Course Syllabus

SPPH 410 – Improving Public Health: An Inter-professional Approach to Designing and Implementing Effective Interventions
University of British Columbia
School of Population and Public Health

Course Overview
SPPH 410 (formerly offered by the College of Health Disciplines as IHHS 410) is a 3 credit course structured around weekly self-directed distance learning activities interspersed with five (approximately once a month) classroom sessions. This course focuses on improving public health by developing the skills to design and deliver pragmatic, effective health behavior change interventions. Using the social-ecological framework and working through a sequence of assigned readings, exercises and assignments, students working in interdisciplinary teams will develop a creative yet realistic intervention plan to improve a specific health outcome by changing health behavior for a target population of the team’s choosing. Students who complete this course will be prepared to approach intervention planning and implementation from both theoretical and practical perspectives, with sensitivity to cultural, ethical and social factors within a target population or community, and in society at-large.

Course Objectives:

SPPH 410 Syllabus page 1
Upon completion of this course, students will be able to design an effective public health intervention that is evidence-based, consistent with established theory, practical, evaluable and inter-professional in scope. Students, working in teams, will be able to:

1. Perform a thorough analysis of a selected public health issue (also known as a health condition, health problem or health outcome) as it relates to a specific target population;
2. Outline the major component objectives (including performance, learning or behavioral, and change or environmental objectives) underlying any viable intervention;
3. Assess the strengths and weaknesses of different intervention options as they pertain to a chosen health outcome, health behavior and target population;
4. Provide a rationale for selecting a particular intervention approach;
5. Describe specific details of the intervention plan, reflecting scientific, political, practical, economic, cultural and ethical considerations; and
6. Delineate specific issues in adoption, implementation and sustainability that may impact the success of an intervention.

Specific inter-professional learning objectives at will be addressed in this course include:

7. Communicate ideas and opinions with clarity and respect;
8. Demonstrate collaborative teamwork and leadership skills;
9. Demonstrate effective and respectful problem solving skills; and
10. Identify and use information resources from other disciplines.

Course Instructor and Meeting Locations:
Please see the separate Course Instructor and Meeting Locations document for details.

Course Requirements:
Philosophy:
Intervention planning is a multifaceted and complex endeavor that requires careful preparation; logical thinking; organization; planning; cultural sensitivity; integrity; ability to work well as a member of a team; and the ability to offer, receive and integrate constructive performance feedback. Working without constant direct supervision (vis à vis, self-directed distance learning) requires commitment and self-discipline. Essential steps for success in this course (and in the real world of intervention planning) include getting an early start; reading and adhering to detailed instructions; reviewing topic-related intervention research; engaging in brainstorming and nominal group consensus methods with other professionals and stakeholders; weighing and integrating suggestions and feedback from peers (classmates) and supervisors (instructors); refining and revising ideas; meeting deadlines; and eventually developing a coherent final plan. Ultimately, your team’s success in this course (and your success in the real world) will depend largely on your team’s ability to develop effective working relationships; generate and critically appraise ideas; plan and work efficiently toward a common goal; develop and execute work plans in a professional (disciplined, respectful, collaborative) manner; and communicate effectively to a range of audiences through written, oral and graphic presentation methods.

Attendance:
Learning in this course is cumulative. Material introduced each week builds on concepts and skills developed in prior weeks. Accordingly, students are expected to stay on schedule, with all assigned work complete and ready for discussion. Attendance is not taken in the classroom sessions, but students are expected to inform both their team members and the instructor in advance if they anticipate being late or absent on any given day. Everyone’s attendance at the two Team Presentation final class sessions is mandatory, and points may be deducted for absence (see...
Team Presentation section below). Preparation, participation and professionalism will be evaluated within each team, so everyone is strongly encouraged to participate actively in team and class activities. Work on assignments within each team should be divided equitably and by consensus, and everyone should take a turn coordinating group activity as the team leader.

