Topics in Biological Chemistry CHMD79H3 LECTURE OUTLINE

This document contains important course information and should be kept in a safe place where you can refer to it throughout the semester

Welcome to CHMD79H: Topics in Biological Chemistry

Prerequisites: Permission of the instructor. Normally recommended for individuals who have completed fifteen full credits, including at least two C-level Chemistry courses, and who are pursuing one of the Chemistry Programs.

Lectures: Thursdays 2-4 pm PO101 (Portables) Reading Week-no classes Feb 17th to Feb 23rd

Lecturer: Dr. Kagan Kerman (EV548)

Emails: kagan.kerman@utoronto.ca

Office Hours: Dr. Kerman: Mon 3:00-5:00 pm (EV502)

<u>Course Website</u>: CHMD79 maintains a Blackboard web space which archives a variety of course-related information including: class announcements, lecture slides and notes if provided, contact information and links to some useful outside resources. In addition, class emails will regularly be sent via Blackboard. *In order for you to receive these emails, you must have a valid "utoronto.ca" email account registered with ROSI*.

To login, go to: https://portal.utoronto.ca/webapps/portal/frameset.jsp. Click on "log-in to the portal" at the top left. Login using your UTORid username and password (same as what's used for your UTORmail). Under the "My Courses" box (top right), click on the CHMD79 link.

E-mail policy:

- Use University account
- If Yahoo or Hotmail used follow instructions below to prevent email ending up in junk mail:
 - put CHMD79 in the subject line followed by the reason for the email
 - use a greeting of some kind NOT "Hey"
 - sign your first and last name
 - please include your student number after your name
- Student emails will be replied to within 48 hours (M-F) provided that the above protocol is used.

Method of Evaluation: The grading scheme for the course is shown in the table below:

| Mid-term Test | 25% | Date will be announced at a later time. |
|-------------------------|-----|---|
| Final Exam | 35% | Entire course work, including assignment/quiz questions and oral presentations |
| Weekly in-class quizzes | 10% | 10-minute closed-book quizzes reviewing material from the previous week's lecture. |
| Assignment-1 | 10% | Each student will prepare 10 questions That may be asked in the mid-term exam. These questions can be in a variety of formats: True/False, multiple choice, short answer, matching, etc. Submission deadline: Feb 16 th at 5 pm |
| Assignment-2 | 10% | Each student will prepare 10 questions that may be asked in the final exam. These questions can be in a variety of formats: True/False, multiple choice, short answer, matching, etc. At least 5 questions should be about their Nobel prize topic. Submission deadline: March 30th at 5 pm |
| Oral Presentation (10%) | 10% | Students will prepare a 15 minute oral presentation on their approved Nobel-prize winning topic from nobelprize.org More details to be given in lectures. Students will present as a team of 2. They will email their choice of Nobel prize topic by Feb 1st at 5 pm |

Recommended texts: There is no individual textbook assigned for the course and students should rely on course notes, literature articles, and lectures for the material covered. The following is a list of suggested texts you may use for extra reading on covered topics:

¹⁾ Golan, Tashjian, Armstrong, and Armstrong, **Principles of Pharmacology: The pathophysiologic basis of drug therapy**, Lippincott, Williams & Wilkins Publisher, (There is now a 3rd edition of the textbook, but the 1st edition should be OK!, 2007.

2) Block, J.; Delgado, J. N., **Wilson and Gisvold's Textbook of Organic Medicinal and Pharmaceutical Chemistry**, 11th Edition. (9780781734813, Lippincot, Williams and Wilkins, 2004) 3) Thomas, G. **Medicinal Chemistry: An Introduction**, 2nd Edition. (978-0-470-02597-0, Wiley, 2008).

The following is a tentative list of topics that will be covered throughout the semester. The topics may change so students should refer to lecture notes provided for content of the course.

Topics:

Jan 11: Introduction to Medicinal Chemistry

Jan 18: Drug-receptor interactions

Jan 25: Pharmacodynamics

Feb 1: Pharmacokinetics

Feb 8: Drug metabolism

Feb 15: Drug toxicity

Feb 22: Reading Week ☺

March 1: Rational drug design

March 8: Metals in Brain

March 15: Oral presentations-1 (5 pairs)

March 22: Oral presentations-2 (5 pairs)

March 29: Remaining presentations & Review game

Course Policies and General Information:

Course Announcements: Announcements, updates to readings, assignment topics, requirements, and evaluation, etc. will be posted to the course site. Students are responsible for checking the course website regularly. Please, arrange your UTORONTO emails to accept the course announcements.

