Department of Epidemiology and Biostatistics

Epidemiology
3210B

Analytic Epidemiology

Winter 2018

Time:
Wednesdays 8:30-10:30
Fridays 9:30-10:30

Location: K116

Instructor: Igor Karp, MD MPH PhD

Office Hours: By appointment

Phone Extension: 86272

E-mail: ikarp@uwo.ca

Course Information

Prerequisites: Epidemiology 3200A and Biostatistics 3100A

Unless you have either the requisites for this course or written special permission from the Undergraduate Chair to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Course Syllabus

The purpose of the course is to consolidate and advance the student’s critical understanding of the theory of etiological research for preventive medicine.
<table>
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<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
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| 1    | 10\(^{th}\) January  
12\(^{th}\) January | Course introduction / orientation  
Study design overview |
| 2    | 17\(^{th}\) January  
19\(^{th}\) January | Study design overview |
| 3    | 24\(^{th}\) January  
26\(^{th}\) January | Objects design |
| 4    | 31\(^{st}\) January  
2\(^{nd}\) February | Selection bias |
| 5    | 7\(^{th}\) February  
9\(^{th}\) February | Information bias |
| 6    | 14\(^{th}\) February  
16\(^{th}\) February | Confounding bias |
| 7    | 21\(^{st}\) February  
23\(^{rd}\) February | Reading week: no class |
| 8    | 28\(^{th}\) February  
2\(^{nd}\) March | Methods for prevention or control of confounding |
| 9    | 7\(^{th}\) March  
9\(^{th}\) March | Directed acyclic graphs |
| 10   | 14\(^{th}\) March  
16\(^{th}\) March | Efficiency optimization in etiological research |
| 11   | 21\(^{st}\) March  
23\(^{rd}\) March | Effect-measure modification |
| 12   | 28\(^{th}\) March | Student presentations |
| 12   | 30\(^{th}\) March | Good Friday: no class |
| 13   | 4\(^{th}\) April  
6\(^{th}\) April | Student presentations |
| 14   | 11\(^{th}\) April | Student presentations |
Course Materials

Recommended textbooks:


Selected chapters from the recommended textbooks and articles for reading and discussion will be provided to students on the course web-site or distributed by the course instructor.

Methods of Evaluation

- Assignment (15% of the final grade)
- Presentation (40% of the final grade)
- Examination (45% of the final grade)

Policy on Accommodation for Medical and Non-Medical Absences

For assignments worth 10% or more, refer to Western University’s Policy on Accommodation for Medical Illness: [https://studentservices.uwo.ca/secure/index.cfm](https://studentservices.uwo.ca/secure/index.cfm). For assignments worth 10% or more, refer to Western University’s Policy on Accommodation for Medical Illness: [https://studentservices.uwo.ca/secure/index.cfm](https://studentservices.uwo.ca/secure/index.cfm). Accommodation for assignments worth less than 10% will be dealt with in similar manner; medical d

All non-medical absences must be approved in advance. In the case of an unexpected absence on compassionate grounds, documentation may be requested. If documentation is required by the instructor for either medical or non-medical academic accommodation, then such documentation must be submitted by the student directly to the appropriate Faculty Dean’s office and not to the instructor. It will be the Dean’s office that will determine if accommodation is warranted.
Statement on Academic Offences
Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

Support Services
As part of a successful student experience at Western, we encourage students to make their health and wellness a priority. Western provides several on campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your degree. For example, to support physical activity, all students, as part of their registration, receive membership in Western’s Campus Recreation Centre. Numerous cultural events are offered throughout the year. Please check out the Faculty of Music webpage http://www.music.uwo.ca/, and our own McIntosh Gallery http://www.mcintoshgallery.ca/. Information regarding health- and wellness-related services available to students may be found at http://www.health.uwo.ca/

Students seeking help regarding mental health concerns are advised to speak to someone they feel comfortable confiding in, such as their faculty supervisor, their program director (graduate or undergraduate chair), or other relevant administrators in their unit. Campus mental health resources may be found at http://www.health.uwo.ca/mental_health/resources.html

To help you learn more about mental health, Western has developed an interactive mental health learning module, found here: http://www.health.uwo.ca/mental_health/module.html. This module is 30 minutes in length and provides participants with a basic understanding of mental health issues and of available campus and community resources. Topics include stress, anxiety, depression, suicide and eating disorders. After successful completion of the module, participants receive a certificate confirming their participation.

Department & Faculty Offices
The Epidemiology & Biostatistics main office is located in K201 in the Kresge Building on Main campus.

For undergraduate academic counselling assistance, students will need to speak with the Bachelor of Medical Sciences Office: http://www.schulich.uwo.ca/bmsc/general-counselling.

Technology Requirements
You are responsible for all required course materials and announcements posted to the course’s OWL website. Please ensure after the first class that when you log in you are able to access the course site. A copy of the course outline will be available on both OWL and the departmental website.