1. Technical Requirements:

- Stable internet connection
- Laptop or computer
- Working microphone
- Working webcam

**Please Note:** Due to uncertainty around COVID-19, students must have a reliable internet connection and computer that are compatible with online learning and testing system requirements.

Computer requirements include:
- Operating system: MAC: OSX Yosemite 10.10.5 or higher, PC: Windows 7, 8, or higher
- Processor/Ram: MAC: Intel / AMD Processor, 2 GB RAM, PC: Dual-core 2.4 Ghz CPU, 2 GB RAM or better
- Web Browsers: Mozilla Firefox v20.0 or Higher Google Chrome v25.0 or higher
- Plug-ins: Javascript Enabled & Third Party Cookies Enabled
- Camera resolution: 800 x 600 resolution or better
- Internet connection: Cable Modem, DSL or better (300 kbps download, 250 kbps upload)

2. Course Overview and Important Dates:

<table>
<thead>
<tr>
<th>Classes Begin</th>
<th>Classes End</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday September 9, 2021</td>
<td>Wednesday December 8, 2021</td>
</tr>
</tbody>
</table>

* November 12, 2021: Last day to drop a first term course without academic penalty

<table>
<thead>
<tr>
<th>Reading Week</th>
<th>Study day(s)</th>
<th>Exam Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 1-7</td>
<td>December 9</td>
<td>December 10 - 21</td>
</tr>
</tbody>
</table>

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/.
3. Contact Information

<table>
<thead>
<tr>
<th>Course Coordinator and Instructor</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. John McGuire</td>
<td><a href="mailto:John.McGuire@schulich.uwo.ca">John.McGuire@schulich.uwo.ca</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching Assistant(s)</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaryd Christie</td>
<td><a href="mailto:jchris63@uwo.ca">jchris63@uwo.ca</a></td>
</tr>
<tr>
<td>Kevin Moore</td>
<td><a href="mailto:kmoor49@uwo.ca">kmoor49@uwo.ca</a></td>
</tr>
<tr>
<td>Maksym Sharma</td>
<td><a href="mailto:mshar68@uwo.ca">mshar68@uwo.ca</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course and Program Assistant</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathleen Petts</td>
<td><a href="mailto:askMBP@schulich.uwo.ca">askMBP@schulich.uwo.ca</a></td>
</tr>
</tbody>
</table>

Students may approach and discuss any course-related problems with the relevant instructor. To request an appointment with Dr. McGuire (preferably via email) use the contact information provided above.

4. Course Description and Design

**Deliver Mode:** in-person

**Course summary**

The biophysics and physiology of the cardiovascular and respiratory systems in health and disease, including cellular biophysics, cardiac function, physics of blood flow, vascular mechanics in the microcirculation and large vessels, surface energy and interactions at biological interfaces such as the lung, diffusive and convective transport and exchange.

**Prerequisites**

Prerequisite(s): One of Calculus 1000A/B, Calculus 1500A/B, Mathematics 1225A/B, Applied Mathematics 1413; one of Physics 1028A/B, Physics 1301A/B, Physics 1401A/B or Physics 1501A/B, and one of Physics 1029A/B, Physics 1302A/B, Physics 1402A/B or Physics 1502A/B. Typically taken in third year, this course is also open to second-year students with an overall average of at least 70% in first year.

**Prerequisite checking – the student’s responsibility**

Unless you have either the requisites for this course or written special permission from your Dean 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 Weight:** 0.5

**Breadth:** Category C

**Subject code:** MEDBIO

**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 Student Accessibility Services at 519-661-2147 for any specific question regarding an accommodation.
Timetabled Sessions

<table>
<thead>
<tr>
<th>Component</th>
<th>Date(s)</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>T/Th</td>
<td>1:30 – 2:30 pm</td>
</tr>
<tr>
<td>Tutorial section 002</td>
<td>T</td>
<td>12:30 pm – 1:30 pm</td>
</tr>
<tr>
<td>Tutorial section 003</td>
<td>W</td>
<td>11:30 am – 12:30 pm</td>
</tr>
</tbody>
</table>

- Asynchronous pre-work lessons must be completed prior to in-person sessions
- Attendance at in-person sessions is required
- Students have access to all course materials, assignments, exams, and tutorials through 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.

