SC/BIOL 3100 2.0
Current Topics in Biological Research

Fall 2009

Course Description:

A review of the research in progress by members of the Department of Biology. It is understood that material presented in seminars may be difficult to comprehend. However, this course is designed to improve skills critical to success in a career in biology, and in the following 4th year Honours curriculum: report writing, and comprehension of advanced research material unfamiliar to the student, covering a broad range of biological research fields. There are additional seminars/computer lab sessions dealing with learning these research-focused skills. This course is designed to prepare Honours students for SC/BIOL 4000 8.0 or SC/BIOL 4000 3.0. Two lecture hours per week in the Fall Term. Two Credits. Open only to students registered in an Honours program in Biology, normally in the year prior to that in which they will undertake their Honours Thesis work.

The course director for Fall 2009 is:

Roberto Quinlan (Rm 211 Lumbers Bldg / rquinlanATyorku.ca – replace ‘AT’ with ‘@’)

Please email Dr. Quinlan to arrange an appointment. Send e-mails from a @yorku.ca email account – emails from other accounts (e.g. hotmail, gmail, etc.) will likely languish in an email spam folder for several weeks. Be sure to include your full name and student number in your email text.

Required reading: (is sold as a single package in the Campus Bookstore)


You may have already obtained these publications previously in another course, or used copies may be available. These publications are ‘required’ in the sense that any written assignments you hand in will be of a quality consistent with being familiar with the content of these publication as it pertains to grammar, spelling, structure etc. You are expected to read the material in these publications at your own pace, in a mode of self-directed learning. There are not particular pages or sections to ‘memorize’ or ‘know’. The material in these publications does not represent ‘testable’ material for a midterm or
exam (there is no midterm or exam in this course!) – these readings are expected to be a reference guide to improve your scientific writing abilities, which will be of benefit to you not just for the purposes of this course but for all your other science courses and future scientific endeavours.

**Lecture Schedule** — The BIOL 3100 lecture slot is Mondays from 2.30 to 5.20 pm. Some weeks will be only a one-hour faculty seminar, other weeks will include a computer lab such that the class ends at 5.20. The average per week is 2 hours.

**Important Dates – Fall Term 2009**

09 Sep – Term start date  
14 Sep – first class – attendance required, as there is an assignment at the end of the class  
24 Sep – Last date to enrol without permission of instructor  
09 Oct – Last date to enrol with permission of instructor  
10 – 15 Oct – Fall reading week  
06 Nov – Last date to drop course without receiving a grade  
08 Dec – Term end date

**Grading and Conduct**

Assignments – 100% - library session assignments are cumulatively worth 45% of final grade  
Assignment 1 – library session 1 (5%)  
Assignment 2 – library session 2 (20 %)  
Assignment 3 – library session 3 (6%)  
Assignment 4 – library session 4 (6%)  
Assignment 5 – library session 5 (8%)  
Assignment 6 – group seminar (15%)  
Assignment 7 – literature review of faculty member’s research (40%)

Embedded within the final grade is a participation mark of 10% (attendance mark) (e.g. you don’t get marks for attending class, but you can lose 1% for each faculty seminar and library session you miss).

Multiple assignments will focus on imparting critical skills necessary for success in a 4th year thesis, other 4000-level biology courses, and scientific research beyond an undergraduate setting (in the workplace or postgraduate degree). Most assignments will focus on the library sessions conducted by the Steacie Librarian, Ilo Maimets. One assignment will involve group work in presenting a research seminar. I will assign groups in the 09th November class. One literature review (1250 words, ~5 pages) will be written describing the research program of a faculty member who presents a seminar. Students will sign up for a particular professor’s seminar on a first-come-first-served basis, I will announce when sign-up sheets will be posted outside my office door (211
Lumbers Bldg). This essay will be due during the exam period - I will give you the exact due date at a later time in the course. Essay guidelines [here](#).

Medical excuses for missed classes must be submitted to Dr. Roberto Quinlan within **2 working days** (by the end of Wednesday), *with your name and student number clearly legible*. The medical note should be date-stamped by the undergraduate biology office (Rm 108 Farquharson), it is your responsibility to arrange this before the office closes on Wednesdays. If more than 1 class is missed for any reason, a deduction will be made from the attendance mark, as this course is centred around listening to research seminars, and seminars cannot be re-offered nor is reading a .pdf copy of the presentation a reasonable alternative to attending the seminar.

I expect that you will conduct yourself accordingly during all seminars, please turn off your cellphone, **there will be no laptop use permitted during class**, remain in the lecture hall until the seminar is over and refrain from reading newspapers or other disruptive activities. Department of Biology faculty members [volunteer their time](#) to present a seminar, and mark essays, in BIOL 3100.