Assigned Readings and Graded Assignments:
The assigned readings, ungraded assignments and graded assignments, along with their due dates, are listed on the Course Outline document. Further instructions and grading criteria are provided in the Course Welcome document and also in two sections below (Grading Criteria, and Tips for Success). The major graded assignment is a formal report proposing an intervention plan. Team members are expected to work energetically and flexibly to conceptualize, design, write up and present a creative and practical plan that addresses an actual, real-world public health issue of the team’s choosing. It can focus locally, developing an intervention targeted towards a specific population and health issue affecting a neighborhood, ethnic or cultural group in any location. Alternatively, the intervention’s focus can be broader in scope, developing a city-wide, provincial- or state-wide, national, international or even global intervention. Each team’s work must be entirely its own! Within this originality requirement, teams have two options:

1. Design a new intervention that represents a logical “next step” to add for a real-world problem in a specific population where other interventions already have been underway;
2. Adapt a previously attempted intervention (or design a new one) to address a new health problem in a specific population or geographic area. The adaptation must describe and provide a rationale for specific distinctive features that distinguish it from the prior program on which your new intervention is based.

Additional Readings:
While other text or reference books and articles might be helpful, they are not required to succeed in this course. Assigned readings, worksheets and slide decks will be distributed electronically via e-mail or in CONNECT. If, for your own interest, you want to pursue additional reading, the following are worth considering:


SPPH 410 Syllabus page 3
Team Presentation:
Teams will provide an oral presentation of their project during the last two class sessions. These serve three purposes:

1. Demonstrate mastery of a targeted area of study;
2. Share valuable insights and information about the chosen topic and intervention;
3. Gain practice and receive constructive feedback by delivering presentations in a format similar to that of professional association conferences.

Attendance on both team presentation days is mandatory; unless anyone has an excellent justification in advance for not attending to support their classmates, anyone failing to attend both presentation days will lose ten (10) points off their final course grade.

Grading Criteria:
Assigned readings and ungraded activities are scheduled on the Course Outline to help you achieve success. Please refer to that outline so you’ll know from week to week what topics are the focuses, what readings should be done, and what assignments are due when. Late submission of graded assignments will incur a 10% penalty on points possible for each day overdue. Please scan for computer viruses anything that you plan to submit electronically before you submit it. Submitted assignments infected with a virus will incur a 30% penalty on points possible. Attendance on both team presentation days is mandatory; unless anyone has an excellent justification in advance for not attending to support their classmates, anyone failing to attend both presentation days will lose ten (10) points off their final course grade. Also be sure to cite sources appropriately; plagiarism will not be tolerated.

Grading Criteria for Teamwork (25 Points)
See Project Group Peer Evaluation Form for details.

Grading Criteria for Oral Report (15 Points)
*Content (7 points):
1. Quality of presentation 2 points
2. Depth of original reasoning & cited evidence 3 points
3. Practical conclusions drawn 2 points
*Presentation (8 points):
1. Organization 2 points
2. Use of time (not too short or too long) 2 points
3. "Poise" (effective visual aids, responses, etc.) 2 points
4. Relative ranking against other presentations 2 points

Grading Criteria for Written Report (Initial Draft 30, Final Draft 30)
*Public Health Problem Statement (10 points):
1. Clear problem statement provided 5 points if present, 0 if not
2. Problem explained in context 5 points (0 - 5)
*Literature Review (10 points):
1. Importance of problem justified 2 points (0 - 2)
2. State of current knowledge summarized 2 points (0 - 2)
3. Evidence cited where appropriate 2 points
4. Limitation of previous studies explained 2 points
5. Appropriate number & format of citation 1 point
8. Clarity & organization of the writing 1 point

*Organization and Use of Evidence (5 points):
1. Length within assigned 15 page limit (excluding title & reference list pages)
2. Cited papers referenced properly
3. Correct and effective writing (spelling, punctuation, structure, etc.)
4. Assertions backed up by appropriate evidence

*Content (5 points):
1. Pertinent background information summarized effectively
2. All reasonable options defined clearly
3. Defensible position selected from among prioritized options
4. Defensible position defended adequately (critical appraisal of evidence)

