MICR303: IMMUNOLOGY COURSE OUTLINE FALL 2020

INSTRUCTORS

Dr. Catherine Bao2o 1 3w 9(e) 3 () 9 (Ba) 020

COURSE CONTENT*

1. Introduction to the Immune System	Principles of innate and adaptive immunity (Ch.1)
2. Innate Immunity	Anatomical barriers; antimicrobial peptides
	complement; innate cell types and effector
	mechanisms; pattern recognition. (Ch. 2,3)
3. Adaptive Immunity	Antigen and antigen-presentation; generation of
	lymphocyte antigen receptors; T cell activation;
	T cell subsets and effector mechanisms;
	antibodies and antibody production.
	(Elements of Ch. 4,5,6,7,9,10)
4.lmmunological memory	Memory B/T cells (Ch. 11)
5.Vaccination	Example composition, methods (Ch. 16)
6. Generation of tolerance and	B, T cell development, central and peripheral
regulatory mechanisms	tolerance and mechanisms preventing
	auto-reactivity (Ch. 8)
7. Autoimmunity	Disorders associated with the immune system
	attacking self; underlying factors, including
	defects in tolerance. (Ch. 15)
8. Immunity at mucosal surfaces	Immunology of the mucosal system and host-
	microbiota interactions. (Ch.12)
9. Hypersensitivity and Allergy	Allergy and allergic diseases; relationship with
	the microbiota (Ch. 14)
10. Immunity to infectious pathogens and	Immune responses to select bacterial, parasitic
pathogen evasion strategies	and viral pathogens; mechanisms by which
	pathogens evade the immune system. (Ch. 13)
11. Tumor immunology	Tumor immune environment, immunotherapy
	with Dr. Brad Nelson

designated time frame. Students are obligated to write exams and quizzes on their own, without the assistance of others or use of the internet and other non-class resources.

•The Group project will involve reading a manuscript and answering questions as a group. Attendance for the Group project discussion is mandatory in order to receive the grade. No

reason for their absence within 48 hours after the midterm exam. The Department will keep a record of the absences. It is the responsibility of the student to ensure all required components are complete, and to arrange deferred exams/assignments with the instructor, which normally should occur within one week of the original exam date.

- 6. The Department of Biochemistry and Microbiology considers it a breach of academic integrity for a student taking a deferred examination to discuss the exam with classmates. Similarly, students who reveal the contents of an examination to students taking an deferred examination are considered to be in violation of the University of Victoria policy on academic integrity (see current University Calendar). Students must abide by UVic academic regulations and observe standards of scholarly integrity (no plagiarism or cheating). Online exams must be taken individually and not with a friend, classmate, or group, nor can you access notes, course materials, the internet, or other resources without the permission of the instructor. You are prohibited from sharing any information about the exam with others. Use of unauthorized electronic devices and accessing the internet and class material during exams is prohibited unless permission is granted by the instructor. Instructors may use Browser Lockdown Software to block access during classes and exams.
- 7. Deferral of a final exam must be requested with an Academic Concession form and submitted directly to Undergraduate Records. Deferred final exams for fall term courses will be arranged by the instructor. Deferred final exams for spring term courses will be arranged through Undergraduate Records and must be written before the end of the summer term as stipulated in the University