

**SPPH 511: Cancer Control and Epidemiology**  
**Term 2 [Jan 9-Apr 10], 2:00-4:00 PST**  
**SPPH 143**  
**Course Syllabus**

		<b>Office Hours</b>	<b>Email</b>
Instructor	Rachel Murphy	In office after in-person class (Rm 132 SPPH), by appointment or e-mail at anytime	Rachel.murphy@ubc.ca

**ACKNOWLEDGEMENT**

UBC’s Point Grey Campus is located on the traditional, ancestral, and unceded territory of the xwməθkwəyəm (Musqueam) people. The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

I encourage all students to reflect on their positionality. [Weaving Relations](#) is a self-directed course developed jointly by the Faculty of Applied Science and the Faculty of Land and Food Systems. Weaving Relations explores Indigenous histories, people, and contexts, as well as settler colonialism in Canada, through the lens of Indigenous-Canadian relationships. The course considers how we got to where we are now, and how we can build a better future together. **This is a highly recommended Canvas course for all students.**

**INSTRUCTOR INFORMATION**

***Instructor***

Dr. Rachel Murphy is an Associate Professor in SPPH at UBC and a Senior Scientist in Cancer Control Research at BC Cancer. She completed her PhD in Nutrition and Metabolism from the University of Alberta and training in population oncology at the Cross Cancer Institute in Alberta. She joined the Laboratory of Epidemiology and Population Sciences at the National Institute on Aging, National Institutes of Health in Bethesda, MD, where she studied diet, body weight and healthy aging before coming to UBC in 2015. Dr. Murphy is interested in health promotion, particularly healthy eating and cancer prevention. Her research studies factors associated with healthy/unhealthy behaviours, mechanistic factors linking behaviours to cancer and programs aimed at encouraging healthy choices. Through her research, Dr. Murphy works with fellow researchers, knowledge users in health care settings, NGO’s and other stakeholders.

**COURSE OVERVIEW**

SPPH511 is an introductory, graduate-level course that exposes students to key issues and concepts in cancer control and epidemiology. SPPH 502 or equivalent is the prerequisite. Students will explore strategies, policies and challenges by examining

specific topics. This course focuses on cancer control related issues at the local, provincial, national and international level.

### **LEARNING OBJECTIVES**

At the end of SPPH 511, students will:

1. Demonstrate advanced understanding of the field of cancer control with an emphasis on the Canadian context;
2. Be aware of the concepts, issues and organizations involved in each of the areas of cancer control presented;
3. Apply knowledge of cancer control issues to critically evaluate the challenges of research, evidence-based decision making and public health programs/policies;
4. Apply knowledge from the class, and literature to critique or propose a cancer control program or policy
5. Have formed a sense of community with classmates as an outcome of interaction in the in-class sessions and on-line discussions.

### **COURSE STRUCTURE**

This course will take place **in person** (SPPH 143) and **online**. There are a total of 13 modules which will include a combination of asynchronous and synchronous learning (i.e., learning at a time you choose, or the set class time). It is necessary for you to participate fully in all parts of this course to successfully complete the course. The course revolves around case studies on a variety of cancer-related topics, each supported by recorded lectures, readings, web links, discussion questions, guest moderators and on-line discussion.

### **Readings and Resources**

There are optional and required readings for each module. All readings are available on the UBC Library Online Course Reserve (link on Canvas page). The goal is to provide an opportunity to expand your comprehension of the material.

**Modules:** There is one module per week that start on a Monday. Each week a 'big picture' question will be asked. The material for that week is selected to help inform critical thoughts about the question. Each module will have 'pre-work'. You have ~ 1 week to complete assigned readings and any related material. At least 24-hrs before the synchronous class session, students will post in the respective Module Discussion about the weeks question (discussion modules will *close at midnight* on Sundays). \*Note there is no pre-work for the first week of class. After the class students will complete a Muddiest Point Discussion (**see details under Assessments below**).

**In class sessions:** Mondays from 2:00-4:00 PST. All synchronous activities will take place during this time. The class time will be used for activities related to that week's module. For example, to synthesize the module activities including feedback from the Muddiest Point and discussion on the question(s) in a given module.