**Tips for Success:**

**General Suggestions:**

All groups typically go through stages as they form and mature. Students who previously took this course have shared tips they’ve learned from the experience of working in groups on tasks involved in producing the required end product. Those are summarized in the materials for week 2 of the course. Take advantage of those insights by reading and discussing them when your group meets during the second week of SPPH 410. In the CONNECT course tabs, you’ll also see a collection of items regarding the Myers-Briggs personality type resources. You may not need them, but if your team is finding personality clashes to be an issue they may provide helpful insights and strategies. Also, since this course’s team assignment is a learning opportunity, it might be helpful to consider VARK (http://vark-learn.com/) if team members become frustrated by task assignments because they haven’t already identified and expressed their own preferred learning style (which may be a mix of visual, aural, read-write and kinesthetic activities).

In weeks 2-3, you’ll identify three possible topics for your major assignment. Ultimately, you’ll want to select one topic in which you can achieve success. It may be tempting to select a serious public health problem because of its magnitude or tragedy alone, but beware of selecting one that cannot realistically be addressed. It would be wise to divide the overall work into components (Component I: Problem Analysis, Target Population Selection, Performance Objectives; Component II: Learning and Change Objectives, Intervention Overview, Intervention Strategy; Component III: Detailed Program Description) on your path to bringing all this into one final paper. It also would be wise to divide the work within each component by assigning specific tasks to specific team members so as to avoid duplication of effort in bringing information back to the entire team each week. More detailed suggestions for dealing with each component are provided below.

**Suggestions for Component I:**

A critical component of intervention planning is acquiring – and communicating – a thorough understanding of the health issue you have chosen, including its biology/health effects, risk factors, behavioral and social determinants, and previous efforts that have been made to address or ameliorate the condition. Your own intervention plan must be informed by this body of work, and should represent the next logical step in addressing the problem at hand. In the real world, the first step in addressing any public health problem would be to conduct a thorough “needs assessment.”
Components of a needs assessment often include field surveys, focus groups, key informant interviews, and literature-based problem analyses. For purposes of this course, we’ll focus primarily on the last component: performing a careful literature-based problem analysis.

For this first component, your team should work together efficiently to research and write a brief paper (8 pages maximum) that addresses the following areas:

I. **Problem Description**: Describe the nature, scope and key determinants of your team’s chosen health outcome (on grant or other funding applications, this section is usually called “Background and Significance”);

II. **Priority (Target) Population**: Based on the above, identify the priority (target) population for your intervention and justify this choice;

III. **Literature Review and Critique**: Review and critique – in detail – published reports of efforts that have been made to address the health outcome in the priority population you have selected;

IV. **Health Behavior**: Based on the above, introduce the health behavior to be changed and justify this choice;

V. **Performance Objectives**: List the performance objectives around which your intervention will be designed and provide a rationale for these objectives; and

VI. **References**: It really sucks to forget where you’ve read that perfect fact or quotation… be sure to start keeping citation information well organized!

We strongly suggest that you use the topic headings above, fleshed out in greater detail using the outline below.

**Section I: Problem Description** Provide a comprehensive yet concise description of the health problem or outcome of interest, using these suggested sections:

1. **Overview**: Describe the health problem / outcome you have selected and explain why it is a health issue that is worthy of consideration.
2. **Epidemiology**: Informed by available literature and surveillance statistics, name and describe individuals or groups at particular risk. For these populations, summarize the incidence and/or prevalence (as appropriate) of the chosen health problem.
3. **Key Determinants**: Applying the social ecological model, describe the key behavioral (individual) and social (environmental) determinants of risk.

**Section II: Priority (Target) Population** Based on the information described in Section I (Problem Description), identify one or more potential target (priority) populations for intervention. From among the options you have described, choose a specific target (priority) population for your intervention, and justify your choice.

