Department of Epidemiology and Biostatistics

Epidemiology 9580S
Systematic Reviews
Winter 2021

1. Technical Requirements:

- Stable internet connection
- Laptop or computer
- Working microphone
- Working webcam (suggested)

2. Course Overview and Important Dates:

<table>
<thead>
<tr>
<th>Delivery Mode</th>
<th>Dates</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online</td>
<td>Tuesdays</td>
<td>1:30 to 3:30 pm (EST)</td>
</tr>
</tbody>
</table>

*Details about design and delivery of the course are listed below in Section 4

<table>
<thead>
<tr>
<th>Classes Start</th>
<th>Reading Week</th>
<th>Classes End</th>
<th>Study Day(s)</th>
<th>Exam Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 11</td>
<td>February 15 to 19</td>
<td>February 26</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

3. Contact Information

<table>
<thead>
<tr>
<th>Course Instructor</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Kelly Anderson</td>
<td><a href="mailto:kelly.anderson@schulich.uwo.ca">kelly.anderson@schulich.uwo.ca</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching Assistant</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joo-Hyun Jeong</td>
<td><a href="mailto:jjeong46@uwo.ca">jjeong46@uwo.ca</a></td>
</tr>
</tbody>
</table>
4. Course Description and Design

Systematic reviews form the core of evidence-based decision-making in health care and are based on reliable syntheses of research and information. This course will cover the theory and rationale behind systematic reviews, discuss the strengths and limitations of the method, and provide step-by-step guidance on how to actually perform a systematic review. Because this course aims to teach a skill, a large portion of the coursework involves “learning by doing”.

Students will be divided into review teams, and each team will work through the steps of a systematic review project. The weekly asynchronous lectures will cover key information on how to conduct a systematic review. Each review team will meet with the course instructor during the weekly synchronous session (Tuesdays) for consultation on their project and to address any questions or issues that arise throughout the process. This will allow students to develop these systematic review skills in a supported environment.

It should be noted that this course requires a significant amount of hands-on group work, but it is intended to be highly practical and will prepare you to conduct systematic reviews. Over the course of six weeks, you will plan, conduct, and report a systematic review on a topic of your choosing. With sufficient planning and effort, your final report may be appropriate for publication in a peer-reviewed journal.

Prerequisites: Enrollment in the graduate program in Epidemiology & Biostatistics, or permission of the course instructor.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Dates</th>
<th>Time</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual asynchronous lectures</td>
<td>N/A</td>
<td>1 hour</td>
<td>Weekly</td>
</tr>
<tr>
<td>Virtual synchronous class session (group meetings)</td>
<td>Tuesdays</td>
<td>1:30 to 3:30 pm (EST)</td>
<td>Weekly</td>
</tr>
</tbody>
</table>

- Asynchronous pre-work must be completed prior to the synchronous sessions.
- The synchronous sessions will consist of group meetings with the instructor regarding course projects. Each group will be assigned a time within the weekly synchronous time slot.
- Missed work from the synchronous session should be completed within 48 hours.

All course material will be available through OWL: [http://owl.uwo.ca](http://owl.uwo.ca). Any changes will be indicated on the OWL site and discussed with the class.

If students need assistance, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

Google Chrome or Mozilla Firefox are the preferred browsers to optimally use OWL; update your browsers frequently. Students interested in evaluating their internet speed, please click [here](http://owl.uwo.ca).
5. **Learning Outcomes**

Upon successful completion of this course, students will be able to:

- Recognize different types of literature reviews and understand how they are used in health care decision making
- Develop a systematic review protocol that clearly defines the study objectives and outlines the search strategy
- Conduct the literature search, study screening, data extraction, and quality assessment
- Write-up a systematic review manuscript

6. **Course Content and Schedule**

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January 11–15</td>
<td>Introduction to Systematic Reviews</td>
</tr>
<tr>
<td>2</td>
<td>January 18–22</td>
<td>Developing a Search Strategy</td>
</tr>
<tr>
<td>3</td>
<td>January 25–29</td>
<td>Study Screening</td>
</tr>
<tr>
<td>4</td>
<td>February 1–5</td>
<td>Data Extraction</td>
</tr>
<tr>
<td>5</td>
<td>February 8–12</td>
<td>Risk of Bias Assessment</td>
</tr>
<tr>
<td>6</td>
<td>February 22–26</td>
<td>Reporting Systematic Reviews</td>
</tr>
</tbody>
</table>
7. Evaluation

Below is the evaluation breakdown for the course. Any deviations will be communicated.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Format</th>
<th>Weighting</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Practice Problems</td>
<td>Online via OWL</td>
<td>5%</td>
<td>N/A</td>
</tr>
<tr>
<td>Peer Evaluation</td>
<td>Online via OWL</td>
<td>15%</td>
<td>February 26</td>
</tr>
<tr>
<td>Weekly Journal Entries (5)</td>
<td>Online via OWL</td>
<td>10%</td>
<td>Every Sunday</td>
</tr>
<tr>
<td>Group Project Presentation</td>
<td>Online via Zoom</td>
<td>10%</td>
<td>February 23</td>
</tr>
<tr>
<td>Group Review Report</td>
<td>Upload to OWL</td>
<td>60%</td>
<td>February 26</td>
</tr>
</tbody>
</table>

