2016 CHEM BIO 4Q03 – Peer Tutoring in Chemical Biology
Course Outline

Instructors

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Classes and Meetings

CB 2Q03 Classes: TBD

Instructional team meeting: TBD (1 hour / week)

Other meetings: as necessary

Course Description

This course gives students theoretical and practical experience with teaching methods in chemical biology and focuses upon effective presentation, interpersonal communication and scientific writing skills.

Prerequisites

Chem Bio 2Q03; and the permission of the instructor.

Classes

There are 1 and 2 hour classes each week concurrently with the CB 2Q03 class, a weekly 1 hour meeting of the instructional team (peer tutors (PTs), teaching assistants (TAs) and instructors; details to be announced), and a weekly meeting with each of your groups while the projects are running. PTs will also be required to attend poster sessions.

Goals of CB 4Q03 – Peer Tutoring in Chemical Biology

The goal of the peer tutoring course is twofold: to continue developing your own inquiry skills, and to help the CB 2Q03 students. Peer tutoring courses are based on the philosophy that you learn best by (i) doing and (ii) teaching. Guiding and evaluating students in an inquiry-based course will help you immensely with your own inquiry skills, which are highly transferable to essentially any work environment you may encounter in your future career, either in industry or academia.

PTs have a number of roles in the course. You will provide instruction during your in-class presentations. During the projects and group work, you will provide guidance to your groups, coaching them to produce the best work possible. That will include maintaining an online presence on A2L. Finally, in the evaluation phase, you will evaluate your groups’ written
reports, and oral and poster presentations. That means both assigning marks, and providing feedback so that students know how to improve their work.

Guidance for groups and individuals

You will meet regularly with the groups while the projects are in progress. You will act as sounding board for them on how to present material, how to develop and refine an inquiry question, how to search databases—whatever they need help with. You are not generally expected to be a source of technical information (except very straightforward questions), but rather you will be helping steer students toward appropriate sources and resources.

If necessary, and to the extent that you are comfortable, your role may extend to helping maintain your groups' smooth functioning by mediating conflicts that may arise.

Two additional points:

(i) Interactions with groups: PTs are not responsible for their groups' performance. That is, PTs' marks are not dependent on their groups' performance, only on how the PT interacts with their groups. PTs are there to give guidance, as needed, and to observe and evaluate. They should not call meetings or run the meetings. The students should initiate meetings, and run them. If a group is performing well, then there will be no need to intervene during meetings and the PT should be like a lifeguard on standby. If there is a need to intervene, it should be a minimal intervention to point people in the right direction. If a group is not doing the required work or putting the work off to the last minute, the PT may wish to mention that they are falling behind, but they can't force the group to do the work on a schedule the PT prefers. If a group member has concerns about how the group is working (people not doing their share, someone dominating the discussion, unfair division of labour, etc.), the PT may offer help to mediate the issue, and should seek advice from the instructors, but it is not up to them to solve the problems.

(ii) Content of projects and technical questions: For questions about what to present, how to present it, what to include, or not include in the projects/reports/presentations, the sources of guidance are (1) the project instructions, and (2) the instructors. Do not ask the students for work that does not appear in the project instructions. In case of doubt, ask an instructor. Peer tutors may answer technical questions when they are sure of the answer, but their primary role is not to be an information source. Peer tutors are certainly welcome to direct students toward appropriate sources of information if they do not understand something, or if the answer is too complex for a simple one-sentence response.

PT presentations

Each PT will deliver two classroom presentations (~40 minutes each), with an instructor’s help. This may include, for example, presentations on how to write, how to use PyMOL, or database searching. Typically, you will a run-through of the presentation with one instructor beforehand, then the actual classroom presentation with the other instructor and PTs present.

Resources

The following resources may provide helpful advice on peer tutoring:


**Marking and Evaluating CB 2Q03 Students**

You will be involved in evaluating the oral presentations, posters, and written reports. The instructors will provide written marking guidelines, and offer informal advice in every case. For the projects the "content" component is an evaluation of the technical correctness of the information and how well the group presents it. The difficulty of the material should also be taken into account. Students should not be penalized for tackling difficult material – a report that contains very technically challenging material with some mistakes should receive a higher grade than a technically easy report with no mistakes. In other words, students should get credit for tackling more challenging material, even if they make mistakes, and less credit for covering simple material, even if they get it completely correct. The "style" component should be especially concerned with the clarity of the logic and explanations. In addition, grammatical correctness, and spelling are part of the style mark.