**Section III: Literature Review and Critique** (also called Intervention History or Previous Interventions): Review and critique key papers from timely, relevant, respected peer-reviewed sources that describe efforts that have been made to address the health problem or outcome that your team is addressing. Try to find at least 3-5 worth citing. Describe each paper carefully, summarizing for each study:

- rationale (why did they say they did their study?) and specific research question(s) addressed
- research or evaluation method(s) used
- reported results (the actual data)
• conclusions and recommendations (their interpretation of the results)
• your own critique addressing strengths, limitations, threats to validity; and
• questions left unanswered / recommendations for further research.

Section IV: Health Behavior Based on the logical flow of the above three sections, describe and justify the health behavior to be changed.

Section V: Performance Objectives Propose two or three key performance objectives that are informed by Sections I-IV above. Remember - your intervention design will flow directly from the POs you define at this stage. Under each PO, provide a rationale for your choice.

Section VI: References Carefully and thoroughly reference all relevant sources within the text and list each citation at the end using either APA or Vancouver format.

A variety of sources can be tapped to research the health problem of your team’s choice, including original research, review papers or meta-analyses, case reports, letters to the editor, statistical databases, and respected governmental or non-governmental organization publications. Tools to search this literature include Google Scholar, CINAHL, MEDLINE, Web of Science and other search engines.

Fitting all of this material into eight pages will be challenging! Constructing this will give you practice in writing tight, cogent, persuasive, and grammatically correct prose – skills that are of enormous value when writing proposals with strict page limits; and in dealing with clients, policy makers and the general public. If you aren’t already a skilled writer, and skilled at writing as a team, then you’d be well-advised to make a detailed outline first and then proceed by adding in notes and then full prose. There also are on-line basic writing guides, mentoring available within the campus library system, and published writing guides that some find helpful.

Suggestions for Component II:

This component has three purposes:
1. To articulate a set of detailed Behavioral Learning Objectives, and Environmental Change Objectives relevant to desired Performance Objective for your prospective intervention;
2. To select from among these a subset of key (the most important) objectives; and
3. To provide a broad overview of the intervention your team is developing, and the intervention strategy you are planning to employ.

This component should be informed, but not constrained, by the research you did before. We strongly suggest that you use the topic headings above, fleshed out in greater detail using the outline below.

Section 1: Learning Objectives and Change Objectives Create a separate and detailed set of learning objectives and environmental change objectives for each performance objective and display this in a table format. The Examples section of the course materials can serve as a template for your work.

Divide learning into the following categories of personal determinants (as applicable):
• knowledge
• attitudes
• behavioral skills

SPPH 410 Syllabus page 7
• subjective norms
• outcome expectations
• perceived behavioral control
• cues to action

Organize environmental using the following categories of external determinants (as applicable):
• interpersonal
• organizational
• community
• culture/society

Each and every one these should connect directly and specifically to the achievement of a performance objective! Here is what this all boils down to:

What do people need to KNOW in order to make a decision necessary for achieving the behavior change described?
What do they have to BELIEVE in order to make that decision?
What should they EXPECT to happen if they undertake the behavior change?
What SKILLS do they need to have in order to accomplish and sustain this successfully?

Developing this is an exacting, iterative process. Stay focused on your priority population and the health behavior you want to see changed.

Section 2: Intervention Overview and Strategy
In this phase of your team’s work, the basic shape and broad outline of your intervention will begin to emerge. Don’t worry about details right now – you only need to conceptualize a general idea of what you want to do in terms of your intervention at this point.

Using the tables you created, select the learning and change objectives you think are the most important and most actionable, and that fit together most logically. List them first and then provide a rationale for your choices. This rationale need not be long: a brief yet cogent explanation should suffice. Outline the main intervention strategy or strategies, implementation method or method(s), and location(s) you think would work best for your target population and justify those choices. Again, a brief yet logical explanation should suffice.

Your detailed intervention plan should evolve quite naturally from the work you have developed thus far in these first two component activities. As you approach that final step, remember KISS (Keep it Simple, S… – fill in whatever “S” word you wish). You are not saving the world or writing a PhD thesis here! Because you are learning the skills of intervention design in the context of a mere 3-credit course, you will of necessity need to restrict the scope of your work. Don’t be afraid to narrow the scope of your intervention (perhaps make it smaller and propose it as a “pilot” study if appropriate) as you learn more about the process and the problem!

