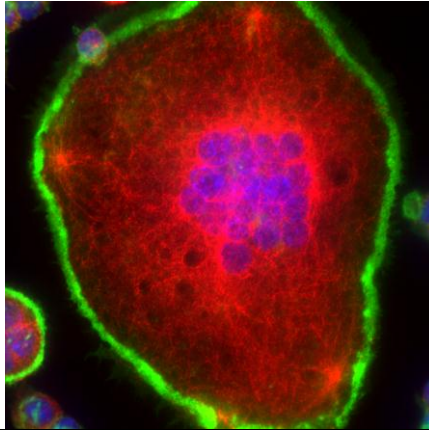


BIOD23H3 Special Topics in Cell Biology
Fall Term Syllabus, 2012 Professor Rene Harrison



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: MW-223, Mon 1-3 p.m.

MW-223, Wed 12-1 p.m*. (*not every week- see schedule on page 3).

Textbook: 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 540C

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

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

Intranet Resources:

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

TA: Urja Naik: urja.naik@utoronto.ca

Reading group*: Danusha Jebanesan: danushajeba@gmail.com

*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. The sessions will be held every **Friday from 10-11am in SW403.**

Course Prerequisites:

Prerequisites: [BIOC15H](#) & [BIOC12H](#) [or [IMCB08H](#) plus [IMCC03H](#) (for Industrial Microbiology students only)]

Grading Scheme:

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

	100%

Assignments (30%)- Three (3) Assignments will be given. Assignments must be handed in at the beginning 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.

Seminar (15%)- 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 15th. 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 prior to their seminar.

Creative Cell Project (10%)- 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:

Cell Video Skit (10%)- 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 Oct. 1st and give Urja an outline of the skit/rough draft or their creative ideas by Oct. 15th at the very latest.

** Skit groups and seminar partners must be confirmed to Rene by October 1st **

Midterm (20%)- 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.

Final (20%)- 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.

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

DATE	TOPIC	RELEVANT PAPERS
Sept. 10	Course Introduction/ Cell Biology Review	---
17	Cell Biology Techniques/Phagocytosis	Articles 1a and 1b
24	Journal Article Discussion#1 *Assignment#1 due	Articles 1a and 1b
26 (wed)	Cell Polarity & Cytoskeleton	Articles 2a and 2b
Oct. 1	Cell Polarity & Cytoskeleton (continued) -seminar/skit/creative project partners must be chosen	Articles 2a and 2b
Oct 3 (wed)	Journal Article Discussion#2 *Assignment#2 due	Articles 2a and 2b
Oct 8	Thanksgiving- NO CLASS	
10 (wed)	Cellular Mechanisms of Pathogen Invasion	Articles 3a and 3b
15	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
22	MIDTERM	
Oct.29	Osteoclasts and Microgravity - presented by Rene	---
Nov. 5	*Creative Projects Due *Video Skit presentations	---
7 (wed)	Student Seminars	
12	Student Seminars	---
14 (wed)	Student Seminars	---
19	Student Seminars	---
21 (wed)	Student Seminars	---
26	Student Seminars	---
28 (wed)	Student Seminars	---
Dec 3	*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.**