Department of Epidemiology and Biostatistics  
2023  
Epidemiology 2200B  
Introduction to Epidemiology

Lecture:  Tuesday: 11:30 a.m.-1:30 p.m.  
Location: North Campus Building NCB-113

Tutorial:  Thursday 11:30 a.m.-12:30 p.m.  
Location: North Campus Building NCB-113

Instructor: Neil Klar  
Office Hours: By appointment  
E-mail: nklar@uwo.ca

Course Information

This course will introduce students to the calculation and interpretation of basic epidemiologic measures, the strengths and weaknesses of various study designs, and the critical appraisal of published medical and epidemiologic studies.

Course Information

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 Materials

## Course Syllabus

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic(s)</th>
<th>Assignments</th>
<th>Readings (Gordis)</th>
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</thead>
<tbody>
<tr>
<td>Jan 10</td>
<td>Introduction to Epidemiology</td>
<td></td>
<td>Chapter 1</td>
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<tr>
<td>Jan 12</td>
<td>Tutorial 1</td>
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<tr>
<td>Jan 17</td>
<td>Dynamics of Disease Transmission</td>
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<td>Chapter 2</td>
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<tr>
<td>Jan 19</td>
<td>Tutorial 2</td>
<td>Assignment 1 posted</td>
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<td>Jan 24</td>
<td>Occurrence of Disease</td>
<td></td>
<td>Chapters 3 &amp; 4</td>
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<tr>
<td>Jan 26</td>
<td>Tutorial 3</td>
<td>Assignment 1 <strong>DUE</strong></td>
<td></td>
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<tr>
<td>Jan 31</td>
<td>Validity and Reliability of Diagnostic and Screening Tests</td>
<td></td>
<td>Chapter 5</td>
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<tr>
<td>Feb 2</td>
<td>Tutorial 4</td>
<td>Assignment 2 posted</td>
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<tr>
<td>Feb 7</td>
<td>Natural History of Disease</td>
<td></td>
<td>Chapter 6</td>
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<tr>
<td>Feb 9</td>
<td>Tutorial 5</td>
<td>Assignment 2 <strong>DUE</strong></td>
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<tr>
<td>Feb 14</td>
<td>Observational Studies</td>
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<td>Chapter 7</td>
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<td>Feb 16</td>
<td><strong>Midterm Exam (during Tutorial)</strong></td>
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<td>Reading week: Feb 18-26 (no classes)</td>
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<tr>
<td>Feb 28</td>
<td>Cohort Studies and Comparison to Case-Control Studies</td>
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<td>Chapters 8 &amp; 9</td>
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<tr>
<td>Mar 2</td>
<td>Tutorial 6</td>
<td>Assignment 3 posted</td>
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<tr>
<td>Mar 7</td>
<td>Randomized Trials</td>
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<td>Chapters 10 &amp; 11</td>
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<tr>
<td>Mar 9</td>
<td>Tutorial 7</td>
<td>Assignment 3 <strong>DUE</strong></td>
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<tr>
<td>Mar 14</td>
<td>Estimating Risk</td>
<td></td>
<td>Chapters 12 &amp; 13</td>
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<tr>
<td>Mar 16</td>
<td>Tutorial 8</td>
<td>Assignment 4 posted</td>
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<tr>
<td>Mar 21</td>
<td>From Association to Causation</td>
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<td>Chapter 14</td>
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<tr>
<td>Mar 23</td>
<td>Tutorial 9</td>
<td>Assignment 4 <strong>DUE</strong></td>
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<tr>
<td>Mar 28</td>
<td>Bias, confounding and interaction</td>
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<td>Chapter 15</td>
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<tr>
<td>Mar 30</td>
<td>Tutorial 10</td>
<td>Assignment 5 posted</td>
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<tr>
<td>Apr 4</td>
<td>Systematic Reviews and Meta-Analysis</td>
<td></td>
<td>Chapter 19, pp. 387-389</td>
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<tr>
<td>Apr 6</td>
<td>Tutorial 11</td>
<td>Assignment 5 <strong>DUE</strong></td>
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Notes will be posted on OWL before each lecture.

Assignments may make use of additional readings not listed above.

### Methods of Evaluation

**Weekly Tutorial One Question Quiz**: 10% of course grade

**Assignments**: 5 in all for a total of 20% of course grade

**Mid-term exam** (multiple choice/short answer) 25% of course grade

**Final exam** (multiple choice/short answer) 45% of course grade

**Must pass final exam to pass the course**
Western Academic Policies and Statements

Absence from Course Commitments

A. Absence for medical illness:

Students must familiarize themselves with the Accommodation for Illness Policy.

A student seeking academic accommodation for any work worth less than 10% must contact the instructor or follow the appropriate Department or course specific instructions provided on the course outline. Instructors will use good judgment and ensure fair treatment for all students when considering these requests. You are not required to disclose details about your situation to your instructor; documentation is not required in this situation, and you should not send any pictures to your instructor.

If you are unable to meet a course requirement for any work worth 10% or greater due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to the Academic Counseling as soon as possible and contact your instructor immediately. It is the student’s responsibility to make alternative arrangements with their instructor once the accommodation has been approved and the instructor has been informed. Please note that the format of a make-up test, exam, or assignment is at the discretion of the course coordinator.

A student requiring academic accommodation due to illness should use the Student Medical Certificate when visiting an off-campus medical facility or request a Record’s Release Form (located in the Dean’s Office) for visits to Student Health Services. The form can be found at: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf

B. Absence for non-medical reasons:

Student absences might also be approved for non-medical reasons such as religious holidays and compassionate situations. Please review the policy on Accommodation for Religious Holidays. All non-medical requests must be processed by Academic Counselling. Not all absences will be approved; pay attention to the academic calendar and final exam period when booking any trips.

C. Special Examinations

A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given on the basis of compassionate or medical grounds with appropriate supporting documents. To provide an opportunity for students to recover from the circumstances resulting in a Special Examination, the University has implemented Special Examinations dates. These dates as well as other important information about examinations and academic standing can be found here.
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, at the following Web site:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.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.

Accessibility Statement

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Accessible Education (AE) at 661-2111 x 82147 for any specific question regarding an accommodation or review the Policy on Accommodation for Students with Disabilities

Copyright and Audio/Video Recording Statement

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. You must always ask permission to record another individual and you should never share or distribute recordings.

Support Services

The following links provide information about support services at Western University:

- Academic Counselling (Science and Basic Medical Sciences)
- Appeal Procedures
- Registrarial Services
- Student Development Services
Student Health Services

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at


To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Department & Faculty Offices

The Department of Epidemiology and Biostatistics is located on the third floor of the Western Centre for Public Health & Family Medicine (PHFM) on Western University’s Main Campus.

Undergraduate Students requiring academic counselling should contact the Science & Basic Medical Sciences Academic Counselling Office: https://www.uwo.ca/sci/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.

Cell Phone and Electronic Device Policy

The Schulich School of Medicine & Dentistry is committed to ensuring that testing and evaluation are undertaken fairly across all our departments and programs. For all tests and exams, it is the policy of the School and the Department of Epidemiology and Biostatistics that any electronic devices, i.e., cell phones, tablets, cameras, or iPod are strictly prohibited. These devices MUST be left either at home or with the student’s bag/jacket at the front of the room and MUST NOT be at the test/exam desk or in the individual’s pocket. Any student found with one of these prohibited devices will receive a grade of zero on the test or exam. Non-programmable calculators are only allowed when indicated by the instructor. The Department of Epidemiology and Biostatistics is not responsible for stolen/lost or broken devices.