

Pathology and Laboratory Medicine / One Health

RESEARCH PROJECT AND SEMINAR

METHODOLOGY, EXPERIMENTATION AND COMMUNICATION IN ONE HEALTH

OH4980E

Course outline for 2020/2021



Although this academic year might be different, Western University is committed to a **thriving campus**. We encourage you to check out the [Digital Student Experience](#) website to manage your academics and well-being. Additionally, the following link provides available resources to support students on and off campus: <https://www.uwo.ca/health/>.

1. Technical Requirements:



Stable internet connection



Laptop or computer



Working microphone



Working webcam

2. Course Overview and Important Dates:

This course will have in person¹ components and online² participation. Virtual/online sessions will be a combination of live and recorded. Students could be expected to complete work prior to attending sessions. Timetabled sessions could be used for lectures, tutorials, discussions, groupwork, etc. Below are details about the sessions.



Mode	Dates	Time	Frequency	Attendance
In person ¹	M-F	Varies	Varies	Yes ¹
Virtual live ²	W	10:30-1:30 EST	Weekly	Optional ³
Virtual recorded	N/A	N/A	Weekly	N/A

¹ Some students may have a research project which may require in-person participation;

² A schedule will be posted for weekly online session; ³ Virtual live sessions will be recorded for later viewing and students will be expected to be familiar with the material.

*Details about design and delivery of the course are listed below in Section 4, 5, and 6

*November 30, 2020: Last day to drop a full course and full-year half course without penalty

3. Contact Information



Course Coordinator	Contact Information
Dr. Francisco Olea Popelka	Use OWL message or direct email at: foleapop@uwo.ca

4. Course Description and Design

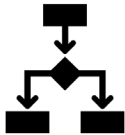
GENERAL OUTLINE

The goal of this seminar and research-based course and research project in 4th year is to introduce you to the qualitative and quantitative skills required to pursue a career in research. Students will undertake a research project that will cross disciplines and be supervised by faculty from either the medical or health sciences, social sciences or public health or in some cases, depending on the project, under co-supervision.

This will involve:

- the formulation of a research proposal and research hypothesis,
- collection of data to test your hypothesis or the development of an appropriate application to solve an existing problem,
- statistical analysis of the data, where appropriate, and
- the oral and written presentation of the methodology, results and conclusions.

Independent study, self-directed experimental design and analysis, and effective communication skills will be emphasized. Students are required to spend at least 10-12 hours/week working with their supervisor(s) on their chosen research problem. Specific projects and assignment to supervisors will be worked out between the student and supervisor early in September.



In addition, we will hold a **weekly seminar session on Wednesdays from 10:30 am to 1:30 pm** (tentative timetable and schedule is attached). These sessions will be recorded, and digital files will be made available to students for viewing at later times. Students are encouraged, however, to participate during the live session. Slight changes to the schedule may also be made to accommodate supervisor's availability for sessions in which you will present your proposals or final research projects. You will be required to present your project proposal report during the Fall term (in written and oral form), and a final report (written and oral form) during the Winter term.

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In person ¹	M-F	Varies	Varies	Yes ¹
Virtual live ²	W	10:30-1:30 EST	Weekly	Optional ³
Virtual recorded	N/A	N/A	Weekly	N/A

- Recorded (asynchronous) pre-work must be completed [at least 1 days] prior to live (synchronous) sessions
- Attendance at live (synchronous) sessions is required
- Missed work should be completed within [48] hours
- A recording will be provided for live (synchronous) sessions

All course material will be posted to OWL: <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](#).

5. Learning Outcomes

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

- Know a variety of methodologies and approaches to address health challenges using the One Health approach
- Formulate hypotheses, design, and implement a One Health research project.
- Know analytical skills required to conduct research in One Health and to derive appropriate conclusions.
- Develop skills in critical evaluation of medical, scientific, and One Health information.



