Course Information:
Class: All face-to-face classes will take place at the School of Population and Public Health at 2206 East Mall on the UBC Campus, Room 308B (3rd Floor)

Instructor: Arminée Kazanjian, Dr. Soc, Professor
arminnee.kazanjian@ubc.ca
604-822-4618
Office Hours: by appointment

Course Overview
SPPH 543 is an advanced course in health technology assessment methods and issues for those who have either completed an introductory epidemiology course (SPPH 502) or an equivalent mix of training and planning, management or policymaking experience (and permission from the instructor).

The purpose of this course is to understand the various policy applications of HTA, from assessment to establishing market viability for new technologies, to assessment conducted with an objective to regulate expensive technologies, and to become familiar with the methods used for conducting HTA.

Course Structure
SPPH 543-DL is a mixed mode, or blended, course. This means that you will be working with your instructor, and fellow students both online and face-to-face in the classroom. It is necessary for you to participate fully in all parts of this course to successfully complete the course. Lectures by the instructor, guest lectures and online material, combined with pre-assigned readings, will outline key issues and concepts in Health Technology acquisition, diffusion and its assessment. All components of this course are designed to provide an opportunity for application of these concepts to your area of interest.

Learning Objectives
This course will provide the opportunity for students to:
1. Become familiar with the framework and methods used for conducting health technology assessment.
2. Develop an understanding of the issues associated with gathering and appraising the quality of available effectiveness evidence.
3. Develop an understanding of the social, ethical and political issues affecting
4. Develop an understanding of the issues associated with using health technology assessment in policy making decisions.

5. Apply the knowledge acquired to the critique of published research and its syntheses.

On completion of this course the student will be able to:

- Describe the practice and purpose of Health Technology Assessment.
- Illustrate how effectiveness and economics are related in the cycle of HTA and begin to construct a conceptual framework with these two dimensions.
- Illustrate how the epidemiologic and social contexts are related in the cycle of HTA and incorporated into conceptual framework.
- Describe the dimensions, indicators and targets of the epidemiological contexts of HTA.
- Identify key databases and tools in HTA. (e.g. Cochrane, INAHTA, DARE).
- Illustrate HTA as evidence-based policy-making.
- Illustrate how HTA facilitates knowledge translation.

**SPPH 543-DL2: Course Schedule**

**Module 1: Health Technology Assessment and Health-System Policy-Making**

This module provides students with a broad understanding of the socio-political context in which Health Technology Assessment is undertaken. Students will learn about the history of HTA and role it plays in sustainable healthcare systems in Canada and globally. We will have at least one one-hour seminar, in person (if possible) or via Connect, to review the syllabus and explore topics of interest.

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<tr>
<th>Week</th>
<th>Topics to be covered</th>
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<tr>
<td>1.</td>
<td><strong>Health Technology Assessment and Health-System Policy-Making</strong></td>
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<td>I. Introduction to Key concepts of Health Technology Assessment</td>
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<td>II. Issues and Applications of HTA</td>
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<td>III. Comprehensive Framework for HTA</td>
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<td>IV. The HTA Process</td>
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<td>1.</td>
<td><strong>Effectiveness and Economic Contexts of HTA</strong></td>
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<td>I. Effectiveness Evidence</td>
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<td>II. Economic Evaluation within HTA</td>
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<td>III. Scientific paradigms</td>
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<td>2.</td>
<td><strong>Epidemiological and Social Contexts of HTA</strong></td>
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<td>I. Population-at-Risk</td>
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<td>II. Population Impact</td>
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<td>III. Social Context</td>
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Module 1: HTA and Health-System Policy-Making (Face-to-face January 21)
The full day’s activities will include review and summary of previous material, discussion and questions, focused classroom activity pertaining to HTA process, and a guest lecture. A block of time will be designated for describing potential student projects for major assignment.

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<tr>
<th>example</th>
<th>Activities of the Day</th>
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| 4. Student-led Seminar-Drugs (e.g., Vaccines) or devices (e.g., pacemakers) | I. Seminar Presentation of HTA proposal on selected topic  
II. Identifying Stakeholders  
III. Exploring scientific paradigms |

Module 2: HTA and Evidence-based Healthcare
This module provides students with an overview of evidence-based medicine and its role in healthcare decision-making. Students will become familiar with the challenges to the uptake of research into clinical practice and policy and will learn how HTA is used to address these difficulties.

