MBIO 4020 IMMUNOLOGY

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January-April 2021.
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Instructors: Emails:	Dr. Deb Court <u>Deborah.Court@umanitoba.ca</u> The expectation is that under normal circumstances emails will be answered within two business days. Prior to exams, FAQ will be posted in UMLearn. Please check your myumanitoba.ca email address regularly for updates and use it to correspond with instructors.	
Web Site:	UMLearn: www.umanitoba.ca/d21	
Zoom:	For synchronous activities (some lectures, in-class assignments) your zoom username must include your first and last names so you can be identified as a member of the class if necessary. All interactions on zoom must be respectful to all and reflect behaviours you would use in a work or classroom setting.	
SAS:	Course instructors are willing to meet with students to discuss the accommodations recommended by Student Accessibility Services, but extended exam times can only be provided with approval from SAS.	
Textbooks:	There is no required textbook, but there is an optional book available in paper format and as an e-book: Kuby Immunology (8 th or 9 th Ed. by Punt <i>et al.</i> W.H. Freeman & Co. publishers). We will <u>not</u> be using their "Immunoportal", so don't buy it! Other books are also useful, such as Immunology - A Short Course by Coico & Benjamini	

You are responsible for what is covered in both the synchronous and asynchronous lectures and any additional information indicated during the lectures or on UMLearn. You are not responsible for entire chapters in the textbook.

TOPICS (Chapters Based on Kuby Immunology 8th Ed.)

- 1. Introduction / Review innate vs acquired immunity (Ch. 5/4)
- 2. Immunoglobulins (Ch.3) on-line module to be completed at your own pace
- 3. Antibodies as Tools (Ch. 20)
- 4. Cells and organs involved in the immune response (Ch. 2)
- 5. Antigens (various chapters)
- 6. Vaccines: HIV vs SARS-CoV2 (Ch.17&18; review and research papers)
- 7. Immunoglobulin Genes (Ch. 6)
- 8. T Cell Receptors structure and genetics (Ch. 6)
- 9. Major Histocompatibility Complex MHC structure and genetics (Ch. 7)

10. Cytokines (Ch. 3)

- 11. B and T Cell development and activation and memory (Ch. 9-12)
- 12. Autoimmune disease mechanisms and immunological approaches to treatment (Ch.16 and review papers)
- 13. Allergy (Ch.15 and review papers)

Guest Lectures (some material will be testable)

i) Dr. Thomas Murooka (Immunology & Medical Microbiology) – April 6 Imaging the immune system
ii) Dr. Neeloffer Mookherjee (Immunology) - TBA Modulation of inflammation

Assessment for final grade in the course:

		Date	
Assignment 1	9%	Tues., Feb. 9 (by 10:00 pm; on UMLearn)	
Assignment 2	9%	Fri., Feb. 26 (by 10:00 pm; on UMLearn)	
Assignment 3	8%	Tues., Mar. 3 (by 10:00 pm; on UMLearn)	
In class test 1	14%	Tues., Mar. 2 (1:00 UMLearn)	
In class test 2	20%	Thurs., Mar. 18 (1:00 pm UMLearn)	
Final Exam	40%	(set by Student Records Office)	
(VW date – March 31 – written feedback on the quiz 1 and assignments 1 and 2 will be provided by that date)			

Letter grades will be assigned by taking into consideration the grade distribution in the class and the University of Manitoba's descriptors A⁺ (Outstanding), A (Excellent), B⁺ (Very Good), B (Good), C⁺ (Satisfactory), C (Adequate), D (Marginal), F (Failure); see <u>http://umanitoba.ca/student/records/grades/686.html</u>. The goal is to provide grades that represent performance in the context of the class; the grades will not be curved to meet an expected distribution, but conversion of percentages to letter grades will be at the discretion of the instructor.

For this course, a grade of 45% on the final exam is required to pass the class. The grading scheme generally, but not always, will be close to the following: A^+ (>90%), A (80-89.9%), B⁺ (75-79.9%), B (70-74.9%), C⁺ (65-69.9%), C (60.0-64.9%), D (50-59.9%), F (<50% total, or <45% in final exam). Note that in some courses, an A^+ is received only for numerical grades of >93% (Nursing, Asper) so there is precedent for shifting grade boundaries higher than those listed above.

There are <u>no deferred in-class tests</u>. If you miss a test, the marks automatically will be added to the final exam. Medical or other notes are not required. The **Final examination** will be comprehensive (i.e., cover all lectures), and will be scheduled by Student Records during the April examination period. Permission to write a deferred final exam is granted by your Faculty - the instructor is not involved in this process. If it is necessary for you to write your final exam at an alternate date, you must visit your Faculty office with appropriate documentation to request permission for a deferred exam. This is a **strict** university policy, and there are no exceptions. If a deferral is granted it is your responsibility to contact the instructor as soon as possible for the date of the deferred exam.

Academic integrity and dishonesty: guidelines are stated in your calendar regarding University policy with respect to academic dishonesty (particularly plagiarism, impersonation and cheating), as well as behaviour and absence from final exams. All exams are to be written individually, without any discussion in person or electronically. Acceptable resources (notes, research papers) will be noted in class prior to the exam. If it isn't on the list, you cannot use it! In cases of cheating or collaboration during in-class examinations, the test(s) in question will be given a grade of 0% and the student will be reported to the appropriate authorities for disciplinary action. Dishonesty during final exams will be reported directly to the Faculty of Science.

The Faculty of Science web page has **detailed information**, with which you must become familiar. (<u>https://sci.umanitoba.ca/students/undergraduate-students/academic-resources/academic-integrity-2</u>) Please read and follow these guidelines and ask if you have any questions.

Watch the Faculty of Science video outlining issues regarding academic integrity in the context of on-line examinations, and the consequences of cheating: (7 min) <u>https://youtu.be/Ok-lilm4SeE</u>

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