- All assignments are due at 5:00 pm EST unless otherwise specified
- Any requests for marking reassessment should be submitted in writing to the course instructor
- After an assessment is returned, students should wait 24 hours to digest feedback before requesting reassessment; to ensure a timely response, please reach out within 7 days

Information about late or missed evaluations:
- Please discuss an alternative deadline with the instructor in advance if you foresee difficulties meeting the assigned due dates
- Late assessments without prior approval or illness self-reports will be subject to a late penalty (5% per day)
- Late assessments with illness self-reports should be submitted within 48 hours of submission of the last illness self-report

8. Communication:

- Students should check the OWL site every 24 to 48 hours
- Discussion forums will be monitored daily, and students will receive a response in 24 to 48 hours
- This course will use the OWL forum for discussions
- Students should post all course-related content on the discussion forum so that everyone can access answers to questions
- The discussion forums will be monitored by the instructor and teaching assistant

9. Weekly Group Meetings:

- The weekly synchronous sessions will involve group meetings with the course instructor for project consultation. Each group will be assigned a time during the timetabled hours (Tuesdays from 1:30 to 3:30 pm EST)
- If needed, meetings can be scheduled with the course instructor by appointment (email)
10. Resources


☑ Any additional readings and other course materials will be posted to the weekly lesson folder on OWL.

11. Professionalism & Privacy:

Western students are expected to follow the Student Code of Conduct. Additionally, the following expectations and professional conduct apply to this course:

☑ Students are expected to follow online etiquette expectations provided on OWL
☑ All course materials created by the instructor(s) are copyrighted and cannot be sold/shared
☑ Recordings are not permitted (audio or video) without explicit permission
☑ Permitted recordings are not to be distributed in any format
☑ Students will be expected to take an academic integrity pledge before some assessments
☑ All recorded sessions will remain within the course site or unlisted if streamed

12. How to Be Successful in this Class:

Students enrolled in this class should understand the level of autonomy and self-discipline required to be successful.

1. Invest in a planner or application to keep track of your courses. Populate all your deadlines at the start of the term and schedule time at the start of each week to get organized and manage your time.

2. Make it a daily habit to log onto OWL to ensure you have seen everything posted to help you succeed.

3. Take notes as you go through the lesson material. Treat this course as you would a face-to-face course. Keeping handwritten notes or even notes on a regular Word document will help you learn more effectively than just reading or watching the videos.

4. Connect with others. Try forming an online study group and meeting on a weekly basis for study and peer support.

5. Do not be afraid to ask questions. If you are struggling with a topic, check the online discussion boards or contact your instructor or teaching assistant.

6. Reward yourself for successes. It seems easier to motivate ourselves knowing that there is something waiting for us at the end of the task.
13. Western Academic Policies and Statements

Policy on Accommodation for Medical and Non-Medical Absences
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 for either medical or non-medical academic accommodation, then such documentation must be submitted by the student to the instructor.

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: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Statement on Copyright and Audio/Video Recording
All of the remote learning sessions for this course will be recorded. The data captured during these recordings may include your image, voice recordings, chat logs and personal identifiers (name displayed on the screen). The recordings will be used for educational purposes related to this course, including evaluations. The recordings may be disclosed to other individuals participating in the course for their private or group study purposes. Please contact the instructor if you have any concerns related to session recordings.

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation, or the participant has the prior written permission of the instructor.
You must always ask permission to record another individual and you should never share or distribute recordings.

Course material produced by faculty is copyrighted and to reproduce this material for any purposes other than your own educational use contravenes Canadian Copyright Laws.

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/, 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.

Students who are in emotional/mental distress should refer to Mental Health@Western [http://www.uwo.ca/uwocom/mentalhealth/](http://www.uwo.ca/uwocom/mentalhealth/) for a complete list of options about how to obtain help.

**Student Accessibility Services**

Western is committed to achieving barrier-free accessibility for all its members, including graduate students. As part of this commitment, Western provides a variety of services devoted to promoting, advocating, and accommodating persons with disabilities in their respective graduate program.

Graduate students with disabilities (for example, chronic illnesses, mental health conditions, mobility impairments) are encouraged to register with Student Accessibility Services, a confidential service designed to support graduate and undergraduate students through their academic program. With the appropriate documentation, the student will work with both SAS and their graduate programs (normally their Graduate Chair and/or Course instructor) to ensure that appropriate academic accommodations to program requirements are arranged. These accommodations include individual counselling, alternative formatted literature, accessible campus transportation, learning strategy instruction, writing exams and assistive technology instruction.

**Department & Faculty Offices**

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