Suggestions for Component III:

The purpose of this step is to present and describe, in beautifully written detail, the design and specifics of your intervention, weaving the set of objectives and methods you developed in the first two component tasks into an integrated whole. You will also outline adoption, implementation and sustainability considerations at this point. Think realistically about resources that will be needed. For example, if you are developing a program to provide after-school exercise for middle school students, do not assume that you have an annual budget of $10 million and can spend lavishly. On the other hand, to motivate a large public audience toward smoking cessation and connect
individual people with resources or programs, a budget of $10,000 would be far too small to get the job done. In the real world, intervention plans must include both a detailed budget and an accompanying budget justification (also known as the budget narrative). For this course you are not expected to include a detailed budget or budget justification in your intervention project proposal. However, you should provide a realistic ballpark estimate for the total cost typical of a project such as the one you’re proposing, and for size of the annual budget of the community in which you propose to launch this project. If your proposed project would consume a sizable proportion of that community’s entire budget, then it also would be wise to indicate magnitude of benefits expected (again, only ballpark estimates of typical results are needed for the course assignment, which you probably can find in your literature review).

**Intervention Overview**: In one or two succinct paragraphs, communicate a “frame” for, or big-picture overview of, the intervention before filling in the details. A well-written intervention overview is a critically important facet of your overall plan, as it will present a compelling synopsis or abstract of your intervention, thus setting a frame for the intervention details that will follow. It makes the document easier for a reader to follow, and forms the typically expected “executive summary” introductory section.

**Program Details**: Describe the specifics of the intervention in sufficient detail to provide the reader with a clear picture of what will happen at each stage. You may use the Recommended Program Detail Items below as a guide. Keep in mind, however, that since each intervention design is unique, attempting to answer the points below in exact sequence may stifle your creativity or distort your plan. Thus, please consider these items only to be a rough guide:

- Describe the geographic scope of the intervention. In what specific neighborhood, city, province, region, country or continent will the intervention take place?
- In what type of setting will the intervention be implemented? In other words, will it take place in a school, church or other spiritual setting, medical clinic, on the street, in people’s homes, on the airwaves, on the internet, or in some other setting?
- How will you shape the intervention to fit both the cultural norms and logistical needs of the priority population and also the context in which the intervention will be delivered?
- How will the recipients or participants be identified and recruited? How will they be persuaded, encouraged or motivated to participate?
- What are the specific components of your intervention? If you are proposing a multi-component plan, provide a clear overview of the whole, and then describe at least one component in detail. If your intervention involves multiple steps that unfold over time, consider providing a timeline to illustrate the sequence or phases you envision. The timeline might cover minutes, hours, days, weeks, or longer, depending on its scope.
- Who will execute the intervention? What role(s) will each person play? How will these people be coordinated, supervised and led? What preparation or training will they need to fulfill their roles?
- How will the intervention components be sequenced or coordinated? Will they be integrated under an overall theme? If so, how will this be done?
- What program materials are needed for each component?
- What resources will be needed to implement the intervention (see additional tips below)?

**Adoption**: What steps can be taken to ensure that the innovation is adopted or put into use? Address these questions:

- How will the intervention be promoted or marketed?
• Who can serve as the logistical champion for the innovation?
• Do you need an iconic or heroic champion? If so, who would this be, and why?
• Who are the key stakeholders and gatekeepers / decision makers? How will they be “brought on board?”
• In what “adopter categories” do the key players (including participants) fall?
• How should the intervention be presented to those in each adopter category?
• What objections might objectors raise? How will you address anticipated objections?

Implementation: What needs to be done to ensure that the intervention can be carried out successfully? Address these questions:
• What are potential funding sources, and how could funding be secured?
• How will those responsible for implementing, managing and leading the intervention be identified, trained, and supervised?
• What linkages or alliances with outside groups or organizations need to be in place for the intervention to be implemented successfully? Think both logistics and politics!

