

Microbiology and Immunology 4300A (Clinical Immunology)

Course outline for Fall 2020



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 desktop computer



Working microphone
(recommended)



Working webcam (optional)

2. Course Overview and Important Dates:



Delivery Mode	Dates	Time
Online	M/W/F	9:30 – 10:20 AM

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

Classes Start	Reading Week	Classes End	Study day(s)	Exam Period
September 11, 2020	November 2 nd - 8 th	December 9 th	December 10 th	December 11 th - 22 nd

* November 12, 2020: Last day to drop a first-term half course or a first-term full course without penalty

3. Contact Information



Course Coordinator	Contact Information
Dr. Mansour Haeryfar	Mansour.Haeryfar@schulich.uwo.ca

Graduate Teaching Assistants	Contact Information
Jenna Benoit	jbenoit6@uwo.ca and/or via OWL messages
Alex Michaud	amichau4@uwo.ca and/or via OWL messages

Chair, Undergraduate Studies	Contact Information
Dr. Kelly Summers	Kelly.Summers@schulich.uwo.ca (for urgent matters only)

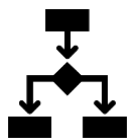
4. Course Description and Design

This course covers advanced concepts in cellular and molecular regulation of immune responses and their application to clinical conditions, including autoimmune diseases, allergic diseases, transplantation, and cancer. Recent advances and challenges in immunological mechanisms and immunotherapies are highlighted.

Prerequisite(s): Microbiology and Immunology 3300B *with a mark of at least 70%*

Mode	Dates	Time	Sessions and Frequency
Virtual synchronous	M/W/F (or TBA)	9:30 - 10:20 AM	<ul style="list-style-type: none">• Course Overview & Introduction• Lectures 1-9, 11-14, 21-28• Tutorial sessions• Midterm tests (as scheduled) and final exam (to be scheduled)
Virtual asynchronous	N/A	N/A	Pre-recorded lectures 10 and 15-20 will be posted in OWL

- ✓ All lectures and tutorial sessions will be posted in OWL regardless of their delivery mode.
- ✓ Asynchronously delivered lectures will be posted in OWL no later than 24 hours before the indicated lecture date/time.
- ✓ Synchronously delivered lectures will be recorded and posted in OWL within 24 hours after the indicated lecture/session date/time. Instructors may choose to have their slides posted in OWL ahead of their lectures as well.
- ✓ Close captioning may be provided at instructors' discretion.



Course materials will be posted in OWL: <http://owl.uwo.ca>. Any possible changes will be indicated in the OWL site and shared with the class in a timely fashion.

If students need assistance, they can seek support in the [OWL Help page](#). Alternatively, they can contact the [Western Technology Services Helpdesk](#) at 519-661-3800 or ext. 83800.

[Google Chrome](#) or [Mozilla Firefox](#) are the preferred browsers to optimally use OWL. Students need to update their browsers frequently. Students interested in evaluating their internet speed may click [here](#).

5. Learning Outcomes



- To acquire advanced knowledge on cellular and molecular mechanisms of immune responses in health and disease as they pertain to the themes and topics that will be covered.
- To develop an understanding of the clinical relevance of immunological concepts and of immunotherapeutic interventions in select diseases and conditions.
- To learn about unresolved issues in clinical immunology
- To become familiar with recent developments and state-of-the-art research in the field of clinical immunology and immunotherapy

6. Online Participation and Engagement



- ✓ Students are expected to keep up with course content.
- ✓ Students are expected to post their questions in the OWL forums after watching the recorded lectures/sessions. These will be answered by the GTAs and/or instructors in a timely manner.
- ✓ Students are expected to participate by interacting in the OWL forums with their peers and GTAs/instructors. Therefore, questions emailed to instructors and GTAs on course lecture materials will not be answered on an individual basis. Use the OWL forums and/or attend tutorial sessions.

