BIOC15H3F Genetics

Course Syllabus Fall 2013

Genetics lectures: Wednesdays 0900h-1100h and Fridays 0900h-1000h in SW 309

Genetics Laboratory sessions: Mondays 1100h-1400h in SW248; Tuesdays 1100h-1400h in SW248 and SW250, 1800h-2100h in SW250; Wednesdays 1300h-1600h in SW 248.

Course Personnel	Office Hours	Email
Instructor: Karen Williams, PhD	SW 563B Thursday 1530h-1630h & Friday 1330h -1530h	kd.williams@utoronto.ca
TAs:	TBA	

Course Goals and Learning Objectives

In Genetics you will discover the world of genes: eukaryotic inheritance, the chromosomal basis of inheritance, gene mutations, genomics, gene interactions, gene function and the genetic dissection of biological processes. Your participation in the scientific process through a laboratory project will enhance your ability to understand the transmission of genetic material. In general lectures and labs provide opportunities for students to:

- Understand the terms used in genetics
- Solve genetic problems and apply concepts to case studies
- Develop skills in the reading of genetics primary literature
- Develop analytical skills to be able to collaborate, present and write about your experiments

Through the assignments and tests you will:

- Learn to work with *Drosophila melanogaster*: to do genetic crosses, to assess their results and to understand how classic genetic techniques contribute to the information available for this genetic model organism.
- Keep up with the information in lecture and labs by using the Online Assessments to facilitate timely interaction with the genetic information covered and to help prepare for the tests and exams
- Evaluate how well you have learned the material: the exams (term tests and final) are comprehensive and will test your ability to understand the material and to apply the knowledge to new cases.

Text: Genetics: From genes to genomes. Hartwell, L.H. et al. 4th Ed. 2011. McGraw-Hill Inc. ISBN 978-0-07-352526-6. www.mhhe.com

Week of	Lecture topic	Readings from text	Labs
03-Sep-13	Introduction to genetics	Hartwell text p.1-10	
09-Sep-13	Mutants and Genomes	ch. 7 & Ch 10	
16-Sep-13	Mendelian Genetics	Ch. 2 & 3	Lab 1
23-Sep-13	Chromosomes vs. extranuclear inheritance	Ch. 4 & Ch.12, Ch 14.5	Lab 2
30-Sep-13	Test I; Basic Chromosome mapping	Ch. 5	Lab 3
07-Oct-13	Chromosome mutations	Ch. 13	Lab 4
14-Oct-13	FALL READING WEEK		No Formal Labs
21-Oct-13	Chromosomes and cancer	Ch. 17	Lab 5
28-Oct-13	Genetics of development	Ch. 16 & Ch. 18	Lab 6
04-Nov-13	Population genetics	Ch. 19	Lab 7
11-Nov-13	Test II		Lab 8
18-Nov-13	Quantitative genetics	Ch. 19 & article	Lab 9
25-Nov-13	Review		Lab Report Due

Please note that every attempt will be made to follow this lecture schedule but the most up-to-date schedule will be the one posted on Blackboard Portal.

% Grade	Assignments	Date due
12	Lab Practical Performance	ongoing
10	Lab Written Report	26-Nov-13
2	Lab Oral Report	
6	Online Assessment	ongoing
15	Test 1	02-Oct-13
15	Test 2	06-Nov-13
40	Final exam	exam period

Assessment information

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".

Students are required to upload their assignments to Turnitin. If you would like to opt out of Turnitin you are required to submit a request to the instructor in writing by October 1st and be prepared to submit draft copies of your poster and critical review assignments.

Late Penalties

Online assessments: Please note that it is NOT possible to make-up a missed online assessment, and if you miss all the online assessments you will not have a grade, i.e. you will receive a zero.

Lab written report: Late assignments will be penalized 5 points per day (24 hours) of lateness to a maximum of 5 days of lateness.

Oral report: It is NOT possible to make up a missed presentation.

Missed tests/exams: There will be ONE make-up term test for those with a valid U of T medical certificate http://www.utsc.utoronto.ca/~registrar/resources/pdf_general/UTSCmedicalcertificate.pdf

If you missed the Final Exam please see Registrar's office.

Procedures and Policies

Course information

Please see Blackboard Portal for all queries and check Blackboard frequently for updated information.

Attendance, Lectures and Notes

In this third year course attendance and participation in lectures is expected. Lectures will be webcast (available only for 2 weeks after the lecture). Lecture notes will be available 12 to 24 hours prior to the lecture.

Email

Contact information for instructor kd.williams@utoronto.ca and TA are available on Blackboard under "Contacts" or by clicking Send Email. Please use your U of T email address for all communication emails from other addresses may not receive a response.

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 19th 2013. Please be advised that the entire assignment or test will be evaluated and your grade may go up, down or may not change.