

BIOC15H3Y Genetics

Course Syllabus Summer 2014

Genetics lectures: Wednesdays 1300h-1400h and Fridays 0900h-1100h in SY 110

Genetics laboratory sessions: Wednesdays 1400h-1500h in SW 242; Thursday 1400h-1700h in SW242 and Fridays 1100h-1400h in SW242.

Course Personnel	Office Hours	Email
Instructor: Karen Williams, PhD	SW 563B Friday 1330h -1530h	kd.williams@utoronto.ca
TAs: Joseph Chau; Stephanie Ross ; Alvin Singh	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 (“pop quizzes”) 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	Lab
05-May-14	Introduction to C15 genetics	Hartwell text Chs. 1,7	lab 1
12-May-14	Mutants and Genomes	Ch. 10 & 11	2
19-May-14	Mendelian Genetics	Ch. 2 & 3	3
26-May-14	Chromosomes vs. extranuclear inheritance	Ch. 4, 12 & 14	4
02-Jun-14	Chromosomes; Test I (6th June)		5
09-Jun-14	Basic Chromosome mapping	Ch. 5	6
READING WEEK			Flex times
23-Jun-14	Chromosome mutations	Ch. 13	7
30-Jun-14	Chromosomes and cancer	Ch. 17	8
07-Jul-14	Genetics of development	Ch. 16 & 18	9
14-Jul-14	Review; Test II (18th July)		
21-Jul-14	Population genetics	Ch. 19	Report due
28-Jul-14	Quantitative genetics	Konopka & Benzer 1971	
Tests and exam are cumulative			

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.

Lab manual: Available on Blackboard portal as a pdf.

% Grade	Assignments	Date due
12	Lab Practical Performance	Ongoing May to July
10	Lab Written Report	25-July-14
2	Lab Oral Report	In lab
6	Online Assessment	ongoing
15	Test 1	06-Jun-14
15	Test 2	18-Jul-14
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 June 1st and be prepared to submit draft copies of your lab report.

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. A report handed in after 5 days of lateness will be given a grade of zero.

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

Missed tests/exams: You must notify the instructor within 48h of a missed test. 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, Labs, 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. Laboratory attendance is expected and extra time outside of scheduled lab practical hours will be necessary to complete your project. Lab coats are required (see Lab manual).

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 July 30th 2014. 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, Religious accommodation and other policies

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

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

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

http://www.utsc.utoronto.ca/~stuaff/student_policies.html