NOTE: In the event of a COVID-19 resurgence during the course that necessitates moving away face-to-face interaction, all remaining course content will be delivered entirely online, synchronously (i.e., at times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any remeasurements will also be conducted online at the discretion of the instructor.

5. Course Syllabus

Teaching Rationale

This course uses primarily the flipped classroom approach to learning.

Online asynchronous lessons introduce fundamental background for physiology and biophysics concepts. The organization, structure, and function of selected components of human cardiovascular circulatory and respiratory systems are considered in the context of their function as biological transport systems. The first half of each series of lessons is weighted heavily on introducing foundational concepts, which may be a review for some and new for other students. This is necessary for establishing a common baseline that allows for discussions later in the course. The application of biophysics and quantifying cardiovascular, and respiratory functions, structures and behaviors is highlighted using examples from medicine.

In-person lecture periods are led by the principal instructor. Students prepare themselves for class by reviewing the asynchronous lessons posted on OWL. Students will participate in class discussions and group work on material covered in lessons from prior and current week. The instructor will assign work to be completed prior to class, assigned as group work in class, and individual, and group work to be followed up in subsequent class, tutorials.

Tutorials are led by the Teaching Assistants. Students will be expected to complete work prior to class and or in Tutorials. Some of this work may be followed up in subsequent Lecture and Tutorial periods. Tutorials are an opportunity for students to discuss the current Assignment with instructors and work on problem solving skills and writing as individuals or in groups. Students are encouraged to ask questions to learn about any course material covered in lectures throughout the term.

Students are expected to become familiar with all required course readings and course materials posted on OWL, review all lessons, attend all tutorials, complete all assignments, and examinations. Students are encouraged to become familiar with recommended reading lists.
Course Learning Outcomes

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

- Explain the functions and structures of organs, tissues, and cells found in the human cardiovascular and respiratory systems.
- Predict and calculate biophysics concepts and formulas, including those related to blood flow, blood pressure, cardiac function, diffusion, partial pressures.
- Critically appraise the literature.
- Generate hypotheses to test solutions for problems encountered in the cardiovascular and respiratory systems.
- Express evidence-based opinions in disciplinary discussions and reports.

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>Sept 8 – 10</td>
<td>Introduction to the circulatory system: a biological transport system</td>
</tr>
<tr>
<td>2</td>
<td>Sept 13 – 17</td>
<td>Biophysics Principles: a focus on transport of fluids</td>
</tr>
<tr>
<td>3</td>
<td>Sept 20 – 24</td>
<td>The heart, the vasculature, and the blood.</td>
</tr>
<tr>
<td>4</td>
<td>Sept 27 – Oct 1</td>
<td>Cellular biophysics of cardiac cells</td>
</tr>
<tr>
<td>5</td>
<td>Oct 4 – 8</td>
<td>The heart as a pump</td>
</tr>
<tr>
<td>6</td>
<td>Oct 12 – 15</td>
<td>The heart as a pump</td>
</tr>
<tr>
<td>7</td>
<td>Oct 18 – 22</td>
<td>Peripheral vascular system and vascular control; blood and the microcirculation</td>
</tr>
<tr>
<td>8</td>
<td>Oct 25 – 29</td>
<td>Peripheral vascular system and vascular control; blood and the microcirculation</td>
</tr>
<tr>
<td>9</td>
<td>Nov 1 – 7</td>
<td>Fall Reading Week</td>
</tr>
<tr>
<td>10</td>
<td>Nov 8 – 12</td>
<td>Peripheral vascular system and vascular control; blood and the microcirculation</td>
</tr>
<tr>
<td>11</td>
<td>Nov 15 – 19</td>
<td>Respiratory system and biophysics</td>
</tr>
<tr>
<td>12</td>
<td>Nov 22 – 26</td>
<td>Oxygen transport and diffusion</td>
</tr>
<tr>
<td>13</td>
<td>Nov 29 – Dec 3</td>
<td>Synthesis and application of biophysics to circulatory and respiratory systems in health and disease</td>
</tr>
<tr>
<td>14</td>
<td>Dec 6 – 8</td>
<td>Synthesis and application of biophysics to circulatory and respiratory systems health and disease</td>
</tr>
<tr>
<td>15</td>
<td>Set by Registrar</td>
<td>Final Exam</td>
</tr>
</tbody>
</table>

The themes and dates reflect the expected timelines to cover these topics. We may spend longer or shorter time on topics as the semester unfolds.
7. Evaluation