7. Course Content and Schedule



Date	Topic	Instructor
Friday, September 11, 2020	Course Overview & Introduction (synchronous/live via Zoom)	TA(s)
Monday, September 14, 2020	Lecture 1: Immunology & Immunity Simplified: A Refresher/Primer (synchronous/live via Zoom)	TA(s) and/or Dr. Mansour Haeryfar
Wednesday, September 16, 2020	Lecture 2: Immunology & Immunity Simplified: A Refresher/Primer (continued) (synchronous/live via Zoom)	TA(s) and/or Dr. Mansour Haeryfar
Friday, September 18, 2020	Lecture 3: Toll-like Receptors	Dr. Sung Kim (skim283@uwo.ca)
Monday, September 21, 2020	Lecture 4: Intracellular Pattern Recognition Receptors	Dr. Sung Kim
Wednesday, September 23, 2020	Lecture 5: Antiviral Pattern Recognition Receptors	Dr. Sung Kim
Friday, September 25, 2020	Lecture 6: Complement	Dr. Sung Kim
Monday, September 28, 2020	Lecture 7: Natural Killer Cells	Dr. Sung Kim
Wednesday, September 30, 2020	Tutorial (synchronous/live via Zoom)	Dr. Sung Kim &/or TA(s)
Friday, October 2, 2020	Lecture 8: Mucosal Immunity I	Dr. Jessica Prodger (jprodge@uwo.ca)
Monday, October 5, 2020	Lecture 9: Mucosal Immunity II	Dr. Jessica Prodger
Wednesday, October 7, 2020	Midterm Test 1 (online)	
Friday, October 9, 2020	Lecture 10: Microbiome and Immunity	Dr. Jeremy Burton (Jeremy.Burton@lawsonresearch.com)
Monday, October 12, 2020	Thanksgiving	No class
Wednesday, October 14, 2020	Lecture 11: MHC: Biological Purposes, Fundamental Aspects & Clinical Implications	Dr. Mansour Haeryfar
Friday, October 16, 2020	Lecture 12: MHC Deficiency: Immunological & Clinical Consequences	Dr. Mansour Haeryfar
Monday, October 19, 2020	Lecture 13: Transplantation I	Dr. Lakshman Gunaratnam (Lakshman.Gunaratnam@lhsc.on.ca)

Wednesday, October 21, 2020	Lecture 14: Transplantation II Assignment #1 Due: Critique of a scientific paper to be chosen by students from the list provided in this document	Dr. Lakshman Gunaratnam
Friday, October 23, 2020	Lecture 15: Allergy and Allergic Diseases I: Allergic Sensitization and Th2 Immunity	Dr. Lisa Cameron (Lisa.Cameron@schulich.uwo.ca)
Monday, October 26, 2020	Lecture 16: Allergy and Allergic Diseases II: Allergic Disease and Treatment Strategies	Dr. Lisa Cameron
Wednesday, October 28, 2020	Lecture 17: From bench to bedside: the long (and sometimes winding) road to drug development	Dr. Lillian Barra (lbarra2@uwo.ca)
Friday, October 30, 2020	Tutorial (synchronous/live via Zoom)	TA(s)
Monday, November 2, 2020	Reading Week	No class
Wednesday, November 4, 2020	Reading Week	No class
Friday, November 6, 2020	Reading Week	No class
Monday, November 9, 2020	Midterm Test 2 (online)	
Wednesday, November 11, 2020	Lecture 18: Immunological Tolerance and Autoimmunity I	Dr. Ewa Cairns (Ewa.Cairns@schulich.uwo.ca)
Friday, November 13, 2020	Lecture 19: Immunological Tolerance and Autoimmunity II	Dr. Ewa Cairns
Monday, November 16, 2020	Lecture 20: Immunological Tolerance and Autoimmunity III	Dr. Ewa Cairns
Wednesday, November 18, 2020	Lecture 21: Case Studies in Autoimmunity	Dr. Mansour Haeryfar
Friday, November 20, 2020	Tutorial (synchronous/live via Zoom)	TA(s)
Monday, November 23, 2020	Lecture 22: Cancer Immunology, Immune Surveillance & Immunotherapy: Terminology & Important Concepts	Dr. Mansour Haeryfar
Wednesday, November 25, 2020	Lecture 23: Anticancer Effector Cells & Molecules – Part I	Dr. Mansour Haeryfar
Friday, November 27, 2020	Lecture 24: Anticancer Effector Cells & Molecules – Part II	Dr. Mansour Haeryfar
Monday, November 30, 2020	Lecture 25: Cancer Immunotherapy: Boosting the Effectors	Dr. Mansour Haeryfar
Wednesday, December 2, 2020	Lecture 26: Cancer Immunotherapy: Suppressing the Suppressors – Part I	Dr. Mansour Haeryfar
Friday, December 4, 2020	Lecture 27: Cancer Immunotherapy: Suppressing the Suppressors – Part II	Dr. Mansour Haeryfar
Monday, December 7, 2020	Lecture 28: Trends & Hot Topics in Cancer Immunology & Immunotherapy Assignment #2 Due: Mock newspaper article to be written by students	Dr. Mansour Haeryfar

