

SPPH 511 – Cancer Control and Epidemiology

Syllabus – Winter 2017

Purpose:

- To acquire an understanding of the current evidence regarding the etiology of cancer
- To acquire an understanding of current issues and directions in cancer control
- To be able to review and critically appraise epidemiologic studies of cancer
- To develop an understanding of cancer control research, and cancer control programs including prevention, screening, and early detection
- To gain an understanding of economic, quality of life and ethical issues in cancer control

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Teaching Assistant: Héctor A. Velásquez García [hector.velasquezgarcia@alumni.ubc.ca]

Schedule: Monday 1:30 – 4:30 pm, January 4- April 4
(No classes: February 8, February 15, March 28)

Location: Dorothy Lam Board Room – 1st Seminar Room, BC Cancer Research Centre
675 West 10th Avenue, Vancouver
(Exceptions January 16, March 20, 8th Floor Seminar Room)

Prerequisite: SPPH 502 or equivalent

Evaluation:	Final Research paper (topic to be chosen by February 27 th)	50%
	One written assignment during the course	25%
	Class Reflections	10%
	Class presentation on one reading	10%
	Attendance and participation	5%

Final Paper See information at the end

Written Assignment

An assignment will be given at the end of the first lecture to be due by start of class on **Monday February 6th**.

Class Presentations

There will be a selection of readings assigned for each lecture topic. At each lecture, two or three students will present an article in journal club format, in their session.

Reflections:

Students will write three take-home messages they received from each session's presentation and discussion. Each student will submit her/his three take-home messages from the lecture by the end of the same day: Each reflection will contribute to 1.5% of the mark up to a maximum of 15 marks.

Attendance

Students are expected to attend all classes having reviewed the assigned readings. A mark is awarded for each session prepared for and attended up to a maximum of 10 marks.

Lecture Schedule

Date	Lecture Title/Description	Leader
Week 1	Introduction to Cancer Epidemiology (January 9, 2016) <ul style="list-style-type: none"> • review of expectations, course format and evaluation (Regier) • overview of cancer epidemiology (Woods/Spinelli) 	Woods
Week 2	Cancer Biology (January 16, 2016) <ul style="list-style-type: none"> • basic tissue structure and genetics • cancer promotion and progression 	Rosin
Week 3	Genetic Cancer Epidemiology (January 23, 2016) <ul style="list-style-type: none"> • haplotypes and linkage disequilibrium • establishing genetic etiology (twin, family history and association studies) • candidate gene and Genome-Wide Association Studies (GWAS) 	Brooks-Wilson
Week 4	Environment and Cancer (January 30, 2016) <ul style="list-style-type: none"> • relationship between cancer and environmental exposure • cancer prevention through community knowledge translation 	Dummer
Week 5	Skin Cancer Epidemiology (February 6, 2016) <ul style="list-style-type: none"> • disease detection and follow-up • imaging and early detection 	Lee
Week 6	Family Day (February 13, 2016)	

Date	Lecture Title/Description	Leader
Week 7	Reading Week (February 20, 2016)	
Week 8	Nutrition and Cancer (February 27, 2016)	Murphy
	<ul style="list-style-type: none"> • association between cancer and nutrition • challenges in dietary assessment and analysis 	
Week 9	Physical Activity and Cancer (March 6, 2016)	Campbell
	<ul style="list-style-type: none"> • association between physical activity, sedentary behavior and cancer risk • measurement of physical activity and sedentary behavior in epi studies 	
Week 10	Cancer Screening and Early Detection (March 13, 2016)	Coldman
	<ul style="list-style-type: none"> • components of an effective screening program evaluation (sensitivity and specificity) • issues in planning cancer screening 	
Week 11	Health Economics and Cancer Control (March 20, 2016)	Peacock
	<ul style="list-style-type: none"> • economic issues in cancer • economic evaluation and cancer control programs 	
Week 12	Cancer Survivorship (March 27, 2016)	McBride
	<ul style="list-style-type: none"> • issues in cancer survivorship • implementation and evaluation of cancer survivor programs 	
Week 13	Quality of Life and Ethics and Cancer Control (April 3, 2016)	Regier
	<ul style="list-style-type: none"> • approaches measuring quality of life • personalized medicine and incidental findings • ethical issues in genomics 	

SPPH511 Research Paper

The SPPH511 research paper can be on any subject related to the topics in the syllabus, to be approved by the course co-coordinators. Many students choose a topic that is related to their previous or current work in cancer. However, others chose to address a topic of interest that comes up during the course.

The research paper should follow the usual structure for an essay or short dissertation. For example:

- definition and scope of the topic (research question/hypotheses);
- approach to the topic - literature, survey, statistics, etc. (methods/data);
- findings (results); and,
- recommendations and conclusions (discussion/conclusion).

Students are encouraged to choose a research topic that is of interest/relevant to their work/studies, but this is not required.

Students should email their **proposed topic/research question** to the course coordinators by **Monday February 27, 2016**.

Here are some guidelines for preparing your paper:

- Papers must be typed double-spaced maximum 10 pages (excluding references, tables and figures). Use "Times New Roman" font 12.
- Articles should be written in clear English (terminology and abbreviations not consistent with internationally accepted guidelines should be avoided).
- Number the references in the order of their first mention in the text; cite only the number assigned to the reference.
- reference style follows that of the Uniform Requirements for Manuscripts Submitted to Biomedical Journals, which can be found on the website of the National Library of Medicine www.nlm.nih.gov/bsd/uniform_requirements.html

Marking is based on relevance, originality, content and style.

**Research papers must be submitted to the course coordinators
by Monday April 10, 2016.**

Below are some examples of previous topics/research questions:

- The Molecular Epidemiology of Breast Cancer
- Cervical Cancer: Aim Towards Reducing the Global Disease Burden Through Primary Prevention based on Environmental and Genetic Risk Factors
- Reaching the Underserved: A Review of Cervical Cancer Screening for Vulnerable Populations in Canada
- Sunlight exposure and Lung Cancer Survival in British Columbia
- An Overview of Environmental Risk Factors for Non-Hodgkin Lymphoma
- Disparity in Cervical cancer screening among visible minority women in Canada
- Improving Cancer Primary Prevention through Exposure Surveillance of Environmental Carcinogens in Canada
- Hormone Replacement Therapy and Breast Cancer in Postmenopausal Women: A Critical Evaluation of the Women's Health Initiative
- Colorectal Cancer: Genes and Lifestyle
- Epidemiological review of malignant glioma in Canada
- Association of cholangiocarcinoma and hepatitis c virus infection: A systematic review of epidemiological studies