**MEDBIO 3501A**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Dates</th>
<th>Methods</th>
<th>Grade Weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment #1</td>
<td>Week 3 Sept 24 Due by noon</td>
<td>Mixed</td>
<td>10</td>
</tr>
<tr>
<td>Assignment #2</td>
<td>Week 6 Oct 15 Due by noon</td>
<td>Mixed</td>
<td>25</td>
</tr>
<tr>
<td>Assignment #3</td>
<td>Week 12 Nov 26 Due by noon</td>
<td>Mixed</td>
<td>25</td>
</tr>
<tr>
<td>Midterm</td>
<td>Week 8 Tentative Oct 28</td>
<td>In person</td>
<td>20</td>
</tr>
<tr>
<td>Final Exam</td>
<td>University Scheduled</td>
<td>In person</td>
<td>20</td>
</tr>
</tbody>
</table>

**BIOPHYS 9501**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Due Date</th>
<th>Format</th>
<th>Grade Weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment 1</td>
<td>Week 3</td>
<td>Mixed</td>
<td>5</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>Week 6</td>
<td>Mixed</td>
<td>12.5</td>
</tr>
<tr>
<td>Midterm</td>
<td>Week 8</td>
<td>In person</td>
<td>0*</td>
</tr>
<tr>
<td>Assignment 3</td>
<td>Week 12</td>
<td>Mixed</td>
<td>12.5</td>
</tr>
<tr>
<td>Class Lessons</td>
<td>TBD</td>
<td>In person</td>
<td>50</td>
</tr>
<tr>
<td>Final Exam</td>
<td>University Scheduled</td>
<td>In person</td>
<td>20</td>
</tr>
</tbody>
</table>

Assignments
- All assignments are due before 11:59 AM EST unless otherwise specified.
- All student submissions are to be made through OWL unless directed otherwise.
- All files submitted by students shall be pdf format.
- All assignments will be submitted to Turnitin by the student.
- Students will have unlimited submissions to Turnitin.
- Assignments submitted after the class due date and time will be subject to an automatic late penalty of 10% that then increases by an additional 10% every 24 h period afterwards until 11:59 AM EST of the first Monday following the assignment due date.
- Assignments submitted after 11:59 AM Monday following the assignment due date, or not submitted at all, will receive a zero grade and be returned ungraded.

Midterm Exam
- The midterm exam will be delivered in-person.
- The midterm exam will cover all Weeks and evaluations prior to Oct 28, 2021.
- If a midterm is missed and the student has not been granted academic consideration, then the student will receive a zero grade.
- If the midterm exam is missed and the student has been granted academic consideration for their missed work/absence, then the default make-up exam date will be set for Week 10 November 8-12, 2021.
- Permission to write a make-up exam requires permission of the instructor.
- Students who cannot complete the make-up exam due to illness or academic accommodation will receive INC (incomplete) in this course and will have to complete it the next time the course is offered.

Final Exam
- The Final Exam will be delivered in-person.
- The Final Exam will be a cumulative examination spanning the entire course.
Information about Academic Consideration, Self-Reported Absences, and late or missed evaluations:

- The default due date for late assignments is 11:59 am EST of the second day following the end of the approved reported absence period or in the case that your request is still being processed, 11:59 am EST on the second day following your expected return to class (whichever event is earlier).
- If an accommodation is not granted by Academic Counselling or if the submission is late or deemed late according to documentation from Academic Counselling, then the same grade penalties will apply as the original assignment. Assignments will not be graded until the absence accommodation has been approved/disallowed by the appropriate process.
- Whether you have used Self-reported Absences or Student Academic Counselling, you will be advised that within 24 hours of the reported absence period to contact (by email please) Dr. McGuire to confirm you will be submitting late and when he should expect it (see above). Please include ‘Student Academic Consideration MEDBIO 3501A Assignment X ’ in the subject line. Submissions will be made through the course OWL site unless directed otherwise.