6. Course Content and Schedule



DATE	TIME	TOPIC	INSTRUCTOR
September 9	10:30am - 1:30pm	Introduction to the course Course structure / expectations One Health research project characteristics	FJOP
September 16	10:30am - 1:30pm	Applied One Health Research Approach	FJOP
September 23	10:30am - 1:30pm	Study design & Research Methods	FJOP
September 30	10:30am - 1:30pm	Applied statistics, sample size and Power	FJOP
October 7	10:30am - 1:30pm	Individual 45 minutes sessions Research project mentoring	FJOP
October 14	10:30am - 1:30pm	Individual 45 minutes sessions Research project mentoring	FJOP
October 21	10:30am - 1:30pm	Individual 45 minutes sessions Research project mentoring	FJOP
October 28	10:30am - 1:30pm	Individual 45 minutes sessions Research project mentoring	FJOP
NOVEMBER 2-8, 2020		FALL READING WEEK	
November 11	10:30am - 1:30pm	Research proposal tutorial (How to present a research proposal)	FJOP
November 18	10:30am - 1:30pm	Proposal Presentation Session 1	FJOP
November 27	10:30am - 1:30pm	Proposal Presentation Session 2	FJOP
December 2	10:30am - 1:30pm	Proposal Presentation Session 3	FJOP
December 9	10:30am - 1:30pm	Proposal Presentation Session 4	FJOP
December 11-22		MIDYEAR EXAM PERIOD	

DATE	TIME	TOPIC	INSTRUCTOR
January 6	10:30am – 1:30pm	Scientific communication (papers, posters, thesis)	FJOP
January 13	10:30am – 1:30pm	Journal Critique	FJOP
January 20	10:30am – 1:30pm	Journal Critique Session 1 TBD	FJOP
January 27	10:30am – 1:30pm	Journal Critique Session 2 TBD	FJOP
February 3	10:30am – 1:30pm	Journal Critique Session 3 TBD	FJOP
February 10	10:30am – 1:30pm	Journal Critique Session 4 TBD	FJOP
FEBRUARY 13-21		READING WEEK	
February 24	10:30am – 1:30pm	Individual 30 minutes sessions Presenting research (orally and written) mentoring	FJOP
March 3	10:30am – 1:30pm	Individual 30 minutes sessions Presenting research (orally and written) mentoring	FJOP
March 10	10:30am – 1:30pm	Final Research Presentation Session 1	FJOP
March 17	10:30am – 1:30pm	Final Research Presentation Session 2	FJOP
March 24	10:30am – 1:30pm	Final Research Presentation Session 3	FJOP
March DAY* * TBD	10:30am – 3:30pm	Pathology and Laboratory Medicine Research Day	FJOP
March 31	10:30am – 1:30pm	Finishing the written research project (thesis) TBD	FJOP

7. Online Participation and Engagement



- Students are expected to participate and engage with content as much as possible
- Students can participate during all sessions or post on OWL after watching the recording
- Students can also participate by interacting in the forums with their peers and instructors

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8. Evaluation

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

Research Project	75%
^a Written proposal	17.5%
Oral Presentation	15%
^b Final written report	17.5%
Oral Presentation	15%
^c Research Day Poster Presentation	10%
Critical Evaluation / Communication	15%
Journal paper critique presentation	60% (of this 15%)
Journal critiques peer evaluations	40% (of this 15%)
Course Participation	10%



^a Research Proposal – The proposal should be prepared in consultation with your supervisor. Detailed guidelines will be provided to all students before the submission deadline. In brief, proposal reports should include the following sections:

- Overall objective(s)
- Background – brief introduction and evidence that led to formulation of hypothesis
- Hypothesis or research focus/Specific aims (when appropriate)
Main goal and specific objectives/aims
- Outline of methodology - how are you going to test your hypothesis or explore the issue chosen for investigation, including relevant experimental model and approaches (qualitative or quantitative, including statistical analyses when appropriate) to be used
- Significance of research- What is the significance of the study? You may also include the expected results. How are you using the One Health approach in your project?
- References- A complete list of literature cited.

^b Final Report – The written report should be in the format of a scientific article (can use an appropriate format for submission, e.g. Journal of medicine and Internet Research, JAMIA, IJMI, BMC Medical Informatics and Decision Making. Include:

- a general discussion of the problems encountered and the possible solutions,
- the direction of the research if the project were to be continued.

