Biochemistry 4C03
Course Outline
Term 2
January 2016

Coordinator/Instructor:
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Office Hours: by appointment only

Teaching Assistants:
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Time:
Formal lectures during the course of the term will occur on Monday and Wednesday from 8:30 am to 9:20 am, and on Friday between 10:30 am and 11:20 am in ABB 162. Any lectures, tutorials or presentations by the course coordinator/instructor, teaching assistants, or students will take place at the time and location noted above unless otherwise agreed to by the course coordinator/teaching assistants and students. Please note that the location of individual group meetings with the teaching assistants and student presentations will be announced about a week in advance of their occurrence. LearnLink will be the primary means for the instructor to communicate course information to students. In consequence students should frequently check LearnLink to ensure that they do not miss any events scheduled at dates/times and locations other than those noted herein.

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 their content in oral presentations and in written abstracts and reports. Another key objective is to teach students how to write a research proposal by building on current knowledge in the scientific literature.

Course Information and Requirements:
Students will be assigned a teaching assistant, who will provide a research topic for each student. The teaching assistant will subsequently meet with the students to ensure that the student selected appropriate research articles (see below). The scientific literature associated with the research topic will serve as the foundation for two oral student presentations based on one or more primary journal articles (reviews do not constitute primary research articles but should be consulted to familiarize the student with the area of the topic). Students should identify a high-profile, full-length publication(s) for example, one featured in the News and Views section of a
recent high-impact journal such as Science, Nature, or Cell. Students should seek the help of their assigned teaching assistant and must obtain approval from the teaching assistant for their choice of publication(s) well in advance of their first presentation (please see schedule below).

The initial student presentation will be of an introductory nature, structured along the lines of a scientific abstract, and will set the stage for the second presentation, which will require the student to recount the original findings (results and relevant methods) of the article. Students should rely on the content of the article’s Abstract, Introduction and Results sections for their presentations. The background provided in the Introduction and any reviews or original articles cited therein should serve as the foundation for the first presentation. The original figures and tables from the chosen article(s) may be used directly as the content for the second presentation.

The first presentation should not exceed 10 minutes in duration with 5 minutes for questions and comments from the audience. Audience participation is required. The second presentation should not exceed 20 minutes with 10 minutes for questions and comments from the audience. Generally a single Powerpoint “slide” will take at least 1 minute to present. Due to time constraints on room bookings, each student presentation will be strictly limited to the periods cited above.

The written grant proposal should be centered on the assigned research topic and must build on the findings (results) of the selected article. The grant 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. Lectures will be scheduled and presented by the course coordinator/instructor to introduce students to the various components of a scientific proposal.

**Schedule Outline:**

January 6: First class meeting; outline of course objectives, organization and breakdown of student evaluation. Students will be assigned a teaching assistant; this information will be posted on LearnLink.

January 11: Research topics assigned to students by teaching assistants.

January 18: Students identify appropriate primary research article(s) and seek approval of their choice by their teaching assistant. Students should prepare an outline/draft of their first presentation.

January 22: Students provided with feedback from teaching assistants on their initial outline and draft presentation. Each teaching assistant will post the approved journal articles during this period on LearnLink to afford all students in each group to read the articles in advance of their presentation.

February 1: Final presentation outlines uploaded to LearnLink.
February 3 - 8: Individual student presentations (first presentation) take place between these dates. The teaching assistants will identify rooms for the presentations and will post this information on LearnLink.

February 12: Teaching assistants will provide feedback to students on their initial presentation.

February 15 - 19: Midterm Recess - No classes or tutorials can take place during this period.

February 22: Teaching assistants will provide feedback and advice on the abstract and draft of the second presentation.

March 4: Final abstracts and second presentations uploaded to LearnLink.

March 7 - 11: Individual student presentations (second presentation) take place. Rooms will be assigned for the presentations and uploaded to LearnLink.

March 25: Good Friday – No class

April 8: Last day of classes

April 30: Final grant proposal is due by 5 pm. Grant proposals must be delivered to the appropriate teaching assistant. The final mark for late proposals will be reduced by 2.5% for each hour following the due date/time. The reduction in the mark for late proposals will be strictly enforced unless a valid excuse is provided in writing and the excuse verified.

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."