Evaluations and Feedback on Assignments

- Normally, individual feedback with grades are released after all current and previous assessments from the class have been graded or submitted for grading, including any late, and make up exams.
- Assignments and midterm are normally returned to students via OWL or at scheduled classes.
- Feedback on evaluations will be posted via the OWL site.
- After individual feedback on an assessment is returned, students should wait at least 24 hours to digest feedback before contacting the Teaching Assistants or Dr. McGuire; to ensure a timely response, reach out within 7 days.
- If all students have not completed the evaluation under question then the return of student material submitted for grading may be delayed.
- Click here for a detailed and comprehensive set of policies and regulations concerning examinations and grading at Western.
- In MEDBIO 3501A, students will need to communicate scientific concepts, principles, and other content in an effective form that is appropriate for the discipline.
- Listed below are examples of summative feedback on the grading of student assignments in the context of this course.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score</th>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>90-100</td>
<td>The written answer is excellent in all elements. Potential improvements are minimal. Congratulations.</td>
</tr>
<tr>
<td>A</td>
<td>80-89</td>
<td>The written answer excels in some components, but specific improvements to the writing quality, structure, content, and or synthesis are required for full marks.</td>
</tr>
<tr>
<td>B</td>
<td>70-79</td>
<td>The written answer is eminently satisfactory in many elements, but specific improvements to the writing quality, structure, content, and synthesis are required for full marks.</td>
</tr>
<tr>
<td>C</td>
<td>60-69</td>
<td>The written answer fulfills the technical requirements, demonstrates competency with the subject matter, but requires revisions, edits, additional content, and synthesis of material. Improvements to the writing quality, structure, content and logic are required for full marks.</td>
</tr>
<tr>
<td>D</td>
<td>50-59</td>
<td>The written answer meets the minimum of technical requirements. Extensive revisions, edits, additional content, and synthesis of</td>
</tr>
</tbody>
</table>
material are required. Improvements to the writing quality, structure, content and logic are required for full marks.

F below 50 The written answer contains serious flaws in writing, logic, facts, structure, content, and or arguments.

8. Participation and Engagement

- Students are expected to participate and engage with content as much as possible
- Students are invited to participate and engage with online content as much as possible
- Students can also participate by interacting in the forums with their peers and instructor

9. Communication:

- Students should check the Course Announcements, and the Forum for updates.
- Students will be notified of the availability of grades through OWL.
- Tutorials are held in person. Attend only your registered section.
- This course will use the Forum in OWL.
- Students should post all course-related content on the appropriate Forum so that answers to questions etc. are accessible to the whole class.
- Students can and are encouraged to post answers, comments, solutions etc. to other students’ questions.
- The Forums will be monitored and used by the teaching assistants, and Dr. McGuire.
- Students should use their official UWO account when communicating via email with Dr. McGuire, and the teaching assistant(s).

Office Hours:

- E-mail Dr. McGuire to request an appointment.
  - Please include ‘student appointment request MEDBIO 3501’ in the subject line.
  - Please included your student number, and indicate your availability; normally 9 am-5 pm EST. Monday to Friday when University is open.
  - Dr. McGuire will send a Zoom invite for confirmed appointments.
  - Normally Dr. McGuire will schedule additional drop-in hours for appointments in the last two weeks of class and the study dates.

10. Course Materials

All resources will be accessed through the OWL course website at https://owl.uwo.ca/portal

Students with OWL issues should contact the Western Technology Support at 519 661-3800

READ ABOUT THE FIRST TIME USING MEDBIO 3501A OWL Site

The first time students use the MEDBIO 3501A OWL site, they will be required to complete the Academic Integrity task/assignment. Students will not have full access to course materials until that task is completed.
Students will have full access to the Schedule, Course Readings, Lessons, and Forum, after submitting the Academic Integrity documents.

Accessing the course materials without permission is considered academic misconduct. Such permission is not granted until the Academic Integrity task is completed. Instructors and Teaching Assistants may decide not to assist students in the classroom who have not completed the Academic Integrity documents. Students will receive a zero grade for all evaluations that are submitted up to and including on the date of submission of valid and complete Academic Integrity forms (both sets). Assessments will be returned ungraded and without feedback.

**Keep reading**

- Dr. McGuire’s and all instructors’ videos are hosted on Microsoft Stream which can be accessed by all Western students. However, these videos are restricted to the membership of the MEDBIO 3501A Fall 2021 group.
- After completing the Academic Integrity task (above), students will be added to the Microsoft Stream Group MEDBIO 3501A Fall 2021.
- Students will receive an email notifying them of being added to the Microsoft Stream Group MEDBIO 3501A.
- Students should allow for 1 day (members are added manually) before inquiring about technical issues with access.
- Students will be removed from the Group at the end of the course.
- Students will be able to view videos and transcripts, but not add or edit content.
- Students will be required to enter their Western credentials to access the links from OWL to some of the e-learning content. Specific resources include Western Libraries, Microsoft Stream, and Zoom.
- Logon credentials may be required every time students access the linked resource unless they choose to have their devices ‘save’ the information.