When marking written reports, it is important, first of all, that corrections are factually correct. If you are not sure, check before writing. If you are still not sure, check with an instructor. Second, grammatical corrections should be made only when the correction is clearly superior to the original version. Corrections that are mostly a question of style should not be made. If a document is very well written, it is not necessary to make comments/corrections just for the sake of writing something. If a document is poorly written, correct the big mistakes first. If it is very poorly written, beware of overwhelming students with too many corrections, and focus on the most important corrections.

Your written feedback will be combined with the instructors' and returned to the students. All marks are ultimately decided by the instructor, which means that you will not have to deal with complaints about marking.

**Availability**

While the projects are running, you are expected to check on your groups' postings at least once per day, seven days a week, and to answer A2L e-mails within 24 hours.
Your Evaluation in CB 4Q03

<table>
<thead>
<tr>
<th>Academic Component</th>
<th>% of course grade</th>
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<tbody>
<tr>
<td>Weekly progress meetings &amp; participation</td>
<td>20%</td>
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<tr>
<td>Weekly meetings with course instructors**, TAs and other peer tutors</td>
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<tr>
<td>This will be evaluated based on your participation in weekly meetings with the instructional team, including providing your peers with presentation feedback, providing feedback to the instructors on each group's progress/problems.</td>
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<tr>
<td>Classroom presentations</td>
<td>30%</td>
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<td>15% per presentation, evaluated by course instructors, TAs and other peer tutors.</td>
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<tr>
<td>Classroom presentations will be evaluated on the technical quality, clarity, degree of preparation, quality of answers, interactions with the class, visual aids (e.g., PowerPoint presentation).</td>
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<tr>
<td>A mark (15% each) &amp; feedback will be provided within one week of each oral presentation (at least one of which will be before the drop date).</td>
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<tr>
<td>Interaction with students</td>
<td>20%</td>
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<tr>
<td>Interaction with students will be evaluated based on:</td>
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<tr>
<td>(i) the instructors' observations</td>
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<td>(ii) online interactions with students on discussion boards</td>
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<td>(iii) students' formal written evaluations after each project</td>
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<tr>
<td>A mark (10%) &amp; feedback will be provided after Project 1 (before the drop date) and after Project 2 (10%).</td>
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<tr>
<td>Project evaluations</td>
<td>30%</td>
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<td>Quality of CB 2Q03 student evaluations will be assessed based on the relevance, clarity, correctness, and completeness of your feedback on students' oral and written work.</td>
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<tr>
<td>A mark (10%) &amp; feedback will be provided after Project 1 (before the drop date) and after Project 2 (20%).</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
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</table>

** The CB 2Q03 course instructors will also be the CB 4Q03 course instructors. They will be jointly responsible for the CB 4Q03 course evaluation.
The small print

A2L:

We will use AVENUE2LEARN for posting course information, submitting reports, group discussions, etc. You can log in through a web browser at avenue.mcmaster.ca.

Students should be aware that when they access the electronic components of this course private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor.

Academic Integrity

You are expected to exhibit honesty and use ethical behaviour 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 behaviour 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, located at http://www.mcmaster.ca/academicintegrity

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.

We will be using a web-based service (turnitin.com) to protect against plagiarism. University policy dictates that the use of turnitin.com cannot be made mandatory. If you object to your work being checked with turnitin.com, please speak to an instructor before projects begin. All work will be screened for plagiarism even if turnitin.com is not used.

Copyright Policy:

In this course you will have access to material that is subject to copyright laws. This includes (but is not limited to) the textbook, solutions manual and all resources developed by the instructor such as quizzes, assignments, tests, class notes and class slides. You are not allowed under any circumstances to share or redistribute this material in any printed or electronic form without explicit written consent of the copyright holder. This includes posting any course material on Internet bulletin boards, course repositories, social networks, etc.
Discrimination Policy:

McMaster University is concerned with ensuring an environment that is free of all adverse discrimination. If there is a problem that cannot be resolved by discussion among the persons concerned, individuals are reminded that they should contact their Department Chair, or Human Rights & Equity Services, as soon as possible. Issues involving teaching assistants should also be brought to the attention of the instructor.

Changes:

If, due to circumstances beyond our control, changes to the course are required:

"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."