Department of Epidemiology and Biostatistics

Epidemiology 9514R
Sampling Methods

Time: Tuesday 1:30 - 4:30
Location: K116
Instructor: Yun-Hee Choi
Office Hours: Monday 10:00 - 12:00 (K216)

Lab Time:
Lab Location:
E-mail: ychoi97@uwo.ca
Phone Extension: 86256

Course Information
Unless you have either the requisites for this course or written special permission from the Graduate 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 this course is to introduce various issues and methods related to designing and analyzing survey samples. Topics to be covered include: construction of sampling frames, basic sampling designs, statistical inference for sample surveys, sample size calculation, and methods for adjusting non-response/missing data.

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<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Oct. 30</td>
<td>Introduction to sampling</td>
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<td>2</td>
<td>Nov. 6</td>
<td>Basic statistical concepts of sampling</td>
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<td>3</td>
<td>Nov. 13</td>
<td>Simple &amp; stratified sampling</td>
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<td>4</td>
<td>Nov. 20</td>
<td>Cluster sampling; SAS / R</td>
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<td>5</td>
<td>Nov. 27</td>
<td>Sample size consideration</td>
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<td>6</td>
<td>Dec. 4</td>
<td>Non-responses in sample surveys</td>
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<td>Presentation and analysis of survey data</td>
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<td>7</td>
<td>Dec. 11</td>
<td>Final exam</td>
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Course Materials
3. Lecture notes and handouts will be downloadable from OWL.

Methods of Evaluation
- 40% - Assignments
- 20% - Presentations
- 40% - Final exam

Note that
1. If you miss an assignment without a valid documented reason (medical or bereavement), you will be assigned a grade of 0% for that part.
2. For the first presentation, students choose a research paper of your interest that uses some sampling techniques, present about the study designs, sampling methods and models used, how to present results and any critiques of the paper, etc. Evaluation will be based on in-class presentation (15 minutes presentation + 5 minutes Q&A) + your slides.
3. For the second presentation, students present about issues related to non-responses in sample survey—what are the problems and how to handle them by reading Chapter 6 of Survey Methodology book. Students will have 20 minutes presentation + 5 minutes Q&A. It will take place on December 5th during class.

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.

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_grad.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 web page [http://www.music.uwo.ca/](http://www.music.uwo.ca/), and our own McIntosh Gallery [http://www.mcintoshgallery.ca/](http://www.mcintoshgallery.ca/). Information regarding health- and wellness-related services available to students may be found at [http://www.health.uwo.ca/](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](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](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](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.