Office Hours: Students are welcome to ask questions or resolve course-related problems by contacting the Course Instructor either by dropping in during scheduled office hours or by making an appointment. Students are responsible for work missed as a result of absence; the Course Instructors will not re-teach material covered in the lectures and lab sessions.

e-mail Communication: The Course Instructors may be contacted via the course email addresses to get clarification on course-related issues, or to ask brief questions. The Course Instructor will endeavour to provide responses to emails within 48 h. Urgent issues must be communicated in person or by telephone (with a follow up email message).

Missed Mid-term Test: The exact dates of the mid-term tests are provided in the Course Topics schedule. Students who miss the term test will be assigned a mark of zero for the test, unless they can document a compelling reason for missing it. Students in that position must submit a written request to the Course Instructor with appropriate documentation. If a request is accepted for the mid-term test, the weighting of the mid-term will be included to the final exam. There will be no make-up mid-term tests.

Final Examination: The final examination will take place during the UTSC examination period in December following the end of the course. The exact date will be provided when the examination is scheduled.

AccessAbility: Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible. The UTSC AccessAbility Services staff (located in S302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or ability@utsc.utoronto.ca

The sooner you let us know your needs the quicker, we can assist you in achieving your learning goals in this course.

Cell Phones: During lectures and labs please put your cell phones in silent mode to avoid disruption of the class. If circumstances warrant use of your cell phone and you must receive an emergency call, please inform the Course Instructor at the beginning of the session in advance and then excuse yourself from the session to respond to the call outside the lecture hall or laboratory.

Academic Calendar: Further information about academic regulations and course withdrawal deadlines can be found in the UTSC Calendar. You are encouraged to read this material.

Centre for Teaching and Learning: If you need assistance with effective writing skills, study skills, exam preparation, note taking, or time management, free workshops and advice are available from the Centre for Teaching and Learning, which can be reached at:

http://www.utsc.utoronto.ca/~ctl/Student_Support/index.html

Math & Statistics Learning Centre is now offering students help with any sort of questions they may have related to mathematics and statistics. Our course components involve advanced math skills. If the students are struggling, they are encouraged to drop in at AC312 and use the available general help hours. The schedule can be viewed at the link:

http://ctl.utsc.utoronto.ca/mslc/

Computer Use: Ethical use of University computers is expected at the University of Toronto Scarborough. Guidelines are set out in the UTSC Calendar. It is expected that the equipment and/or

resources accessed in the UTSC Library and the computer labs are to be used for academic research, assignments, and course activities only.

Academic Integrity: Honesty and fairness are considered fundamental to the University's mission, and, as a result, all those who violate those principles are dealt with as if they were damaging the integrity of the University itself. When students are suspected of cheating or a similar academic offence, they are typically surprised at how formally and seriously the matter is dealt with - and how severe the consequences can be if it is determined that cheating did occur. The University of Toronto treats cases of cheating and plagiarism very seriously.

Examples of offences for which you will be penalized include (but are not limited to):

- Using any unauthorized aids on an exam or test (e.g., "cheat sheets")
- Representing someone else's work or words as your own plagiarism (see web document "How not to plagiarize" available online at http://www.utoronto.ca/writing/plagsep.html
- Falsifying documents or grades
- Purchasing an essay
- Submitting someone else's work as your own
- Submitting the same essay or report in more than one course (without permission)
- Looking at someone else's answers during an exam or test
- Impersonating another person at an exam or test or having someone else impersonate you
- Making up sources or facts for an essay or report.

As a student it is your responsibility to ensure the integrity of your work and to understand what constitutes an academic offence. If you have any concerns that you may be crossing the line, please, read from the website:

http://www.utoronto.ca/academicintegrity/resourcesforstudents.html

and always consult your instructor. Your instructor can explain, for example, the nuances of plagiarism and how to use secondary sources appropriately; he or she will also tell you what kinds of aids - calculators, dictionaries, etc. - are permitted in a test or exam. Ignorance of the rules does not excuse cheating or plagiarism.

This information is taken from the brochure, "Academic Integrity" and website, part of a series of UT publications to help students understand the University's rules and decision-making structures. For copies, visit the Office of the Registrar at UTSC. All of the policies and procedures surrounding academic offences are dealt with in one policy: "The Code of Behaviour on Academic Matters". The full text is located in the back of the UTSC Calendar.