

**Bio-Organic Chemistry
CHMC47
Course Outline**

Welcome to the CHMC47H3

LEC01: Fri 9:00-11:00, SW-143

Instructor: Dr. Lana Mikhaylichenko

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(416) 287-7216, SW-155B

Office hours: Wed. 1:00 – 2:00, Thu 9:00 – 11:00 am, Fri. 1:00 – 3:00 pm

Required Text Books:

P.Y. Bruce, *Organic Chemistry*, 5th ed., Pearson.

P.Y. Bruce, *Study Guide and Solutions to Organic Chemistry*, 5th ed., Pearson
(You can also use 4th edition book and Study Guide)

Recommended Websites:

Virtual Textbook of Organic Chemistry:

<http://www.cem.msu.edu/~reusch/VirtualText/intro1.htm>

Interactive Tutorials:

<http://www.cem.msu.edu/~reusch/VirtualText/Questions/problems.htm>

Method of Evaluation:

Test #1: 15% (October 3^d)

Midterm Test: 35%

Final Exam: 50% (December exam period)

Discussion Section:

The discussion section for this class will be Tuesday evening from 5 -6 pm in SW162. The location may be change later. This is your time to ask questions that you were not able to ask during the lecture.

Study Hints:

Organic chemistry is a cumulative subject. As such, an understanding of new material depends on mastery of topics discussed in previous chapters, including that which was taught in Organic Chemistry I and II. **Keep up with the material –do not let yourself get behind!!!**

Lecture Schedule: This is a rough guide only and may change throughout the term.

Lec #	Week	Subject	Reading (Bruice 5 th ed.)	Reading (Bruice 4 th ed.)
1	Sept-12	Carbohydrates	Ch 21	Ch 22
2	Sept-19	Carbohydrates	Ch 21	Ch 22
3	Sept-26	Amino Acids, Peptides, and Proteins	Ch 22	Ch 23
4	Oct-3	Amino Acids, Peptides, and Proteins Test #1 (60 min)	Ch 22	Ch 23
5	Oct-10	Amino Acids, Peptides, and Proteins Lipids	Ch 22 Ch 26	Ch 23 Ch 26
6	Oct-17	Lipids	Ch 26	Ch 26
TERM TEST	120 MINS	Around this time. Date to be announced. Chapters TBA		
7	Oct-24	Heterocyclic Compounds	Ch 20	Ch 21
8	Oct-31	Nucleic Acids	Ch 27	Ch 27
9	Nov-7	Catalysis The Organic Mechanisms of the Coenzymes	Ch 23 Ch 24	Ch 24 Ch 25
10	Nov-14	The Organic Mechanisms of the Coenzymes	Ch 24	Ch 25
11	Nov-21	The Chemistry of Metabolism	Ch 25	Ch 25
12	Nov-28	The Organic Chemistry of Drugs: Discovery and Design	Ch 30	Ch 30
Fall Term Exams	Dec 5 -19	Three hour term test.		

Assigned problems will be posted with the every lecture material.

Class notes:

Sets of *incomplete notes*, including figures discussed in class, will be available on the class Intranet page prior to the corresponding lecture. You are responsible for printing these notes and bringing them with you to class. **You will be responsible for all material covered in lecture, even if it is not included in the online notes;** you must attend lecture in order to get additional information.

Steps Toward Success in Bio-Organic Chemistry:

- 1. Look through the chapter before lecture.** It is not necessary to read the whole chapter before class, but look at headings and schemes, specifically trying to find

similarities to topics that you already know. Much of organic chemistry follows the same trends, and identifying common themes will make studying and learning the material much easier.

- 2. Go to class.** Go to class every time and pay attention during class.
- 3. Do practice problems!** This is the most important and most productive way to study and ESSENTIAL to your success in the class. Work as many problems as you can, but realize that reading the solution manual is not the same as solving a problem on your own. If you have a difficult time with the problem, it will be much more beneficial to you if you reread the appropriate section of the textbook (and online text if you need additional explanations) than if you simply read the answer.
- 4. Ask questions!** Attend office hours and discussion sections.