## **COURSE SCHEDULE**

The weekly course activities including links to readings/viewing materials can be found under modules on the course website. An overview is also provided below. There is 1 module per week, which runs from Monday to Monday, with 12 modules. The first module will start January 9<sup>th</sup> and the last one on April 3<sup>rd</sup>. **There will be no module over the mid-term break (February 20<sup>th</sup>) or Easter Monday (April 10<sup>th</sup> which is a holiday).**

**Date and Topic:** Module 1 (Jan 8), Overview of the course, Introduction to key concepts in cancer epidemiology and cancer research

**Objectives:** Be aware of cancer epidemiology terminology, identify different types of study designs and etiologic factors, review basics of cancer biology

**Activities:** Familiarize yourself with the course website, introduce yourself on the discussion board on the course website and engage with the discussion board on class participation. Post in the muddiest point discussion after class

**Date and Topic:** Module 2 (Jan 15), Health promotion and cancer

**Questions:** Are health promotion programs impacting cancer control? If not, why? How can the field move forward?

**Objectives:** Describe the origins of health promotion and the Ottawa Charter for Health Promotion, identify the role of health promotion and health protection, demonstrate examples of effective health promotion policies, describe risk perception in the context of cancer

**Activities:** Complete the pre-work: View the lecture. Read the core readings. Module 2 discussion. Post in the muddiest point discussion after class. Work on your infographic.

**Date and Topic:** Module 3 (Jan 22), Cancer surveillance

**Questions:** How can we improve how cancer cases are monitored in Canada? How does the Canadian system compare to other countries?

**Objectives:** Understand how cancer incidence, prevalence and related metrics are reported within Canada and BC, assess how data can be used to inform health system priorities

**Activities:** Complete the pre-work: View the lecture. Read the core readings and post in the Module 3 discussion. Guest moderator Jonathan Simkin, Scientific Director, BC Cancer Registry will join us for the synchronous session to discuss the provincial cancer system Post in the muddiest point discussion after class

**Date and Topic:** Module 4 (Jan 29), Lifestyle related cancer risk factors

**Questions:** Are lifestyle factors for cancer modifiable? If not, why? What public health efforts are needed?

**Objectives:** Describe evidence on lifestyle-related risk factors for cancer and how they may contribute to cancer development, define population-based methods to measure relationships, assess ways interventions can be implemented and barriers for public health strategies that address lifestyle.

**Activities:** Complete the pre-work: View the lecture. Read the core readings and Module 4 discussion. Come prepared to present and discuss the infographics. Post in the muddiest point discussion after class.

**Date and Topic:** Module 5 (Feb 5), Screening and cancer

**Questions:** What are the harms of screening? Do the benefits outweigh the harm(s)?

**Objectives:** Describe the principals of cancer screening, identify measures of screening success, define controversies in screening and gaps in evidence

**Activities:** Complete the pre-work: View the lecture. Read the core readings and Module 5 discussion. Guest moderator Angus Pratt will join us for the synchronous session. Post in the muddiest point discussion after class

**Date and Topic:** Module 6 (Feb 12), Big data, precision medicine and cancer

**Questions:** Are precision medicine approaches the key to advancing cancer control?

**Objectives:** To describe general approaches in big data and precision medicine, propose how big data and precision medicine can be used in cancer control, and assess challenges and opportunities in the field and incorporation into health system

**Activities:** Complete the pre-work: View the lecture. Read the core readings. Post in the Module 6 discussion. Post in the muddiest point discussion after class

### **Mid-term break Feb 19**

**Date and Topic:** Module 7 (Feb 26), Health disparities and cancer

**Question:** Use a health disparities lens to consider the following: In the context of a publicly funded healthcare system what are the considerations for developing a health promotion program or intervention?

**Objectives:** To describe the vast health disparities in cancer risk and cancer control with a National and International context, to identify contributors to health disparities, barriers to measuring disparities and opportunities to overcome them

**Activities:** Complete the pre-work: View the lecture. Read the core readings and post in the Module 7 discussion. Guest moderator Ace Chan, PhD Candidate, SPPH. Post in the muddiest point discussion after class

**Date and Topic:** Module 8 (Mar 4), Patient centred care

**Question:** Is it possible to shift from a top down approach to cancer care to a patient centred focus? What considerations are needed to realize this?

