BioA11 Syllabus: Biology of Humans

The course meets for:

Lectures: Friday: 1300h-1500h & Tutorials: Monday: 0900 - 1000h or 1000 -1100h

Course personnel

Course Personnel	Office Hours	Email
Instructor:	SW542	kd.williams@utoronto.ca
Karen Williams, PhD	Friday 1530-1630h or by	
	appointment	
Teaching Assistant:	ТВА	
Mouly Rahman		

Course Goals and learning objectives:

We explore biology of humans as it relates health. BioA11 students will learn to recognize the roles of genes in 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 genetics 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 genetics problems, information from OMIM and information from the primary literature in order to present and write about a case in your assignment report
- Evaluate how well you have learned the material: the exams (midterm test 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 of the tutorials will result in a zero grade for tutorials.

Grading and Evaluation

Grade %	Assignment	Due Date	
40	Final Exam (3 hrs)	Final Exam period	
28	Midterm test (in class)	25 October 2019	
18	Tutorials: quizzes, participation	Ongoing alternate weeks	
10	Case study: Presentation and report	Weeks 9 to 11	
3	Quizzes (best 3 of 4)	Ongoing	
1	Dynamic Homework	Ongoing	
100			

Assessment policies:

Turnitin: "Normally, students will be required to submit their course essays to Turnitin.com 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 Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site".

Tutorials: Participation and attendance in tutorials will greatly assist your understanding of the material. In each of weeks 9 & 10 tutorials there will be student presentations (6 presentations per tutorial).

Case study report presentations: Oral presentations of your assigned case study. Oral presentation slides and bibliography are due at the start of the tutorial submitted to Quercus as a pdf.

Midterm test: The term test will be held during class time and will likely include multiple choice and short answer questions. More information about the test and final will be posted on Quercus.

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: Late quizzes and dynamic homework assignments will be given a zero grade.

Tutorial blog reflections: 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 ONE cumulative make-up midterm exam (TBA) for those who have missed the midterm and have a valid U of T medical certificate: <u>http://www.utsc.utoronto.ca/~registrar/resources/pdf_general/UTSCmedicalcertificate.pdf</u>

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 13th 2019. 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

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

Access Ability

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*. 6th 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.

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-to-date schedule will be on Quercus.

Dates	Lecture	Lecture topic	Chapter	Tutorial	Assignment /	Tutorial
	Week		in Text		Test	topic
Sept 6	1	Methods in Biology	1&2	NONE		
Sept 9-13	2	Metabolism and disorders	3 & 4	1 cycle 1	TQ1	Tutorial
				3)		: Scientific
Sont 16	2	Colls out of control	C	1 avala 2	TO1	wethou
Sept 16-	3	Cells out of control	0		IQI	
20				(1012 & 1)		
Sont 22-	Λ	Cell cycle and meiosis	7	2 cycle 1	το2	Τίςςμος
27	+		/		TQZ	1135065
Sep 30-	5	Mendelian genetics	8&9	2 cycle 2	TQ2	Tissues
Oct 4						
October	6	Mutations	10	3 cycle 1	TQ3	Interpreting
7-11						data
October		Fall reading week				
14-18						
October	Oct 25	Midterm Test		3 cycle 2	TQ3	Interpreting
21-25		(1310h -1500h)				data
Oct 28-	7	Populations and evolution	11, 12 &	4 cycle 1	TQ4	Lactose
Nov 1			13			tolerance
Nov 4-8	8	Multifactorial traits and	11,12 &	4 cycle 2	TQ4	Lactose
		heritability	13			tolerance
Nov 11-	9	Infectious diseases	21	5 cycle 1	Presentations	
15						
Nov 18-	10	Behaviour genetics	22.1 &	5 cycle 2	Presentations	
22			24			
Nov 25-	11	Review		6 cycle 1	ТВА	
29						
Dec 2				6 cycle 2	ТВА	