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<tr>
<th>week</th>
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| 5. Evidence-Based Healthcare: tools and databases, international resources | I. Evidence-based health care vs evidence-based medicine  
II. Similarities, differences, controversies  
III. Interpreting types of evidence  
IV. DARE, INAHTA  
V. Cochrane and Campbell Collaborations |
| 6. Issues of Data, Information and Knowledge in HTA | I. Introduction to key concepts in health informatics  
II. Health Informatics Tools  
III. Data-based decision support vs model based ones  
IV. Knowledge-based decision support |

Module 2: HTA and Evidence-based Healthcare (Face-to-face February 27)
The full day’s activities will include review and summary of previous material, discussion and questions, focused classroom activity pertaining to HTA process, and a guest A block of time will be designated for describing progress to date on student projects, outline and early draft.

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<th>example</th>
<th>Activities of the Day</th>
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| 7. Student Led Seminar-Screening technologies (e.g. Newborn Screening, Screening Mammography, Genetic screening, etc.) | I. Seminar presentation of HTA proposal on selected topic  
II. Establishing HTA framework  
III. Discussion by all |
Module 3: Research Methods in HTA
This module will familiarize students with the research methods used in HTA, in particular, systematic reviews, their importance and limitations and the hierarchy of evidence/strength of recommendations.

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<th>week</th>
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<td>8.</td>
<td>Systematic Reviews and Critical Appraisal</td>
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<td>I. Framing questions for a review</td>
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<td>II. Identifying relevant literature</td>
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<td>III. Literature Search terms</td>
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<td>IV. Inclusion/Exclusion Criteria</td>
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<td>9.</td>
<td>Systematic Reviews and Critical Appraisal - Cont’d</td>
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<td>V. Assessing the quality of the literature</td>
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<td>VI. Identifying sources of bias</td>
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<td>VII. Summarizing the evidence</td>
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<td>VIII. Interpreting the findings</td>
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<td>10.</td>
<td>Knowledge Translation</td>
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<td>IX. Knowledge Translation and Research Uptake dynamics</td>
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<td>X. Knowledge Exchange-Decision Support (KE-DS) Model and Toolkit</td>
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Module 3: Research Methods in HTA (Face-to-face March 17)
The day’s activities will include overview and summary of the Expanded HTA Framework, discussion and questions as it relates to KT/KE. focused classroom activity Student presentations of projects and their critique will be the highlight of the day.

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<td>11.</td>
<td>I. Seminar presentation of HTA proposal on selected topic</td>
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<td>II. Critique of HTA proposal</td>
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<td></td>
<td>III. Discussion</td>
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Readings
There is no required textbook for this course. Readings are assigned based upon their relation to module topics and are available online.
Evaluation

Students will be evaluated on various activities: Participation, HTA problem definition, HTA conceptual framework, Student-led seminars, Student-led seminar critique, HTA proposal.

Student-Led Seminars (During Face-to-face sessions)

There will be one student-led presentation for each module. Each student (or a group of 2-3) will conduct a seminar on an issue or topic in HTA. Each will be responsible for leading the group discussion on their issue or topic, and will be responsible for the learning objectives and activities of that session.

At the beginning of the course students will be assigned the module and seminar topic that they are responsible for leading.

The format of the seminar discussion is as follows:

- Individuals/groups will be assigned a general topic from which they can select something more specific.
- The group will work together to coordinate what to present.
- Students are encouraged to use more general media, not just academic sources.
- The other students in the class will be expected to have read the assigned material from that module and be able to discuss and ask question on the presentation

The general topics for the seminars may be as follows:

- Module 1 – Drugs
- Module 2 – Screening
- Module 3 – Policy/System/Finance

In each presentation, preliminary draft, or advanced draft, the following information should be covered.

- problem definition
- conceptual framework
- methods for assessment
- implementation – knowledge translation
Assignment Submission Guidelines

- All assignments are to be submitted via email to the instructor or Vista drop box on the due date noted on the course schedule.
- There will be late penalties for overdue assignments.
- Students are expected to manage their time accordingly – if a student believes that an assignment due date is at a busy time for them (e.g., during exams), the student should start working on their assignment earlier.

Grading Standards

A Level (80% to 100%)
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 (or group) 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. However, the achievement does not demonstrate the level of quality that is clearly distinguished relative to that of peers in class and in related courses.

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:
1. one or more significant errors in understanding
2. superficial representation or analysis of key concepts
3. absence of any special initiatives
4. lack of coherent organization or explication 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%.
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 graduate students. See the UBC Calendar for details.