# **BioA11 Syllabus: Biology of Humans**

The online course meets for synchronous lectures and tutorials:

Lectures: Friday: 1300h-1500h & Tutorials: Monday: 0900 - 1000h or 1000 -1100h or 1100h-1200h (EST /Toronto times)

#### Course personnel

Course Personnel	Office Hours	Email
Instructor: Karen Williams, PhD	Virtual, online Thursday 1100-1130h or by appointment	<u>kd.williams@utoronto.ca</u>
Teaching Assistants: Fatima Naimi; Rida Ansari	ТВА	

## **Course Goals and learning objectives:**

We explore biology of humans as it relates health. BioA11 students will learn to recognize the biological determinants of infectious disease and disorders, the patterns of inheritance in human populations, the polygenic basis of many traits related to human health and society. In general, lectures and assignments provide opportunities for students to:

- Understand the terms used in biology and how they relate to human health
- Solve genetic problems and apply concepts to case studies
- Develop skills in the reading of primary literature and in writing about human biology cases

The assignments and tests will help you reach these objectives because you will:

- Keep up with the lecture material, by using the Mastering Biology quizzes and Dynamic Homework, which will facilitate timely interaction with the information covered and help you to prepare for the tests and exams
- Apply to a randomly assigned case the skills you have learned for solving biology problems, using information from secondary sources and information from the primary literature to present and write about a case in your assignment report
- Evaluate how well you have learned the material: the exams (midterm tests and final) are comprehensive and will test your ability to understand the material and to apply the knowledge to new cases.

## **Attendance and Lecture notes:**

Attendance in lectures and tutorials is expected. Absence from all the tutorials will result in a zero grade for tutorials.

Lecture notes will be available 12 to 24 hours prior to the lecture. Lectures will be online (via Zoom/MSTeams). Attendance and participation (often by chat) during lectures is encouraged. Review lectures will be recorded. Many of the synchronous lectures will be recorded. The recording or distribution of any video or audio captures from material posted on this course is prohibited, see University rights and responsibilities and Academic Integrity below.

University of Toronto states "This course, including your participation, will be recorded on video and will be available to students in the course for viewing remotely and after each session. Course videos and materials belong to your instructor, the University, and/or other sources depending on the specific facts of each situation, and are protected by copyright. Do not download, copy, or share any course or student materials or videos without the explicit permission of the instructor."

"Students may not create audio recordings of classes with the exception of those students requiring an accommodation for a disability, who should speak to the instructor prior to beginning to record lectures. Students creating unauthorized audio recording of lectures violate an instructor's intellectual property rights and the Canadian Copyright Act. Students violating this agreement will be subject to disciplinary actions under the Code of Student Conduct."

#### Communicate:

Please use your U of T email address for all communication emails from other addresses may not receive a response. Your U of T email address must be used for any Zoom sessions. Tutorials & office hours may use Zoom.

## **Assessment information**

Grading and Evaluation

Grade %	Assignment	Due Date		
33	Final Exam (3 hrs)	Final Exam period		
10	Midterm test 1 (1hr)	22 October 2021		
10	Midterm test 2 (1hr)	26 November 2021		
27	Tutorials: quizzes, participation, blogs	Ongoing alternate weeks		
16	Case study: Presentation and reports	Weeks 9 to 12		
3	Quizzes requires Mastering Biology	Ongoing		
1	Dynamic Homework	Ongoing		
100				

#### **Assessment policies**:

**Plagiarism detection**: "Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (https://teaching.utoronto.ca/ed-tech/teaching-technology/pdt/pdt-faq/)".

**Tutorials**: Participation and attendance in tutorials will greatly assist your understanding of the material. In each of weeks 10 to 12 tutorials there will be student presentations (about 5 presentations per tutorial). Only assignments submitted to Quercus are accepted.

**Case study reports & presentation**: Oral presentations of your assigned case study. Oral presentation slides and bibliography are due at the start of the 5<sup>th</sup> tutorial submitted to Quercus as a pdf.

**Midterm tests**: The 1-hour online term tests may begin during class time, may be available for about 4 hours and will likely include multiple choice and short answer questions. More information about the tests and final will be posted on Quercus. Tests (and Final) are expected to be completed individually without assistance.

### **Late Penalties**

**Case study reports**: late reports will be given a zero grade. It is not possible to make up a missed oral presentation.

**Quizzes & blog reflections:** Late MB quizzes, dynamic homework assignments will be given a zero grade. Late blog reflections will be given a zero grade.

**Tutorial Quizzes**: will be penalized 5% per day (24 hours) of lateness to a maximum of 5 days of lateness. Assignments submitted beyond 5 days will be given a grade of zero.

**Missed tests**: There will be NO make-up midterms. Those who have missed a midterm test must indicate their absence on ACORN and notify the instructor within 48h of the missed test. Those who have missed a test, emailed instructor about the missed test, and submitted their acceptable documentation may be eligible for one test worth the total of the midterm tests. Those who missed both tests and have acceptable documentation may be offered one alternate test likely in a different format. \* Medical notes are NOT required see ACORN Declaration link see below.

