

SPPH 513: Clinical Epidemiology

Course Notes 2018

Course Syllabus

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Revised and updated (2018)
Major revisions (2014)



INTERIM VERSION 2018-SEPT-10; SUBJECT TO REVISION

Updated versions posted online will have changes from this version listed on page 2.

List of revisions after 2018-SEPT-10

SEE UPDATED "COURSE SCHEDULE SPPH 513 2018.XLSX"



SPPH 513: Clinical Epidemiology
Course syllabus, Spring 2019
(INTERIM VERSION 2018-OCT-10; SUBJECT TO REVISION)

No major revisions are probable before the course starts. Mini-presentation and class schedules are subject to change based on factors such as the number of students

enrolled. The most current information is always posted on the course website in *UBC Connect*.

Overview of SPPH 513: Clinical Epidemiology, Spring 2019

Prerequisites	One of HCEP 400, HCEP 502 or one of SPPH 400, SPPH 502
Scheduling	Jan 9 to Apr 2, 2017 (12 weeks, Midterm Break Feb 18-22) Mandatory classroom attendance at 7 of 12 weeks 5 of 12 weeks for independent group work on major project Tuesdays 2 – 5 PM Location: To Be Announced
Important dates	Apr 9, 2018: Deadline for submission of <i>Final Project</i> Group project (management recommendation) presented and submitted.
Text	Required: <i>Users' Guides to the Medical Literature: A Manual for Evidence-based Clinical Practice</i> by Guyatt et al., (2nd Ed 2008) Required: <i>GRADE Handbook</i> (2013-Oct) (Included in <i>GRADEpro GDT</i> online.) Recommended: <i>Users' Guides to the Medical Literature: A Manual for Evidence-based Clinical Practice</i> by Guyatt et al., (3rd Ed 2015)
Student appraisal	Major project (a Management Recommendation): 40% Mini-presentation: 25% Attendance, preparation and active participation*: 35% *Online tests and evaluations, submitted module work, attendance etc.

SPPH 513 is an overview of major themes in clinical epidemiology. A possible operational definition of clinical epidemiology is that it comprises the knowledge and skills that allow you to formulate management recommendations: these inform your fellow practitioners of possible ways to translate *evidence to action*. Critical appraisal of the literature, clinical approaches to evidence

about diagnosis, therapy, prognosis etc, and the current frameworks for formulation of management recommendations are parts of this discipline. Our aim is to prepare you to contribute effectively to authorship of management recommendations.

Problem-based learning units (Therapy, Threats to validity, Diagnosis etc) are

available online. Each will be discussed in one or more classes. See the *Course Schedule* for a complete list.

Students work through the problems in each unit's *Class Notes*, having read the relevant portions of the text, as well as the applicable articles that are mentioned. All learning materials is accessible online.

To encourage engagement and understanding of materials prior to class, an online quiz is completed prior to and during most classes.

Classes are a dialog about, and a review of, the most important themes in the material already covered before class. Attendance is mandatory and noted.

Text (required reading)

The **required** textbook for this course is *Users' Guides to the Medical Literature: A Manual for Evidence-based Clinical Practice* by Guyatt et al., (2nd Ed 2008). It is available online at the UBC Library and in [UBC Connect: SPPH 513](#).

Reading the *GRADE Handbook* (2013-Oct) (Included in GRADEpro GDT online) as part of the *Major Project* is **required**.

A newer version of the text is available, and is **recommended**: *Users' Guides to the Medical Literature: A Manual for Evidence-based Clinical Practice* by Guyatt et al., (3rd Ed 2015).

Student appraisal

Your grade comprises the following:

Major project:	40%
Mini-presentation:	25%
Attendance, preparation, active participation:	35%

There is no exam on course content. You demonstrate your knowledge of course materials in the major project and through attendance and active participation in class.

Major project (Management Recommendation, Clinical Practice Guideline)

Working in groups, and using a standardized format, students formulate a patient management recommendation, as outlined in the *Major Project: Management Recommendations* unit. Note that there is limited and not comprehensive formal coverage of how to do this during class. You will have to integrate concepts from different units (diagnosis, therapy, natural history etc) in preparing your project. Projects are presented to your peers and submitted during the final class.

Students are graded on adherence to the protocol, clarity of explanation, and quality and completeness of the discussion of the rationale for each step of the suggested protocol.

Links to the forms and materials needed for the project are kept at the course web site.

Minor project (mini-presentation)

Groups of three students are assigned a minor presentation early in the term. Three weeks before the presentation, background materials to use for each presentation are made available online. Each is about an episode in epidemiology that illustrates the importance of one of the core themes covered in class. Many involve threats to validity, which play a crucial part of critical appraisal of evidence. Each group has ten minutes to present and teach the principle involved to your fellow students, and test them for comprehension.

Each group of presenters also prepare 1) a one- page summary of the key ideas and references in their presentations for attendees to view online on the day of presentation and 2) questions for a review quiz about the presentation that is completed online.

Students are graded on their clarity of explanation, and the quality and completeness of their discussion of the principles behind their vignette.

Expectations

The expectations of students in graduate level courses go beyond those at the undergraduate level. Graduate level work is expected to go beyond simply learning and presenting course material; graduate education is (in theory!) about a quest for knowledge. Your work on the major project should demonstrate this.

Our expectations have been outlined above. Attendance allows you to contribute to the class; you learn independently about management recommendations as you do your major project, and you contribute to a minor project. You respect your fellow students and the academy.

Attendance is not optional for this class at UBC. The university has written attendance requirements, available online. Although a lot of content and learning can occur independently and online, SPPH 513 is currently not a distance or distributed-learning format course.



SPPH 513: Clinical Epidemiology
Course outline, Spring 2019
DRAFT (2018-Sept-10) Subject to change
CLASS weeks highlighted

WEEK	DATE	TOPIC
1	Jan 8	Introduction / Critical appraisal / CPGs
2	Jan 15	Bias
3	Jan 22	[Bias]
4	Jan 29	Chance
5	Feb 5	Therapy
6	Feb 12	[MAJOR PROJECT]
	Feb 19	BREAK
7	Feb 26	[MAJOR PROJECT]
8	Mar 5	Prognosis
9	Mar 12	[MAJOR PROJECT]
10	Mar 19	Diagnosis
11	Mar 26	Clinical disagreement
12	Apr 2	[MAJOR PROJECT]

NOTE: Schedule is tentative and subject to change and rearrangement according to class needs.



SPPH 513: Clinical Epidemiology
Mini-presentations, Spring 2019
DRAFT (2018-Sept-10) Subject to change
CLASS weeks highlighted

WEEK	DATE	PRESENTATIONS
1	Jan 8	
2	Jan 15	
3	Jan 22	
4	Jan 29	Berkson's bias Detection bias
5	Feb 5	Protopathic bias The Will Rogers Phenomenon
6	Feb 12	
	Feb 19	BREAK
7	Feb 26	
8	Mar 5	Confounding by Indication/severity Prevalence-incidence bias
9	Mar 12	
10	Mar 19	Verification bias Time-dependent bias
11	Mar 26	Length and Lead-time bias
12	Apr 2	

NOTE: There may be fewer, additional, or different presentations given this year, depending on course needs. The list is given for information purposes only; don't plan around these dates.



SPPH 513: Clinical Epidemiology
UBC Marking 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.