**Objectives:** To demonstrate how patient and caregiver perspectives can inform healthcare services. To introduce qualitative methods to capture patient and caregiver experiences

**Activities:** Complete the pre-work: View the lecture. Read the core readings. Post in the Module 8 discussion. Guest moderator Helen McTaggart-Cowan, Scientist, BC Cancer will join us for the synchronous session. Post in the muddiest point discussion after class.

**Date and Topic:** Module 9 (Mar 11), Cancer in Indigenous populations

**Questions:** How can Indigenous concepts of well-being inform our current health system? What are key gaps to consider?

**Objectives:** To describe health disparities for Indigenous people and demonstrate work underway to improve Indigenous cancer journeys

**Activities:** Complete the pre-work: Read the core readings and post in the Module 8 discussion. Post in the muddiest point discussion after class. Engage in discussion on feedback. Work on your elevator pitch for the next class.

**Date and Topic:** Module 10 (Mar 18), Cancer in the context of other diseases/public health problems

**Question:** In this era of seemingly constant threats to public health (e.g. COVID-19, opioid crisis), does cancer prevention and control matter?

**Objectives:** To situate cancer within the broader public health realm, and identify the impact on cancer control as a result of public health emergencies

**Activities:** Complete the pre-work: View the lecture. Read the core readings and post in the Module 10 discussion. Post in the muddiest point discussion after class. Present your elevator pitch!

**Date and Topic:** Module 11 (Mar 25), Global cancer burden

**Questions:** Is it possible (or practical) to shift health systems in developing countries from a focus on infectious disease to prevention/treatment of chronic disease?

**Objectives:** To provide a global context to cancer control, describe how cancer incidence and mortality rates vary across countries, identify challenges facing cancer control efforts in developing countries and describe trends in cancer

**Activities:** Complete the pre-work: View the lecture. Read the core readings. Post in the Module 11 discussion. Post in the muddiest point discussion after class.

**Date and Topic:** Module 12 (April 1), Emerging cancer risk factors

**Question:** What is 'enough' to warrant public health action?

**Objectives:** Discuss emerging risk factors such as vaping, sleep and stress. Be aware of the current state of evidence and identify critical gaps

**Activities:** Complete the pre-work: View the lecture. Read the core readings. Post in the Module 12 discussion. Post in the muddiest point discussion after class. Work on your final paper

**Date and Topic:** Module 13 (April 8), Decision making in cancer control

**Question:** Should the public provide input on coverage of cancer drugs to ensure decisions are ethical and fair?

**Objectives:** To outline cancer control in the context of the health care system, and discuss the role of economics in cancer control in public health care.

**Activities:** Complete the pre-work: View the lecture. Read the core readings. Post in the Module 13 discussion. Post in the muddiest point discussion after class. Work on your final paper

## SUMMARY OF ASSESSMENT

	%	Due Date	Where to Submit
Muddiest point discussion	10	Weekly	Post in Discussions
Participation	15	Ongoing	Synchronous and asynchronous activities
Infographic	10	Jan 29	Course wesite
Discussion posts on Module questions	10	Weekly	Post in Discussions
Briefing Note	20	Mon Feb 12	Course website
Elevator pitch	10	Mar 18 *Engage in discussion on feedback by Mar 17	In class and Discussion post
Final Essay	25	Fri Apr 19	Course website
TOTAL	100		

## ASSIGNMENT DESCRIPTIONS

### Muddest Point Discussion-10% of overall grade

There will be a Muddiest Point Discussion for each module. This formative assessment tool is designed to help you understand the course material. Identify and post your comments on any concept in a given module that:

- You had to work on understanding or that remained unclear in the material
- Gave you more insight into the topic
- Made you wish to learn more

You will receive a grade for participation, although I would suggest the general guideline of one paragraph or less.

### Participation-15% of overall grade

An assessment of the degree you demonstrate engagement in synchronous and asynchronous activities throughout the term. Quantity and quality of participation in the learning environment are considered.