Wednesday, December 9, 2020	Tutorial (synchronous/live via Zoom)	Dr. Mansour Haeryfar
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8. Evaluation

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



Evaluation	Material Tested	Scheduled/Due Date	% of Final Mark
Midterm Test 1	Lectures 1-9 (inclusive)	Wed Oct 7, 2020 (9:30 AM)	22.5%
Assignment #1	Paper Critique	Wed Oct 21, 2020 (by 9:30 AM)	15%
Midterm Test 2	Lectures 10-17 (inclusive)	Mon Nov 9, 2020	22.5%
Assignment #2	Newspaper Article	Mon Dec 7, 2020 (by 9:30 AM)	15%
Final exam	Lectures 18-28 (inclusive)	During Final Exam Period (TBD)	25%

Information about evaluations:

Exams may contain multiple-choice questions, multiple-multiple-choice questions, short-answer questions, fill-in-the-blank questions, and/or extended match questions. Details on exam formats will be communicated via OWL.

There are NO make-up midterm tests in this course. Instead, you will write an alternate final exam with the weight of the missed test(s) transferred to the final exam.

If a make-up assessment is missed, the student will receive an INC and complete the task the next time the course is offered.

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 on Assignment #1: Paper Critique

Format: A one-page critique of a published, newsworthy article relevant to the field of clinical immunology and/or immunotherapy (to be chosen from a list of 34 papers that is provided below)

All margins should be set at 0.75" (1.87 cm). Use Times New Roman font (12 pt.) and single-spaced text with no more than six lines per inch.

Content: The critique should contain positive and negative remarks. It should be written for a scientific audience. An example will be posted in OWL.

Marking Scheme for Assignment #1:

- 2.5% State the research objective. What question was asked? What hypothesis was tested?
- 2.5% Methodology and experimental approaches
- 5.0% Main findings
- 5.0% Novelty and clinical significance/implications
- Total = 15%**

Note: Evaluation of performance in each section will take into account the content of your critique (thorough understanding of the scientific concepts, accurate reasoning, etc.) as well as proper writing, precision and accuracy (spelling, grammar, etc.).

List of Articles for Assignment #1:

Please pick only one article from the following list.

1. Trotta E, Bessette PH, Silveria SL, et al: A human anti-IL-2 antibody that potentiates regulatory T cells by a structure-based mechanism. *Nature Medicine* 2018, 24(7): 1005-1014 [PubMed ID: 29942088]
2. Mannick JB, Morris M, Hockey HP, et al: TORC1 inhibition enhances immune function and reduces infections in the elderly. *Science Translational Medicine* 2018, 10(449). pii: eaaq1564 [PubMed ID: 29997249]
3. Rangasamy SB, Jana M, Roy A, et al: Selective disruption of TLR2/MyD88 interaction inhibits inflammation and attenuates Alzheimer's pathology. *The Journal of Clinical Investigation* 2018, 128(10): 4297-4312 [PubMed ID: 29990310]
4. Pandey MK, Burrow TA, Rani R, et al: Complement drives glucosylceramide accumulation and tissue inflammation in Gaucher disease. *Nature* 2017, 543(7643): 108-112 [PubMed ID: 28225753]
5. Carvelli J, Demaria O, Vely F, et al: Association of COVID-19 inflammation with activation of the C5a-C5aR1 axis. *Nature* 2020, (online ahead of print – doi: 10.1038/s41586-020-2600-6) [PubMed ID: 32726800]
6. Fu B, Zhou Y, Ni X, et al: Natural killer cells promote fetal development through the secretion of growth-promoting factors. *Immunity* 2017, 47(6): 1100-1113 [PubMed ID: 29262349]
7. Gautam R, Nishimura Y, Gaughan N, et al: A single injection of crystallizable fragment domain-modified antibodies elicits durable protection from SHIV infection. *Nature Medicine* 2018, 24(5): 610-616 [PubMed ID: 29662199]
8. Sobolev O, Binda E, O'Farrell S, et al: Adjuvanted influenza-H1N1 vaccination reveals lymphoid signatures of age-dependent early responses and of clinical adverse events. *Nature Immunology* 2016, 17(2), 204-213 [PubMed ID: 26726811]
9. Fu S, He K, Tian C, et al: Impaired lipid biosynthesis hinders anti-tumor efficacy of intratumoral

