



**COURSE OUTLINE**

**ENVS 226**  
**ENVIRONMENTAL CHANGE AND COMMUNITY HEALTH**

**45 Hours**  
**3 credits**

**PREPARED BY:** Larry Gray, instructor  
**DATE:** January 2010

**APPROVED BY:** Jeff Wolosewich, Dean  
**DATE:** January 2010

**YUKON COLLEGE**

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Course Outline prepared by Larry Gray, January 2010

Yukon College  
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**DIVISION OF APPLIED SCIENCE AND MANAGEMENT**  
**School of Science, Trades and Technology**  
**Winter 2010**

**ENVS 226**  
**ENVIRONMENTAL CHANGE AND COMMUNITY HEALTH**

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**INSTRUCTOR:** Larry Gray

**OFFICE HOURS:** Fridays, 9:00 am. – noon.  
**OFFICE LOCATION:** A2310

**TELEPHONE/E-MAIL:** 332-4442 / lgray@yukoncollege.yk.ca  
**FAX:** 668-8828

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**COURSE OFFERING** Tuesdays and Thursdays 9-10:30 am.  
**DAYS & TIMES:**

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**COURSE DESCRIPTION**

This course (developed in collaboration with Canada's Northern Contaminants Program and Trent University) is complementary to ENVS 225 Environmental Change and Fish & Wildlife Health. It covers some of the same material, but in less depth and focuses more on impacts of environmental changes (such as environmental contaminants and climate change) on human health. The course is relevant for all northerners, but particularly those interested in working in the health field. The importance of traditional food to the health of northerners, alternative models of health and wellness, and traditional versus modern diets are all discussed in light of the latest research results on contaminants and other environmental issues in the north.

**LEARNING OUTCOMES:**

With successful completion of the course, students will have demonstrated

- a. Recognition and appreciation of the geographic and global scope of environmental changes that affect the north, particularly, the long-range and point source contaminants and climate change.
- b. Understanding of the holistic connections (spiritual, mental, physical and emotional) between the land/wildlife and human health.
- c. Appreciation of what it means to be a healthy person and a healthy community.

- d. Understanding of human exposure assessment, toxicology and epidemiology of selected northern contaminants as well as an understanding of human risk and benefit assessment and management procedures for northern contaminants
- e. Ability to make informed choices about a healthy lifestyle and to develop a Community Health Education Plan for the student's community.

### **DELIVERY METHODS/FORMAT:**

This course is designed for distance delivery. There will be two 1 ½ hour videoconferences each week and a course website, including a discussion forum and links to other information sources.

### **PREREQUISITES:**

Pre-requisite is 2<sup>nd</sup> year standing or permission of the instructor

### **COURSE REQUIREMENTS/EVALUATION:**

#### **Attendance and Participation**

Attendance at all videoconference sessions is mandatory. Unexcused absences in excess of 10% of scheduled activities may result in dismissal at the instructor's discretion.

#### **Assignments**

Weekly assignments are given. Students will also undertake a major research project on a "real-life" environment and community health issue, demonstrating the links between the two. The project will be written up as a term paper.

#### **Evaluation**

The course grade will be arrived at as follows:

|                        |     |
|------------------------|-----|
| Assignments            | 20% |
| Mid-Course Exam        | 20% |
| Research Project/Paper | 30% |
| Final Exam             | 30% |

### **PLAGIARISM**

It should be noted that plagiarism (academic dishonesty) is a serious academic offence and will result in your receiving a mark of zero on the assignment or the course. In certain cases, it can also result in dismissal from the College. Plagiarism involves representing the words of someone else as your own, without citing the source from which the material is taken. If the words of others are directly quoted or paraphrased, they must be cited according to standard procedures. The resubmission of a paper for which you have previously received credit and the submission of the same paper for two courses also constitutes plagiarism and academic dishonesty. **Do not jeopardize your academic future with plagiarism. It is dishonest and can have serious consequences.**

### **REQUIRED TEXTBOOKS/MATERIALS:**

Smith, R. & Lourie, B. (2009). *Slow Death by Rubber Duck*. Alfred A, Knopf. Canada.  
A course reader with selected readings as well as on-line resources.

**EQUIVALENCY/TRANSFERABILITY:**

In progress

|         |  |
|---------|--|
| Week 1  | <p>Introduction to the course and course website</p> <p>The history, roles and activities of NCP</p> <p>What is health? What is community?</p>   |
| Week 2  | <p>Models of Health/Health Issues</p> <p>First Nations concepts and models of health (ex, medicine wheel)</p> <p>Major health issues in Yukon First Nations communities</p>  |
| Week 3  | <p>Traditional foods and their importance to northern cultures</p> <p>Contaminants I: What is a contaminant?</p> <p>The 4 major categories of contaminants</p>   |
| Week 4  | <p>Contaminants II:</p> <p>Sources, pathways and action of contaminants in arctic ecosystems</p> <p>Food webs, biomagnification and bioaccumulation</p> <p>Levels and spatial and temporal trends of contaminants in the arctic with focus on the Yukon</p> <p>Current management tools and regulations for contaminants</p> |
| Week 5  | <p>Traditional Diets, the North American Diet and Contaminants</p>   |
| Week 6  | <p>Health and Nutrition: Making Informed Choices</p>   |
| Week 7  | <p>Health and Nutrition: Making Informed Choices</p>   |
| Week 8  | <p>Community health risk assessment</p>  |
| Week 9  | <p>Community health risk assessment</p> <p>Case Studies in “Eco-Health”</p>  |
| Week 10 | <p>Climate Change and Community Health</p>   |
| Week 11 | <p>Climate Change and Community Health</p>   |
| Week 12 | <p>Developing a Community Health Education Plan</p>  |
| Week 13 | <p>Developing a Community Health Education Plan</p>  |