Life Sciences 4Q03
Course Outline
Term 2
January 2017

Instructor:
John A. Hassell: hassell@mcmaster.ca
Extension: 27217
Office: HSC 4H41
Office Hours: by appointment

Class Meeting Times:
The class meets on Monday (Tutorial) from 10:30 am - 11:20 am in room 238 (Burke Science Building) and from 2:30 pm to 3:20 pm on Tuesday and Thursday (Lecture) in room B102 (Kenneth Taylor Hall). Any lectures or student presentations will take place at the time and location cited below (Draft Schedule).

The instructor will communicate with the class using Mosaic and Avenue to Learn. In consequence students should check their email and Avenue to Learn daily to ensure that they do not miss any events scheduled at dates/times and locations other than those noted above in the Draft Schedule.

Course Objective:
One objective of the course is to enhance the ability of students to understand scientific findings and methods reported in primary journal articles, and to communicate the content of the article in oral presentations. Another key objective is to teach students how to write a research proposal.

Course Information and Requirements:
Each student will be assigned an article, which will be the basis for the presentations and research proposal. Normally, articles featured in the News and Views section of high-impact journals such as Science, Nature, Cancer Discovery or Cell will be assigned to the students.

The initial student presentation will be of an introductory nature and will recapitulate the Abstract of the primary article(s). No data (i.e. figures or tables) are to be presented in the first presentation. The background provided in the Abstract and Introduction and any reviews or original articles cited therein should serve as the foundation for the first presentation, which should not exceed 10 minutes in duration with an additional 5 minutes for questions and comments from the audience. Students in the audience are expected to ask questions of the presenter.

The second presentation will build on the first presentation and should include the original data - figures and tables of the article or simplified versions thereof. The second
presentation should also outline the specific aims of the research proposal. The second presentation should not exceed 20 minutes with 5 minutes for questions and comments from the audience.

Generally a single Powerpoint “slide” will take at least 1 minute or more to present dependent on the complexity of its content. Due to time constraints on classroom bookings, each student presentation will be strictly limited to the periods cited above.

The written research proposal should focus on the assigned article and must build on its findings. The research proposal should comprise a scientific abstract, an introduction to the field, rationale for the proposed study, a hypothesis, 2-3 specific aims and references. A brief description of the methods to be used for the proposed study should be included in the specific aims section.

**Draft Schedule:**

January 5 - 12: Outline of course objectives, organization and breakdown of student evaluation, and assignment of articles to students.

January 26: Students will upload their presentation as a PDF on Avenue to Learn by 11:59 pm. The mark for late upload of the presentation will be reduced by 2.0% for each hour following the due time. Presentations may not be altered after submitting a PDF of the presentation.

Jan 30, 31 and Feb 2, 6, 7 and 9: First presentation occurs on the aforementioned dates.

Feb 13: The instructor will describe the various components of a research proposal.

Reading Week (Feb 20 – 24): No classes.

March 2: Students upload the second presentation. The mark for late upload of the presentation will be reduced by 2.0% for each hour following the due time. Presentations may not be altered after submitting a PDF of the presentation.

March 6, 7, 9, 13, 14, 16, 20, 22 and 23: Second presentation occurs on the aforementioned dates.

April 17: Proposal due by 11:59 pm. The final mark for late proposals will be reduced by 2% for each hour following the due date/time.

**Evaluation:**

**First presentation** – 15% of final mark  
Outline – 3%  
Presentation – 10%  
Participation – 2%
Second presentation – 35% of final mark
  Abstract – 10%
  Presentation – 20%
  Participation – 5%

Grant proposal – 50% of final mark

Academic Integrity
You are expected to exhibit honesty and use ethical behavior in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behavior can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy.
<http://www.mcmaster.ca/academicintegrity>

This section is dedicated to students:
http://www.mcmaster.ca/academicintegrity/students/index.html

The following illustrates only three forms of academic dishonesty:

Plagiarism is the submission of work that is not one’s own or for which other credit has been obtained.

Improper collaboration in group work.

Copying or using unauthorized aids in tests and examinations.

Requests for Relief for Missed Academic Term Work
In the event of an absence for medical or other reasons, students should review and follow the Academic Regulations in the Undergraduate Calendar “Requests for Relief of Missed Academic Term Work”. Please note these regulations have changed beginning Spring/Summer 2015.

If you have any questions about the MSAF, then please contact your Associate Dean’s office.

"The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either
type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes."