expect one hour of homework for every hour of instructional time.</td></tr>
<tr><td rowspan="6">Evaluation</td><td>Component</td><td colspan="2">% Value</td></tr>
<tr><td>Quizzes and assignments</td><td colspan="2">10-20%</td></tr>
<tr><td>Group work</td><td colspan="2">10-20%</td></tr>
<tr><td>Peer-reviewed journal presentation</td><td colspan="2">10-20%</td></tr>
<tr><td>Midterm examination</td><td colspan="2">20-30%</td></tr>
<tr><td>Comprehensive final examination</td><td colspan="2">25-35%</td></tr>
<tr><td>Completion Requirements</td><td colspan="3">The minimum grade to pass this course is D (50%). Unless otherwise stated, a minimum grade of C- (55%) is required for this course to fulfil a prerequisite.</td></tr>
<tr><td>Course Designer(s)</td><td>Michael Chua, Ph.D., Biology Instructor, Alexander College</td><td>Consultant(s), if applicable</td><td>Carol Pollock, Ph.D., Professor Emerita, University of British Columbia</td></tr>
<tr><td>Dean’s Approval</td><td>Steven Roe, PhD., Dean of Arts and Sciences, Alexander College</td><td>Dean’s Approval Date</td><td>January 17, 2023</td></tr>
<tr><td>Curriculum Committee Approval Date</td><td>January 17, 2023</td><td>First Term Offered</td><td></td></tr>
<tr><td>Last Review Date</td><td>January 17, 2023</td><td>Next Review Date</td><td>January 17, 2028</td></tr>
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Revision History	

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