**Course Readings**

Course Readings will be accessible by logging into OWL, Course Readings or Western Libraries Electronic Reserves using a student Western account. A hard copy of the Cardiovascular Physiology textbook will be available for temporary loan through Library Reserves. Students can purchase their own licenses for the e-textbooks from the publisher or access them through the Course Readings and OWL.

Due to licensing restraints, there is a limit to the maximum number of users that can access simultaneously the AccessMedicine online textbooks versions of the Cardiovascular Physiology, and Pulmonary Physiology textbooks. Please be considerate of your classmates and remember to logoff after reading, downloading or printing the content for personal study.

Instructors will direct students to required reading selections from the following textbooks:

- **Cardiovascular Physiology 9e.** David E. Mohrman, and Lois Jane Heller. 2018.

- **Pulmonary Physiology 9e.** Michael G. Levitzky. 2018.

- **Biophysics: A Physiological Approach.** Patrick F. Dillon. 2012.
During the semester, instructors may make suggestions for optional readings and additional required readings for their lessons or course materials posted on OWL.

**Contact with Instructors regarding course materials:**
Students may approach and discuss any course-related problems with the relevant instructor. Please make an appointment (preferably via email) utilizing the contact information provided above.

**Collaborative work on Assignments:**
Students are encouraged to work together, but each student shall take total responsibility for their submitted work.

Note on Plagiarism: “Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence” (see Scholastic Offence Policy in the Western Academic Calendar).

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 and listed below in section 12.
- All course materials not already covered by copyright and thus, created by the instructor(s) are copyright © Dr. McGuire and instructors of MEDBIO 3501A, and shall not be re-used distributed without their specific permission.
- Respect the privacy and wishes of your instructors and classmates. Audio, and video recordings of Lectures and Tutorials by students are not permitted in this course.
- Lectures and Tutorials are for the purpose of the education of students registered in University of Western Ontario MEDBIO 3501A, and BIOPHYS 9501 courses.
- In person classes are not to be attended, and or re-broadcasted to anyone but the students registered in this course.
- Students may be asked to complete a pledge of Academic Integrity before some assessments, and the student shall abide by the pledge else suffer the penalty of Academic Misconduct.

12. **Western Policies for in-person courses in Fall 2021**

**Masking Guidelines**
Students will be expected to wear triple layer, non-medical, paper masks at all times in the classroom as per University policy and public health directives.
Students who are unable to wear a mask must seek formal accommodation through Western Accessible Education, and present medical documentation.
Students are not permitted to eat or drink while in class to ensure masks stay in place.
Students will be able to eat and drink outside of the classroom during scheduled breaks.
Students unwilling to wear a mask as stipulated by Western policy and public health directives will be referred to the Dean, and such actions will be considered a violation of the student Code of Conduct.
Course Absences due to Daily COVID Screening Questionnaire
Missed assessments (e.g., presentations, essays, quizzes, tests, midterms, etc.) require formal academic considerations (typically self-reported absences and/or academic counselling). Methods for dealing with missed work and course content are at the discretion of the instructor(s).

Students should be aware that some learning outcomes cannot be easily made up and may need to be completed in a subsequent year. Your instructor will provide you with further information as to how this applies within this course.

Students who demonstrate a pattern of routinely missing coursework due to self-reported COVID symptoms, and therefore do not demonstrate mastery of the learning outcomes of the course, will not receive credit for the course.

Contingency plan for an in-person class pivoting to 100% online learning
In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any remaining assessments will also be conducted online as determined by the course instructor.

In the event that online learning is required, a stable internet connection with working microphone and webcam will be required. As has been the case in the past, the decision to pivot to online learning will be made by Western, and not individual instructors or departments (excepting temporary online instruction in the event of instructor illness).

13. Western Academic Policies and Statements
   Online Learning
   The following is provided in case that in person classes are disrupted that result in online synchronous course delivery.