Participation looks different for everyone and we will consider a range of avenues. As one of the course objectives is to form a sense of community, I would like to co-develop a rubric for class participation. A discussion on what participation means to you will be on Canvas. Please engage within the first week of class. A summary will be shared with the class and used to inform the assessment.

Some of the competencies we have considered when assessing participation.

- Clear engagement during the in class sessions

- Contributes to synchronous activities by using insightful and constructive comments
- Actively engages with others in class discussions
- Listens while classmates present as indicated by comments that build on others ideas
- Engages with online platform as appropriate
- Always prepared for assignments and assessments

### **Discussion Posts-10% of overall grade**

There will be a discussion post for each Module that is designed to apply the weeks material to answer the question that has been posed. The in class sessions will be used to synthesize the discussion on the question(s) in a given module. You will receive a grade for participation, so you can choose to write as much or as little as you wish. One reply to another student is *required*, additional comments are appreciated to generate a good discussion. Discussion posts should be clear, succinct and respectful. The instructor will moderate the online discussion.

### **Infographic- 10% of overall grade**

The goal of this assignment is to think critically about your knowledge of cancer control, and how that may conflict with perceptions in the general public. In the first class we will have a discussion about misperceptions in cancer control, and implications. Then you will be asked to choose one topic, research what the evidence base says, and develop an infographic that presents fact-informed information. Limit your infographic to a single page. I recommend Canva for free infographic templates and images. We will discuss the resultant infographics in class. References are not required, but given the focus on using evidence to inform the infographic, a separate page can be submitted (will not count to page limit, APA style references).

### **Briefing Note-20% of overall grade**

The goal of this exercise is to debrief a policymaker on an a topic of your choice and require the policymaker to agree or disagree with a recommendation to take a position or a course of action. The brief should provide a factual presentation of the evidence and a clear recommendation of future directions. Good briefs are concise, accurate, objective and strategic. Maximum 800 words. I have posted two examples of policy briefs on the course website. If you have questions about your topic please contact the Instructor. Some examples: women under age 40 should be able to self-refer for breast cancer screening, marketing for vaping/e-cigarettes that target youth should be banned to protect public health, smoking cessation programs work and should continue to be funded.

Format (adapted from the Public Health Agency of Canada and the BC Ministry of Health Services). Policy briefs do not require references, but since this is an academic exercise, please include your references at the end (this does not count towards the page limit).

Review the briefing note template on the course website to see the sections that are expected to be included in your briefing note.

### **Elevator Pitch-10% of overall grade**

Assesses your ability to make a compelling and persuasive case using a brief, concise speech. In class you will present a 3-minute elevator pitch of your topic for the final paper. Not only will this be an opportunity for you to demonstrate your communication skills, but you will also have the opportunity to get feedback from your instructors and peers which you can incorporate into your final written plan.

The presentation may look different for everyone and we will consider a range of formats. For instance, you may wish to use slides or other visual aids to help convey your message but it is not necessary. You will be assessed on participation for both the delivery of your topic and feedback of at least 1 other student's pitch.

- Expectations about feedback: you should address the ideas not the person, contribute respectfully and ensure that you are sharing space with others to allow collective feedback.
- In recognition of the aim of creating a community within the class and that everyone differs in their view of feedback is and how they like to receive it, a discussion on feedback for this assessment is on Canvas. Please contribute your viewpoint before Mar 17

### **Final Essay-25% of overall grade**

Throughout the course you will work on developing a written critical analysis of a topic of your choice in cancer control. The final paper will represent the culmination of your learning in SPPH 511 and demonstrate your understanding and ability to integrate and apply the concepts presented throughout the course.

You may do any of the following:

- Identify a cancer control issue that requires attention or intervention
- Propose a public health program or intervention in your topic area
- Evaluate the effectiveness of a specific intervention in your topic area

You may wish to continue building on the topic of your Briefing Note, which is acceptable as long as there is minimal overlap on the content. Please discuss your idea with the teaching assistant if there are any questions on suitability.