^c Poster presentation – Evaluation provided by invited faculty and course coordinator. General format to include: Objectives & Aims, brief outline of Methodology, Results to date, Summary and Significance of Research. Student will also be evaluated on how well they understood the research methodology, results and significance of research in answering questions.

^d Course Participation will be evaluated by the course coordinator and based on class/sessions attendance as well on activate participation on oral discussions, oral presentations, and written forums.

- All assignments are due at 11:55 pm EST unless otherwise specified
- Written assignments will be submitted to Turnitin (statement in policies below)
- Rubrics will be used to evaluate assessments and will be posted with the instructions
- After an assessment is returned, students should wait 24 hours to digest feedback before contacting their evaluator; to ensure a timely response, reach out within 7 days

Click [here](#) for a detailed and comprehensive set of policies and regulations concerning examinations and grading. The table below outlines the University-wide grade descriptors.

A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work which is clearly above average
B	70-79	Good work, meeting all requirements, and eminently satisfactory
C	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	below 50	Fail

Information about late or missed evaluations:

- Late assessments without illness self-reports will be subject to a late penalty 25 %/day
- Late assessments with illness self-reports should be submitted within 24 hours of submission of the last illness self-report

9. Communication:



- Students should check the OWL site every 24 – 48 hours
- Students should email their instructor(s) and teaching assistant(s) using OWL “messages” or directly to the course instructor at foleapop@uwo.ca
- Emails will be monitored daily; students will receive a response in 24 – 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 daily by instructors or teaching assistants

10. Office Hours:



- Office hours will be held remotely using Zoom and arranged individually with students.
- Students will be able to sign up for an appointment emailing the course instructor

11. Resources



- All resources will be posted in OWL

12. 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 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

13. 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 in this class.
3. Follow weekly checklists created on OWL or create your own to help you stay on track.
4. 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.
5. Connect with others. Try forming an online study group and try meeting on a weekly basis for study and peer support.

6. Do not be afraid to ask questions. If you are struggling with a topic, check the online discussion boards or contact your instructor(s) and or teaching assistant(s).
7. Reward yourself for successes. It seems easier to motivate ourselves knowing that there is something waiting for us at the end of the task.

14. Western Academic Policies and Statements

Absence from Course Commitments

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

In the interest of the health and safety of students and health care providers, you are no longer required to seek a medical note for absences this term. If you are unable to meet a course requirement due to illness you should use the [Illness Reporting Tool](#). This tool takes the place of the need to submit a medical note and the Self-Reported Absence System formally used by undergraduate students.

You are required to self-report every day that you are ill and unable to complete course commitments. Details about when you should submit missed work, the format of the missed work can be found in the Section 7. Evaluation above. Students should communicate promptly with their instructor and use this tool with integrity.

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](#).

Academic Offenses

“Scholastic offences are taken seriously, and students are directed [here](#) to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence.

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](#).

Correspondence Statement

The centrally administered **e-mail account** provided to students will be considered the individual’s official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner. You can read about the privacy and security of the UWO email accounts [here](#).

Turnitin and other similarity review software

All assignments will be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. Students will be able to view their results before the final submission. 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 Western University and [Turnitin.com](https://www.turnitin.com).

15. BMSUE Academic Policies and Statements

Cell Phone and Electronic Device Policy (for in-person tests and exams)

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 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 program is not responsible for stolen/lost or broken devices.

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.

Rounding of Marks Statement

Across the Basic Medical Sciences Undergraduate Education programs, we strive to maintain high standards that reflect the effort that both students and faculty put into the teaching and learning experience during this course. All students will be treated equally and evaluated based only on their actual achievement. **Final grades** on this course, irrespective of the number of decimal places used in marking individual assignments and tests, will be calculated to one decimal place and rounded to the nearest integer, e.g., 74.4 becomes 74, and 74.5 becomes 75. Marks **WILL NOT** be bumped to the next grade or GPA, e.g. a 79 will **NOT** be bumped up to an 80, an 84 **WILL NOT** be bumped up to an 85, etc. The mark attained is the mark you achieved, and the mark assigned; requests for mark "bumping" will be denied.

16. 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](#)