NKT cells. *Nature Communications* 2020, 11(1): 438 [PubMed ID: 31974378]

10. Howson LJ, Awad W, von Borstel A, et al: Absence of mucosal-associated invariant T cells in a person with a homozygous point mutation in *MR1*. *Science Immunology* 2020, 5(49): eabc9492 [PubMed ID: 32709702]
11. Yan J, Allen S, McDonald E, et al: MAIT Cells Promote Tumor Initiation, Growth, and Metastases via Tumor MR1. *Cancer Discovery* 2020, 10(1): 124-141 [PubMed ID: 31826876]
12. Hegde P, Weiss E, Paradis V, et al: Mucosal-associated invariant T cells are a profibrogenic immune cell population in the liver. *Nature Communications* 2018, 9(1): 2146 [PubMed ID: 29858567]
13. Machiels B, Dourcy M, Xiao X, et al: A gammaherpesvirus provides protection against allergic asthma by inducing the replacement of resident alveolar macrophages with regulatory monocytes. *Nature Immunology* 2017, 18(12): 1310-1320 [PubMed ID: 29035391]
14. Perkin MR, Logan K, Tseng A, et al: Randomized Trial of Introduction of Allergenic Foods in Breast-Fed Infants. *The New England Journal of Medicine* 2016, 374(18), 1733-1743 [PubMed ID: 26943128]
15. Martinez-Gonzalez I, Mathä L, Steer CA, et al: Allergen-Experienced Group 2 Innate Lymphoid Cells Acquire Memory-like Properties and Enhance Allergic Lung Inflammation. *Immunity* 2016, 45(1), 198-208 [PubMed ID: 27421705]
16. Keller CW, Sina C, Kotur MB, et al: ATG-dependent phagocytosis in dendritic cells drives myelin-specific CD4⁺ T cell pathogenicity during CNS inflammation. *Proceedings of the National Academy of Sciences USA (PNAS)* 2017, 114(52): E11228-E11237 [PubMed ID: 29233943]
17. Sutton CE, Finlay CM, Raverdeau M, et al: Loss of the molecular clock in myeloid cells exacerbates T cell-mediated CNS autoimmune disease. *Nature Communications* 2017, 8(1): 1923 [PubMed ID: 29234010]
18. Chowell D, Morris LGT, Grigg CM, et al: Patient HLA class I genotype influences cancer response to checkpoint blockade immunotherapy. *Science* 2018, 359(6375): 582-587 [PubMed ID: 29217585]
19. Wu J, Zhang H, Shi X, et al: Ablation of Transcription Factor IRF4 Promotes Transplant Acceptance by Driving Allogeneic CD4⁺ T Cell Dysfunction. *Immunity* 2017, 47(6): 1114-1128 [PubMed ID: 29221730]
20. Chhabra A, Ring AM, Weiskopf K, et al: Hematopoietic stem cell transplantation in immunocompetent hosts without radiation or chemotherapy. *Science Translational Medicine* 2016, 8(351): 351ra105 [PubMed ID: 27510901]
21. Varelias A, Bunting MD, Ormerod KL, et al: Recipient mucosal-associated invariant T cells control GVHD within the colon. *The Journal of Clinical Investigation* 2018, 128(5): 1919-1936 [PubMed ID: 29629900]
22. Pan D, Kobayashi A, Jiang P, et al: A major chromatin regulator determines resistance of tumor cells to T cell-mediated killing. *Science* 2018, 359(6377): 770-775 [PubMed ID: 29301958]
23. Tanyi JL, Bobisse S, Ophir E, et al: Personalized cancer vaccine effectively mobilizes antitumor T cell immunity in ovarian cancer. *Science Translational Medicine* 2018, 10(436). pii: eaao5931

[PubMed ID: 29643231]