   Some components of this course will involve person to person interactions. To ensure the best experience for both you and your classmates, please honour the following rules of etiquette:

   • please “arrive” to class on time
   • please use your computer and/or laptop if possible (as opposed to a cell phone or tablet)
   • ensure that you are in a private location to protect the confidentiality of discussions in the event that a class discussion deals with sensitive or personal material
   • to minimize background noise, kindly mute your microphone for the entire class until you are invited to speak, unless directed otherwise
   • In order to give us optimum bandwidth and web quality, please turn off your video camera when the Tutorial section is together unless you are invited to speak
   • When in breakout rooms, please leave your video camera on.
   • Please be prepared to turn your video camera off at the instructor’s request if the internet connection becomes unstable
   • unless invited by your instructor, do not share your screen in the meeting

   Your instructor will act as moderator for the class and will deal with any questions from participants. To participate please consider the following:

   • if you wish to speak, use the “raise hand” function and wait for the instructor to acknowledge you before beginning your comment or question
   • remember to unmute your microphone and turn on your video camera before speaking
   • self-identify when speaking.
• remember to mute your mic and turn off your video camera after speaking (unless directed otherwise)

General considerations of “netiquette”:
• Keep in mind the different cultural and linguistic backgrounds of the students in the course.
• Be courteous toward the instructor, your colleagues, and authors whose work you are discussing.
• Be respectful of the diversity of viewpoints that you will encounter in the class and in your readings. The exchange of diverse ideas and opinions is part of the scholarly environment. “Flaming” is never appropriate.
• Be professional and scholarly in all online postings. Cite the ideas of others appropriately.

Note that disruptive behaviour of any type during online classes, including inappropriate use of the chat function, is unacceptable. Students found guilty of Zoom-bombing a class or of other serious online offenses may be subject to disciplinary measures under the Code of Student Conduct.

Accommodation Policies
Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: Academic Accommodation for Students with Disabilities.

Academic Consideration for Student Absence
Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the term, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student’s final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted on the syllabus.

Students are not able to use the self-reporting option in the following circumstances:
• for exams scheduled by the Office of the Registrar (e.g., December and April exams)
• absence of a duration greater than 48 hours,
• assessments worth more than 30% of the student’s final grade,
• if a student has already used the self-reporting portal twice during the academic year

If the conditions for a Self-Reported Absence are not met, students will need to provide a Student Medical Certificate if the absence is medical, or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office to obtain more information about the relevant documentation.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student’s Home Faculty.

For Western University policy on Consideration for Student Absence, see Policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs and for the Student Medical Certificate (SMC), see: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.
For a downloadable student medical certificate see: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf

Students seeking academic accommodation on illness grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. The instructor or department cannot grant academic accommodation.

**Accommodation for Religious Holidays**
The policy on Accommodation for Religious Holidays can be viewed here. Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the Western Multicultural Calendar.

**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.

A Special Examination must be written at the University or an Affiliated University College no later than 30 days after the end of the examination period involved. To accommodate unusual circumstances, a date later than this may be arranged at the time permission is first given by the Dean of the Faculty. The Dean will consult with the instructor and Department Chair and, if a later date is arranged, will communicate this to Registrarial Services. If a student fails to write a scheduled Special Examination, permission to write another Special Examination will be granted only with the permission of the Dean in exceptional circumstances and with appropriate supporting documents. In such a case, the date of this Special Examination normally will be the scheduled date for the final exam the next time the course is offered.

**Statement on Academic Offenses**
"Scholastic offences are taken seriously, and undergraduate students are directed here to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence. Graduate students are directed here http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf

**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.
Discovery Credit Statement
Students are permitted to designate up to 1.0 Discovery Credit course (or equivalent) for pass/fail grading that can be counted toward the overall course credits required for their degree program. The details of this policy and the deadlines can be found 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.

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 under special circumstances. 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.

14. 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
Note that MEDBIO 3501A does not allow for students to make audio/video recordings of synchronous in person or online group sessions such as Lectures and Tutorials. This policy is in place to so that synchronous sessions take place in a safe environment that encourages participation from all students.

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. Other courses may allow recording, but you must always ask permission (consent) 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.

15. Support Services

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

- Academic Counselling (Science and Basic Medical Sciences)
- Office of the Registrar
- Appeal Procedures
- Student Centre [http://student.uwo.ca](http://student.uwo.ca)
- Student Development Services
- Health and Wellness
- USC Student Support Services

Students that are in emotional/mental distress should refer to [Student Health Care](https://www.uwo.ca/health/shs/index.html) for a complete list of options about how to obtain help.