The full paper should be a maximum of 8 pages single-spaced 12 pt font with 1" margins. This excludes references and any tables/figures/graphs which can be included in an Appendix. Please use APA format for your citations.

(<https://www.mendeley.com/guides/apa-citation-guide>). Your final paper should be submitted on the course website.

### **LATE SUBMISSION OF ASSIGNMENTS**



Please contact the instructor with reason if you cannot turn in an assignment on time. ALL late assignments (online discussions, in-class exercises, and all other assignments) will be marked off on a 10% for each day late unless the course instructor decides otherwise.

### **EXPECTATIONS FOR STUDENTS AND INSTRUCTOR**

You are expected to fulfill the course objectives, assignments, and discussions in a timely manner, and to contact us via course mail whenever you need help. I will return your communication within 48 to 72 hours.

You are expected to engage in all synchronous sessions. Sessions will not be recorded to protect privacy and because active participation is critical for building a community of learning.

### **GENERATIVE AI**

The use of generative artificial intelligence tools is strictly prohibited in all course assignments. This includes ChatGPT and other artificial intelligence tools and program.

### **RESPECTFUL ENVIRONMENTS**

UBC and all Members of the UBC Community share responsibility for ensuring and maintaining an environment that is free from Discrimination. UBC regards Discrimination as a serious offence that is subject to a wide range of remedial or disciplinary measures, including dismissal or expulsion from UBC.

<https://universitycounsel.ubc.ca/policies/discrimination-policy/>

### **GETTING SUPPORT FOR CONCERNS ABOUT DISCRIMINATION OR CULTURAL SAFETY**

SPPH is committed to providing a positive education experience free from discrimination. If you have had an experience in this course where you feel unsafe, have been mistreated or have witnessed mistreatment, please let us know. If you want to raise this beyond the course instructor the School recommends the following. You may contact your academic supervisor, the education manager for your program or the Associate Director-Education. You may also report your concerns to the Faculty of Medicine Office of Respectful Environments, Equity, Diversity & Inclusion (REDI) at:

<https://mistreatmenthelp.med.ubc.ca/>

### **Grading (from the UBC Department of Educational Studies, Graduate Course Grading Policy)**

- A+ is from 90% to 100%: It is reserved for exceptional work that greatly exceeds course expectations. In addition, achievement must satisfy all the conditions below.
- A is from 85% to 89%: A mark of this order suggests a very high level of performance on all criteria used for evaluation. Contributions deserving an A are distinguished in virtually every aspect. They show that the individual significantly shows initiative, creativity, insight, and probing analysis where appropriate.

Further, the achievement must show careful attention to course requirements as established by the instructor.

- A- is from 80% to 84%: It is awarded for generally high quality of performance, no problems of any significance, and fulfillment of all course requirements.
- B Level (68% to 79%). This category of achievement is typified by adequate but unexceptional performance when the criteria of assessment are considered. It is distinguished from A level work by problems such as: One or more significant errors in understanding, superficial representation or analysis of key concepts, absence of any special initiatives, or lack of coherent organization or explanation of ideas. The level of B work is judged in accordance with the severity of the difficulties demonstrated. B+ is from 76% to 79%, B is from 72% to 75%, and B- is from 68% to 71%
- C Level (55% to 67%). Although a C+, C, or C- grade may be given in a graduate course, the Faculty of Graduate Studies considers 68% as a minimum passing grade for doctoral graduate students.

#### **UNIVERSITY POLICIES**

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions.

Details of the policies and how to access support are available on [the UBC Senate website](#).

**Infographic (10 points)**

	<b>2 points each</b>
Content	Information provided reflects best available evidence
Clear	The rationale for choosing the issue or intervention is clear
Compelling	The information/visuals are engaging and effectively convey the issue
Concise	The infographic is 1 page
Feedback	Constructive, respectful communication during class

**Elevator Pitch (10 points)**

	<b>2 points each</b>
Content	Enough information is provided to understand the topic
Clear	The rationale for choosing the issue or intervention is clear
Compelling	The approach used engages others in the presentation and effectively conveys the issue
Concise	The pitch is communicated in under three minutes in a non-rushed manner
Feedback	Constructive, respectful communication to <b>at least one student</b> (see Discussion on Feedback)