24. Zhang Q, Bi J, Zheng X, et al: Blockade of the checkpoint receptor TIGIT prevents NK cell exhaustion and elicits potent anti-tumor immunity. *Nature Immunology* 2018. doi: 10.1038/s41590-018-0132-0 [Epub ahead of print] [PubMed ID: 29915296]
25. Bunse L, Pusch S, Bunse T, et al: Suppression of antitumor T cell immunity by the oncometabolite (R)-2-hydroxyglutarate. *Nature Medicine* 2018, 24(8): 1192-1203 [PubMed ID: 29988124]
26. Norelli M, Camisa B, Barbiera G, et al: Monocyte-derived IL-1 and IL-6 are differentially required for cytokine-release syndrome and neurotoxicity due to CAR T cells. *Nature Medicine* 2018, 24(6): 739-748 [PubMed ID: 29808007]
27. Gherardin NA, Loh L, Admojo L, et al: Enumeration, functional responses and cytotoxic capacity of MAIT cells in newly diagnosed and relapsed multiple myeloma. *Scientific Reports* 2018, 8(1): 4159 [PubMed ID: 29515123]
28. Germano G, Lamba S, Rospo G, et al: Inactivation of DNA repair triggers neoantigen generation and impairs tumour growth. *Nature* 2017, 552(7683): 116-120 [PubMed ID: 29186113]
29. Delconte RB, Kolesnik TB, Dagley LF, et al: CIS is a potent checkpoint in NK cell-mediated tumor immunity. *Nature Immunology* 2016, 17(7): 816-824 [PubMed ID: 27213690]
30. Liu E, Marin D, Banerjee P, et al: Use of CAR-Transduced Natural Killer Cells in CD19-Positive Lymphoid Tumors. *The New England Journal of Medicine* 2020, 382(6): 545-553 [PubMed ID: 32023374]
31. Roth TL, Puig-Saus C, Yu R, et al: Reprogramming human T cell function and specificity with non-viral genome targeting. *Nature* 2018, 559(7714): 405-409 [PubMed ID: 29995861]
32. Mandal R, Samstein RM, Lee KW, et al: Genetic diversity of tumors with mismatch repair deficiency influences anti-PD-1 immunotherapy response. *Science* 2019, 364(6439): 485-491 [PubMed ID: 31048490]
33. Casasanta MA, Yoo CC, Udayasuryan B, et al: *Fusobacterium nucleatum* host-cell binding and invasion induces IL-8 and CXCL1 secretion that drives colorectal cancer cell migration. *Science Signaling* 2020, 13(641): eaba9157 [PubMed ID: 32694172]
34. Mateus J, Grifoni A, Tarke A, et al: Selective and cross-reactive SARS-CoV-2 T cell epitopes in unexposed humans. *Science* 2020 (online ahead of print – doi: 10.1126/science.abd3871) [PubMed ID: 32753554]

Information on Assignment #2: Newspaper Article or Press Release

Format: A mock newspaper article or press release to be written by students reporting a recently published, newsworthy article, preferably a recent major discovery relevant to the field of clinical immunology and/or immunotherapy. **Important note:** The article to be covered will be chosen by students and should NOT be among the articles listed for Assignment #1.

All margins should be set at 0.75" (1.87 cm). Use Times New Roman font (12 pt.) and single-spaced text with no more than six lines per inch.

Content: The assignment must be written in lay language accessible to a general audience that includes

high school students as an example. Many examples can be found online or in press. Two samples will be posted in OWL.

Marking Scheme for Assignment #2:

- 3% What gap in knowledge was addressed? What question was asked? What hypothesis was tested?
- 2% Methodology and experimental approaches
- 5% Main findings
- 5% Novelty and clinical significance
- Total = 15%**

Submission: Submit the electronic copy of your assignments in OWL by the due date/time (9:30 AM). The submitted assignments will be checked for plagiarism by Turnitin.

Penalties for late assignments:

50% grade deduction for submissions received via OWL within 24 hours after the deadline

75% grade deduction for submissions received via OWL between 24-48 hours after the deadline

No reports will be accepted after 2 days.

9. Communication:



- ✓ Students should check the OWL site frequently, at least once every 24-48 hours.
- ✓ This course will use the OWL forum for students' questions and 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 GTAs and frequently, at least once a week, by instructors.

10. Resources



- ✓ There is no textbook requirement for this course. However, Kuby Immunology, 8th edition (2019), by Jenni Punt, Sharon Stranford, Patricia Jones and Judith Owen (required textbook for MICROIMM 3300B) may be useful for supplementing lecture materials or for general interest.
- ✓ Although certain textbook sections and the materials covered during lectures constitute the core learning resources for this course, additional readings, including but not limited to scientific journal articles, may be assigned by each instructor and used in your evaluations. All such resources will be posted in 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 – it is illegal to share them.
- ✓ 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 in this class. Keep up with the material.
3. Follow weekly checklists created in 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 teaching assistants.
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.

13. Western Academic Policies and Statements

Absence from Course Commitments

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

If you are unable to meet a course requirement due to illness or other serious circumstances, you must 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 or 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 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.

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](#).

14. BMSUE Academic Policies and Statements

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.

15. 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](#)