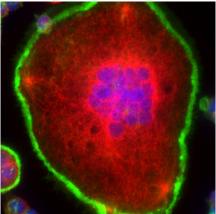
BIOD23H3 Special Topics in Cell Biology

Fall Term Syllabus, 2013 Professor Rene Harrison



A lecture/seminar/discussion class on contemporary topics in Cell Biology.

Students will explore the primary literature becoming familiar with experimental design and methodologies used to decipher cell biology phenomenon. Student seminars will follow a series of lectures and journal club discussions.

Lectures: IC-328, Mon 1-3 p.m.

IC-328, Wed 12-1 p.m*. (*not every week- see schedule on page 3).

<u>**Textbook:**</u> None. Rene's powerpoint presentations and journal articles will be supplied on intranet as PDF files for students to download and bring to class.

Exams: 2 Exams: Midterm worth 20% (short and long answer questions)- 2 hours - Final exam worth 20% (short and long answer questions)- 2 hours

Office Hours:

Office: SW 421-E

Office Hours: Tuesdays 11-1 pm, or by appointment.

e-mail*: harrison@utsc.utoronto.ca

Blackboard Resources:

- outline of PowerPoint presentations will be uploaded onto blackboard prior to class.
- students should print and bring outlines to class to take notes on additional details.

TA: Charlene Lancaster: charlene.lancaster@mail.utoronto.ca

Reading group*:

*The student reading group is designed to assist students with critically evaluating and comprehending primary scientific literature through interactive, thought-provoking discussion. Attendance is completely optional and will in no way contribute to student grades. Student facilitator and room numbers are TBA.

Course Prerequisites:

Prerequisites: <u>BIOC15H</u> & <u>BIOC12H</u> [or <u>IMCB08H</u> plus <u>IMCC03H</u> (for Industrial Microbiology students only)]

Grading Scheme:

Assignments (3)	30%
Seminar	15%
Creative Cell Project/Skit	10 %
Midterm	20%
Final	20%
Participation	5 %
	100%

<u>Assignments (30%)</u>- Three (3) Assignments will be given. Assignments must be handed in at the <u>beginning</u> of class the day the articles are being discussed. Late assignments will be graded as zero. Journal articles and assignments will be put on the intranet a week before the discussions.

<u>Seminar (15%)</u>- Students (in pairs) will give a 25 minute seminar to the class. Students can choose from a list of articles that will be provided on the intranet. Students must decide on paper by October 21st. Presentation dates will be assigned on a first-come, first-serve basis. Students will present a 10 minute background on the specific area of research and then a 15 minute discussion on the major experiments and findings in the article. A 5-10 minute question period will follow. Presenting students must provide a 3-page summary (double-spaced) of the article to the other students at the end of term for the final exam.

<u>Creative Cell Project (10%)</u>- Students (in pairs) will be asked to focus their artistic flair on cell biology. Projects can include but are not limited to: computer animations for BGYB10, adobe graphics for Rene's research, paper mache, cell poetry/ cell haiku, organelle stuffed animals, your own crazy idea...

OR:

<u>Cell Video Skit (10%)</u>- in groups of 3-4, students will present a 5-10 minute skit/video on an cell biology concept or ethical topic in science. This should be in the format of a video (if you possess such skills).

Students must let me know about their groups by Sept. 30th and give Charlene an outline of the skit/rough draft or their creative ideas by October 21st at the very latest.

** Skit groups and seminar partners must be confirmed to Rene by September 30th **

<u>Midterm (20%)</u>- The midterm will cover the topics/journal articles and assignments covered up until the date of the exam. A new paper will also be given to the students one week before the exam and students must answer questions about the experiments/ concepts in this article. The format will be short and long answer questions.

<u>Final (20%)</u>- The final will also include the journal articles discussed in the student seminars, particularly the 3-page summaries written by the students. For this reason, it is very important the 3-page summaries are clear and comprehensive.

<u>Participation (5%)</u>- Participation will be graded according to attendance at journal discussions and student seminars and contribution to discussions.

DATE	TOPIC	RELEVANT PAPERS
Sept. 4	Course Introduction/ Cell Biology Review	
9	Cell Biology Proteomic Techniques/ Phagocytosis	Articles 1a and 1b
16	Journal Article Discussion#1 *Assignment#1 due	Articles 1a and 1b
18 (Wed)	Applying for grad school (optional)	* in SW-524A
23	Cell Biology Microscopy Techniques/ Phagocytosis	Articles 2a and 2b
30	Journal Article Discussion#2 *Assignment#2 due -seminar/skit/creative project partners must be chosen	Articles 2a and 2b
Oct 2 (Wed)	Microscopy field trip	* in SW-422
Oct 7	Host Cell Responses to Pathogen Invasion	Articles 3a and 3b
14-18	READING WEEK	
21	Journal Article Discussion#3 - students must choose article & presentation day for seminar by this date - 'skit' drafts/ creative idea draft due *Assignment#3 due	Articles 3a and 3b
Oct.28	MIDTERM (in class)	
Nov. 4	Show and Tell day - Osteoclasts and Microgravity (Rene) - Creative Projects Due - Video Skit presentations	
11	Student Seminars	
13 (wed)	Student Seminars	
18	Student Seminars	
20 (wed)	Student Seminars	
25	Student Seminars	
27 (wed)	Student Seminars	
Dec 2	*3-pagers due	
Date TBA	FINAL EXAM	

^{*}Disclaimer: The above schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances.