

Fall 2022

Room VAC 100

## 1. Contact Information



Course Coordinator & Instructor	Contact Information
Dr. Janet Martin	jmart83@uwo.ca

Teaching Assistants	Contact Information
Fatemeh Ahmadi	fahmad56@uwo.ca
Yvana Sawaya	ysawaya@uwo.ca

Guest Lecturers	Contact Information
Dr. Philip Jones	pjones8@uwo.ca
Dr. Ken Milne	thesgem@gmail.com
Karla Solo	

## 2. Technical Requirements:



Stable internet connection



Laptop or computer



Working microphone



Working webcam

## 3. Course Overview and Important Dates:

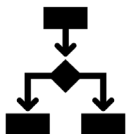


Delivery Mode	Day	Time
In-person (VAC Room 100) and virtual delivery (for selected classes)	Mondays	12:30pm to 3:30pm

First Class	Thanksgiving Holiday	Reading Week	Last Class	Final Assignment
September 12	Oct 10 (no class)	Oct 31 – Nov 6 (no class)	December 5	Dec 12

## 4. Course Description and Design

Students will develop skills required for critical appraisal of clinical research and application of the evidence to support decision-making in health care. Through a combination of videos, lectures, readings, and interactive activities, students will find, filter, interpret and apply evidence from the scientific literature to inform decisions about cases relating to individual patients (simulating 'clinical' decision-making in the interdisciplinary setting) and groups of patients (simulating 'policy' decision-making).



A devoted website has been developed for this course. The **link to redirect you to the course website will be listed on <http://owl.uwo.ca>**.

- Asynchronous pre-work must be completed prior to synchronous sessions
- Attendance at synchronous sessions is required
- Selected synchronous sessions will be recorded

## 5. Learning Outcomes

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

1. Describe the **role of 'evidence'** in decision-making in health care, and how to navigate **uncertainty** in decision-making.
2. Compare and contrast **evidence-based decision-making** versus other forms of decision making for individual patients and for groups of patients.
3. Identify **types of bias** in clinical research and decision-making, and describe the role of appropriate study design and analysis to reduce risk of bias.
4. Identify and formulate different **types of clinical questions** and **policy questions** in health care (diagnosis, prognosis, screening and prevention, therapy, harm).
5. **Choose the best level of evidence** to address different clinical and policy questions.
6. **Critically appraise individual studies** addressing therapy, harm, diagnosis, screening.
7. **Critically appraise syntheses of studies** including systematic reviews, meta-analyses, economic evaluations, and clinical guidelines.
8. **Analyze and apply evidence** from different study types to resolve case-based clinical questions or policy scenarios.
9. **Discuss the role of interdisciplinary contribution** of epidemiologists, biostatisticians, clinicians, and policymakers to improve evidence interpretation and application.
10. Understand the barriers and facilitators of **getting from evidence to real world impact** (knowledge translation).



## 6. Course Content and Schedule

Week	Dates	Topic
1	Sept 12	Intro to Clinical Epidemiology Bias in the Media & Assessing Claims
2	Sept 19	Evidence-Based Decision Making Asking Clinical Questions & Selecting Evidence
3	Sept 26	Using Measures of Effect Using P-values and 95% Confidence Intervals
4	Oct 3	Critical Appraisal Framework Appraising Treatment Studies I
5	Oct 10	<b>Thanksgiving (Self-Study)</b>
6	Oct 17	Appraising Treatment Studies II
7	Oct 24	Appraising Diagnosis & Screening Studies Appraising Studies of Prognosis
8	Oct 31	<b>Reading Week (Self-Study)</b>
9	Nov 7	Appraising Evidence Syntheses I
10	Nov 14	Appraising Evidence Syntheses II GRADE'ing the Evidence & Guidelines
11	Nov 21	Research Integrity I
12	Nov 28	Research Integrity II
13	Dec 5	Summative Session
14		<b>Final Assignments</b>



## 7. Online Participation and Engagement



- Students are expected to participate and engage with content as much as possible
- Students can also participate by interacting in forums with their peers and instructors
- Marks are not specifically allocated for participation in this course