Please review the University's [policy on academic honesty](#). This policy includes all forms of plagiarism on written assignments and evaluation. You are expected to take the proper responsibility to inform yourself of the plagiarism policy. By this juncture in your academic career you have already had ample opportunity to be informed about your responsibilities with regards to academic integrity.

Please do not ask me for mark changes to the next grade point or bell curving.

**Course Schedule**

Biology faculty seminars are in **CLH B**. Additional seminars and computer lab sessions follow the biology faculty seminar at 3.30 in **TEL 2116/2118** (except for week 1, when the entire class is in TEL 2116/2118). More details on the library sessions will be provided closer to the date of the session, and will involve advanced search strategies for publications, searching Medline, Scopus and bioinformatics databases, and writing an annotated bibliography.

14 Sep – **Entire class is in TEL 2116/2118** 2.35 – 5.20: first class - introduction, course aims & outline; Library Session 1 & 2 -- **Entire class is in TEL 2116/2118**
21 Sep – 2.35 – 3.20: faculty member seminar, CLH B
28 Sep – 2.35 – 3.20: faculty member seminar, CLH B
05 Oct – 2.35 – 5.20: faculty member seminar, CLH B, 2.35-3.20; Library Session 3, 3.30-5.20, TEL 2116/2118
12 Oct – no class
19 Oct - 2.35 – 5.20; faculty member seminar, CLH B, 2.35-3.20; Library Session 4, 3.30-5.20, TEL 2116/2118
26 Oct - 2.35 – 5.20; faculty member seminar, CLH B, 2.35-3.20; Library Session 5, 3.30-5.20, TEL 2116/2118
02 Nov – 2.35 – 3.20: faculty member seminar, CLH B 
09 Nov – 2.35 – 4.20: faculty member seminar, CLH B, 2.35-3.20; How to Present an Effective Seminar, CLH B, 3.30 – 4.20 
16 Nov – 2.35 – 4.20: faculty member seminar, CLH B, 2.35-3.20; Writing Tips for Science Students, CLH B, 3.30 – 4.20 
23 Nov – 2.35 – 5.20: faculty member seminar, CLH B, 2.35-3.20; student seminars, CLH B, 3.30-5.20 
30 Nov – 2.35 – 5.20: faculty member seminar, CLH B, 2.35-3.20; student seminars, CLH B, 3.30-5.20 
07 Dec – 2.35 – 5.20; student seminars, CLH B

Faculty member seminars

21 Sep – Imogen Coe 
28 Sep – Chris Lortie 
05 Oct – Norman Yan 
19 Oct – Amro Zayed 
26 Oct – Mark Bayfield 
02 Nov – Yi Sheng 
09 Nov – Ron Pearlman 
16 Nov – Logan Donaldson 
23 Nov – Vivian Saridakis 
30 Nov – Joel Shore

**Assignment due dates** – assignments are due at the start of class (these due dates may change should “things go awry”)

Assignment 1 – library session 1 – due **22 Sep (Tuesday!)**; due by noon in 211 LUMBERS. 
Assignment 2 – library session 2 – due 05 Oct 
Assignment 3 – library session 3 – due 19 Oct 
Assignment 4 – library session 4 – due 09 Nov 
Assignment 5 – library session 5 – due 16 Nov 
Assignment 6 – group seminar – seminar to be presented either 23 Nov, 30 Nov or 07 Dec 
Assignment 7 – Literature review paper – **latest possible** submission – noon 22 December at 211 Lumbers

**Assignments**  
(Library assignments will be posted here the date of the library session)

Assignment 1 – [here](#)  
- worksheet  
- worksheet example  
Assignment 2 – [here](#)  
- species you are assigned - [here](#)
Assignment 3 - here
- worksheet to complete - here
- possible topics for the assignment (your choice*) - here

Assignment 4 – here
- worksheet to fill out - here
- assigned bioinformatics package number - here
  go to link to obtain assignment materials associated with package number

Assignment 5 – here
- Information Table worksheet – here (one for each article)

Assignment 6 - here
- list of articles (DOI #’s)
- schedule of group presentations
  Monday 23 November 1, 4, 5, 16, 17
  Monday 30 November 3, 6, 7, 10, 11
  Monday 07 December 2, 8, 9, 12, 13, 14, 15

**Literature review of faculty member’s research (Assignment 7) **
**This assignment can be started once you’ve signed up for a professor to write a review paper about**

Instructions and guidelines - here
21 Sep – Imogen Coe
28 Sep – Chris Lortie
05 Oct – Norman Yan
19 Oct – Amro Zayed
26 Oct – Mark Bayfield
02 Nov – Yi Sheng
09 Nov – Ron Pearlman (updated 09 Nov)
16 Nov – Logan Donaldson (includes additional info in ‘attachments’ tab)
23 Nov – Vivian Saridakis
30 Nov – Joel Shore