**Briefing Note Rubric (45 points-scaled to 20%)**

	<b>9 points</b>	<b>6 points</b>	<b>3 points</b>	<b>0 points</b>
Background information	Relevant facts about the issue are identified including the history of the issue, past decisions, previous action(s) taken, why the issue evolved, why the issue is being brought to the Minister’s attention	Some relevant facts about the issue are provided	Relevant facts about the issue are provided but they are not adequate. Justification for bringing the issue is clearly made	Does not provide adequate information or facts to communicate the relevance of the information
Thesis/organization	Well organized and structured briefing note. All elements are present	Missing one element of the note	More than one element is missing	The briefing note lacks a defined structure

Considerations	Identifies considerations the Minister needs to take into account to concur with the recommended course of action. E.g. unintended consequences, political and financial feasibility, level of expected social acceptance, probability of successful implementation	Considerations are somewhat identified	Considerations identified are not adequate	No considerations are identified
Summary and Recommendation	Brief states succinctly the student's recommendation and explains why this option is the preferred approach	Brief states the student's recommendation but does not provide strong justification for the recommendations	Little or no explanation is given for stated recommendation	Brief does not state any recommendation nor provide any explanation why this is preferred
General Style	Style free of typographical errors, avoids jargons and technical terms. Letter format is followed. Follows assignment instructions. Within page limit	General style relatively free of typographical errors, grammar errors, technical jargons.	Somewhat organized. Incompletely follows assignment instructions.	Letter has many typographical errors, poor grammar, technical jargon or abbreviations. Does not follow assignment instructions. Exceeds page limit.

**Final Essay Rubric (30 points, scaled to 25)**

	<b>9 points</b>	<b>6 points</b>	<b>3 points</b>	<b>0 points</b>
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Introduction	Provides a clear background of the public/population health issue that underlies the program/policy and supports this background by citing the appropriate literature	Background is provided and somewhat supported by appropriate literature	Background is not well supported with appropriate literature	No background is provided
Content/Argument	Addresses with an exhaustive analysis all the issues referred in the thesis. The provided information is necessary and sufficient to discuss these issues, and a strong and convincing argument is made	Addresses with an in depth analysis all the issues referred in the thesis. The provided information is necessary and sufficient to discuss these issues, and a strong argument is made	For the most part addresses with an in depth analysis most of the issues referred in the thesis. The provided information is, for the most part, necessary and sufficient to discuss these issues	Poorly addresses the issues referred in the proposed topic. The provided information is not necessary or not sufficient to discuss these issues
Quality of Writing	The essay is extremely well written from start to finish, without spelling, grammar or use of English errors. The essay is well organized, clear and presents ideas in a coherent and compelling way	The essay is well written from start to finish, without spelling, grammar or use of English errors. The essay is well organized, clear and presents ideas in a coherent way	The essay is well written for the most part, without spelling, grammar or use of English errors. The essay is for the most part well organized, clear and presents ideas in a coherent way	The essay is not well written, and contains many spelling errors, and/or grammar errors and/or use of English errors. The essay is badly organized, lacks clarity and/or does not present ideas in a coherent way
Format	Exactly follows all the requirements related to format and layout	Closely follows all the requirements related to format and layout	Follows, for the most part, all the requirements related to format and layout. Some requirements are not followed	Follows poorly the requirements related to format and layout

<p>References Please use APA format</p>	<p>All the references used are important, and are of good/scholarly quality. All the references are effectively used, correctly cited and correctly listed</p>	<p>All the references used are important, and are of good/scholarly quality. There is a minimum of 8 scholarly resources that are used effectively in the essay. All the references are effectively used, correctly cited and correctly listed in the reference list according to APA style</p>	<p>Most of the references used are important, and are of good/scholarly quality. Scholarly resources are for the most part used effectively in the essay. Most of the references are effectively used, correctly cited and correctly listed in the reference list</p>	<p>Most of the references used are not important, and/or are not of good/scholarly quality. Scholarly resources are not used effectively in the essay. References are not effectively used, and/or correctly cited and/or correctly listed in the reference list</p>
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