## 8. Evaluation

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

Assessment	Format	Weight %	Due Date
Assignment 1	Bias in the Media (video submission)	10	Sept 26
Assignment 2	<b>Critical Appraisal (paper submission)</b>	<b>15</b>	Oct 24
Assignment 3	Teach it to me (video submission)	10	Oct 31
Assignment 4	<b>Critical Appraisal (paper submission)</b>	<b>15</b>	Nov 7
Assignment 5	Teach it to me (video submission)	10	Nov 14
Assignment 6	<b>Critical Appraisal (paper submission)</b>	<b>20</b>	Nov 28
Assignment 7	<b>GRADE Guideline (paper submission)</b>	<b>20</b>	Dec 12



- ✓ All assignments are due at **12:00 noon Eastern Time (ET)** unless otherwise specified
- ✓ Written assignments may be assessed for plagiarism ie, Turnitin (statement in policies below)
- ✓ Rubrics will be used to evaluate assessments and will be posted with the instructions
- ✓ Click [here](#) for a comprehensive set of policies and regulations concerning grading

### Information about late or missed evaluations:

- ✓ Late assessments without self-reported absences will be subject to a late penalty of 20%/day

## 9. Communication:



- ✓ Students should email their instructor(s) and teaching assistant(s) using uwo email.
- ✓ Emails and discussion forums will be monitored daily by instructors or teaching assistants

## 10. Office Hours:



- ✓ Office hours in-person or via Zoom will be available upon request by contacting the teaching assistants or the instructor via uwo email.

## 11. Resources



Resources and readings will be posted on the course website

Recommended textbook (optional):

Gordon Guyatt: Users' Guide to the Medical Literature: A Manual for Evidence-Based Clinical Practice, 3<sup>rd</sup> ed. **ISBN-13: 978-0071790710**, 860 pages. This book is available electronically or as a physical copy.

## 12. Pre-Requisites Information

Undergraduate pre-requisites: Biostatistics 3100A and Epidemiology 3200A.

Unless you have either the requisites for this course or written special permission 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 or permissions.

## 13. 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

Students are expected to respect the academic integrity pledge for all assessments

## 14. 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. Schedule time throughout each week to complete the asynchronous course material on the course website before Monday's virtual class.
2. During Monday's synchronous classes, use the time as a safe space to explore and apply the concepts you have learned.
3. Connect with others often. Study groups are encouraged.
4. Ask questions freely. If you are struggling with a topic, check the online discussion boards and contact your instructor(s) and or teaching assistant(s).
5. Contribute often to discussions.
6. Provide constructive feedback to the instructor and teaching assistants throughout the course, so that we know when things are working well or when improvements could be made.
7. The course is less about memorization, and more about applying concepts to solve cases. Note that this may feel uncomfortable at first. Embrace the uncertainty, and make learning and applying the goal.

## 15. Western/BMSc Academic Policies and Statements

### 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.

### Absence from Course Commitments: Undergraduate Students

#### [Policy on Academic Consideration for Student Absences](#)

If you are unable to meet a course requirement due to illness or other serious circumstances, please seek approval for the absence as soon as possible. Approval can be granted either through a **self-reported absence** or via the **Academic Counselling** unit. Students have two self-reports to use throughout the academic year; absence from course commitments including tests, quizzes, presentations, labs, and assignments that are worth 30% or less can be self-reported. Self-reported absences cover a student for 48 hours (yesterday + today + today + tomorrow). Your instructor will receive notification of your consideration; however, you should contact your instructor immediately regarding your absence. Students are expected to submit missed work within 24 hours of the end of the reported 48-hour period. Please review details of the [university's policy on academic consideration for student absences](#).

If you have used both their self-reported absences or will miss more than 48 hours of course requirements, a Student Medical Certificate (SMC) should be signed by a licensed medical or mental health practitioner, and you should contact academic counselling. Academic Counselling will be operating virtually this year and can be contacted at [scibmsac@uwo.ca](mailto:scibmsac@uwo.ca).

### Absence from Course Commitments: Graduate Students

All accommodations are to be discussed and arranged with the course instructor.

### Accommodation for Religious Holidays

The policy on Accommodation for Religious Holidays can be viewed [here](#).

### 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:

- Undergraduate students:  
[http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf).
- Graduate students:  
[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_grad.pdf](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.

## 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/>

Registrarial Services: <http://www.registrar.uwo.ca>

USC Student Support Services: <http://westernusc.ca/services/>

Student Development Centre: <http://www.sdc.uwo.ca/>

SGPS Life & Community web page: [https://grad.uwo.ca/life\\_community/self/index.html](https://grad.uwo.ca/life_community/self/index.html)

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/> 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 and 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 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.