#### Departmental late/missed work information link: https://www.utsc.utoronto.ca/biosci/node/389

**Missed exam**: If you missed the Final Exam please see Registrar's office.

**Re-Evaluation requests:** A written request for re-evaluation must accompany the assignment or test. All requests must be addressed to the instructor (email requests permitted) and must be received by

December 14<sup>th</sup> 2021. Please be advised that the entire assignment or test will be evaluated, and your grade may go up, down or may not change.

### **Academic Integrity**

UTSC statement on Academic integrity "The University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (<u>https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019</u>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences.

Potential offences in papers and assignments include using someone else's ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor, making up sources or facts, obtaining or providing unauthorized assistance on any assignment.

On tests and exams cheating includes using or possessing unauthorized aids, looking at someone else's answers during an exam or test, misrepresenting your identity, or falsifying or altering any documentation required by the University. (Also see "Remote assessments" below).

Please see UTSC resource links on Academic integrity:

http://www.adfg.utoronto.ca/processes/acdiscipline/AcademicDisciplineResourcesLinks.htm

Please see also UTSC student policy on "code of behaviour in academic matters" by following this link:

#### http://www.utsc.utoronto.ca/~stuaff/student\_policies.html

Know the academic integrity guidelines specific to remote online learning. We will use this helpful list of offences from UTM (April 2020) as a reminder of what you must NOT do:

"Remote assessments:

- 1. Accessing unauthorized resources (search engines, chat rooms, Reddit, etc.) for assessments.
- 2. Using technological aids (e.g. software) beyond what is listed as permitted in an assessment.
- 3. Posting test, essay, or exam questions to message boards or social media.
- 4. Creating, accessing, and sharing assessment questions and answers in virtual "course groups."

5. Working collaboratively, in-person or online, with others on assessments that are expected to be completed individually."

## **Access Ability**

UTSC statement: "Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible.

AccessAbility Services staff (located in Rm AA142, Arts and Administration Building) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations 416-287-7560 or email ability@utsc.utoronto.ca. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course"

Please follow the link below for UTSC student services related to Access Ablilty:

http://www.utsc.utoronto.ca/~ability/

#### Accommodation

Please see the link below for policies on religious accommodation and student conduct:

http://www.utsc.utoronto.ca/~stuaff/student\_policies.html

#### Equity

http://www.hrandequity.utoronto.ca/Assets/HR+Digital+Assets/Equity+Resources/studentequity.html

## **Textbook and supplemental material**

Textbook: *Biology science for life with physiology*. 6<sup>th</sup> edition. Belk & Maier 2019 Pearson. ISBN 9780134555430. <u>www.pearson.com</u>

Mastering Biology: (included with textbook or purchase separately from bookstore). Register at pearson.com/mastering/biology, see link on Quercus.

Supplemental material: a small (140g) tub of PlayDoh.

Links to other helpful reference texts will be available on Course Reserves.

# Lecture and Tutorial Schedule:

Every effort will be made to follow this lecture schedule, but it will likely change, and the most up-todate **schedule will be on Quercus.** 

Dates	Lecture	Lecture topic	Chapter	Tutorial	Assignment /	Tutorial
2021	Week		in Text		Test	topic
Sept 10	1	Methods in Biology	1&2	NONE		
Sept 13-	2	Metabolism and	3 & 4	1 cycle	TQ1	Tutorial
17		disorders		1		Introduction
				(TUT 1,		: Scientific
				3 & 5)		Method
Sept 20-	3	Cells out of control	6	1 cycle	TQ1	Introduction
24				2 (TUT 2		: Scientific
				& 4)		Method
Sept 27-	4	Cell cycle and meiosis	7	2 cycle	TQ2	Tissues
Oct 1				1		
Oct 4- 8	5	Mendelian genetics	8&9	2 cycle	TQ2	Tissues
		_		2		
October		FALL READING WEEK				
11 -15						
October	6	MIDTERM TEST 1	10	3 cycle	TQ3	Interpreting
18-22		(1h)		1		data
October	7	Mutations	10	3 cycle	TQ3	Interpreting
25-29				2		data
Nov 1 -5	8	Populations and	11, 12 &	4 cycle	TQ4	Lactose
		evolution	13	1		tolerance
Nov 8-	9	Multifactorial traits and	11,12 &	4 cycle	TQ4	Lactose
12		heritability	13	2		tolerance
Nov 15-	10	Infectious diseases	21	5 cycle	Presentations	
19			(&23)	1		
Nov 22-	11	MIDTERM TEST 2	21	5 cycle	Presentations	
26		(1h)		2		
Nov 29-	12	Behaviour genetics &	22.1,	6 cycle	Presentations	
Dec 3		Review	23.2 &	1		
			24			
Dec 6	1			6 cycle	Presentations	
				2		