Sustainability: How will the intervention be sustained or maintained over time? Address these questions:
• How can program fidelity be assured? In other words, how will the program both stay true to its original intent and also evolve appropriate to changing conditions?
• What kind of oversight, review, and revision processes need to be in place?
• From what sources - and how - can long-term funding be secured?
• How will the innovation become an institutionalized part of ongoing operations?
• What pathways for scaling (expansion) and dissemination do you envision?

Suggestions for Last Step in Writing Final Paper:

The purpose of the Final Paper is to synthesize the work your team has completed for all previous components into one unified paper. This is your opportunity to incorporate feedback or input you received throughout the semester from the professors and from fellow students. This paper must not be a simple “cut and paste” of the prior assignments. In fact, it cannot be, as the page length limit is substantially smaller than the sum of the previous three parts. To this end, you will need to deploy your accumulated knowledge, skills and creativity to distill and condense your prior work to satisfy the page length requirements.

Title Page and References are not considered part of the page count for this limit. Excess pages may not be read, and penalties will apply for exceeding the limit. You may attach large diagrams or tables as an Appendix, but make sure that any appended material is supplementary rather than critical to the body of your report – do not use an Appendix as a ploy to exceed text page limits. Prior students have found papers in the Examples Section of course materials to be quite helpful when constructing their assignments. Please note, however, that the course and its assignments evolve over time. As a result, the examples provided are offered as general guidance only.

Each team should strive to produce written work that is logical in its flow, well-written, grammatically correct and editorially tight. In addition, written work should be both persuasive in its message and easily understandable to the proverbial “intelligent yet uninformed reader.” The best way to assure that your written work is of high quality is to ask others outside your team to
review and provide specific critical feedback well before the due date. Each team can achieve this goal in ways like:

- Asking another “buddy” team to read segments or entire drafts of your work and to offer specific comments and critical feedback (teams 1 and 2 are buddies for each other, teams 3 and 4 are buddies, and so on);
- Ask one or more “outside” people (friends, roommates, family members or people who owe you favors) to review and critique your written work;
- Discuss drafts of components with the course instructor as you progress (but do not expect detailed editing services here).

You are encouraged to utilize all of these options. At the same time, these assets should be used strategically and wisely. For example, you may wish to test out ideas and share sections of component assignments with your buddy team, and then ask one or more “outside” people to review a complete but still relatively unpolished draft. In terms of asking for an instructor’s opinion, the closer your draft is to “finished,” (in other words, the more complete and “polished” it is), the more benefit the team will get from the instructor review. Please note that while you can ask for critical feedback from your buddy team or outside critic at any time, the instructors must receive your draft no later than a mutually agreeable time prior to any due date in order to allow sufficient time for them to review and return your draft, and for the team to discuss and incorporate feedback. As can be seen, it is imperative that each team develop and adhere to a timeline for completion of work that takes the above opportunities and constraints into account. Despite their best efforts, some teams fall a bit short on assignments. There is no revision or resubmission option for the final paper.

Spacing, fonts, margins and page numbering requirements:
Please make sure the line spacing on your manuscripts is between 1.5-spaced and double-spaced. Margins should be 1” throughout. Font and size should be Times New Roman 12 or equivalent. Tables and matrices may be single spaced, and can be constructed using Arial Narrow. Pages, except for the title page, should be numbered. All written assignments should be submitted in .doc, or .docx format.

Title page requirement:
On the title page, make sure the following information is included:
1. Project title
2. Project summary information:
   a. Health outcome (e.g., complications from diabetes)
   b. Health behaviour to be changed (e.g., overweight and obesity), and
   c. Priority (target) population (e.g., adult Aboriginal women living in Port Hardy, BC).
3. Your team name or number
4. Team members’ names and email addresses
5. Course number and semester,
6. Submission date
The title page, reference pages and appendices will not be counted against page limits.

Submission requirement:
Please select one person from your team to submit your final report to the instructor for grading via the Assignments Tab on the course website on or preferably to be safe one day before the specified due date. Penalties apply on any papers not received by the due date.