



Organic Chemistry - CHMB42
Summer 2012
Course Syllabus



This document contains important information regarding all aspects of the course and should be referred to throughout the semester.

Lectures: Mondays 9-11, Wed 12:30-2 in SW309

Instructors: Wanda Restivo until June 18
 but lab coordinator for whole term.
 SW-639 and SW 162, 416-287-7222
restivo@utsc.utoronto.ca
 office hours Tuesday 11-1 (probably in SW 162) Wed 3-4:30 in SW 639

Dr. Effie Sauer from June 20 to end of term
 SW640, 416-287-7209
esauer@utsc.utoronto.ca
 office hours Monday and Wednesday 3:30 - 5 pm

CHMB42 provides an introduction to compound determination using various spectroscopic methods. You will learn about aromatic compounds and their reactions, carbonyl chemistry and biologically important compounds such as carbohydrates, and heterocycles.

Course evaluation:

<u>2 Midterm tests-</u> (~1 hour each in class) <u>Term test 1 9-10 am June 18</u> Chapters: 13 to 15 inclusive <u>Term Test 2 9-10 am July 23</u> Chapters 16-19 inclusive	12% each The exams will be cumulative. No makeup exams.
<u>Tutorials- online homework</u>	3+ 3%
<u>Lab</u> 5 experiments and final lab test- see manual *There will be no makeup for the lab test.	25% must pass to pass course
<u>Final exam</u> during final exam schedule (cumulative)	45% must pass one midterm or final to pass course
Extra credit- more on this later	Up to 1.5%- must having passing mark first

If you are sick you must provide the University of Toronto medical certificate within one week of your missing the lab/test/tutorial. It must be dated the day of the illness and must state that you were unable to write/do the lab/test/tutorial. Every effort will be made to allow you to make up the lab/test/tutorial. **All notes should be given to Wanda. Note that the labs are full and this will be problematic in trying to do a makeup lab.**

Missing a lab because you have a test that day is not a valid excuse and you will receive a mark of 0 for that lab.

To achieve a passing grade in this course you must pass both the lab and two of the exams. The extra credit will not be counted towards achieving a pass in the course.



Required Materials:

Text: Organic Chemistry (6th Edition) by Paula Yurkanis Bruice, Prentice Hall publishing. This is the same text you would have used in CHMB41. It is an excellent text and will be used for some third year courses as well, such as CHMC47 and will be a useful resource for CHMC41/42. The publisher's web site at: <http://pearsoncanada.ca/> includes media materials, which supplement the text.

Online Homework: <http://aceorganic.com/index.html>

The online homework system is ACE Organic which is supported by Pearson Education and has been provided to us for free from the publisher. Please access the site using the website provided above, and register yourself using the access code:

PSSABO-WHIRR-PROSY-CHINA-ANETO-ACHES

Please use your official name and student number as your ID (do not use your email address or UTORid), otherwise I will not be able to keep track of your grades.

On instructions on registration and how to use the site, please access:

<http://www.aceorganic.com/student/html>

Our course ID is 4276 for CHMB42H Summer 2012

The problem sets will be released every **Friday evening** after each chapter is finished and they are due the following **Friday at 11 pm. First will be due May25th.**

The assignments will be graded on a decreasing scale with the number of attempts and equally weighted. They will cover the material discussed in class.

Late assignments will not be graded. Lowest grade will be dropped.

The online homework counts for 3% of your final grade and can make a huge difference in helping you understand the course material and ultimately improving your grade. I will post practice problem sets online as well as the graded problem sets.

Clickers: You should have one from last term or from first year. They will be used in class so that you may participate in the questions that will be presented periodically throughout the lectures. They will not be used for credit.

Course Organization:

Lectures- Total of 3.5 hours per week.

The lecture schedule is a rough guide. Incomplete notes will be provided for you on **Blackboard (Bb)** You should print them off and bring them with you to class. You should also bring some blank paper. **You will be responsible for all material covered in lecture, even if it is not included in the online notes.** Assigned problems are posted on Blackboard. It may seem like there are so many questions but many of them are quickly answered when going through the reading of the chapter. You will be successful in this course by doing the problems and coming for help when difficulty arises.

Online viewing:

For those students who wish to review the lecture after the fact, all CHMB42 lectures will be taped and posted online with a link posted on Blackboard. (Bb) Forward queries to webopt@utsc.utoronto.ca .

Lecture schedule : this is a rough guide

Week of:	Chapter
May 7	Ch 13- Mass Spectrometry
May 14	Ch 13 IR (not covering UV) and start NMR
May 21	14 NMR
May 28	15 Aromaticity- Benzene Reactions
June 4	16 Reactions of substituted benzenes
June 11	Ch 17 Carbonyl Compounds I
Dr. Sauer's section:	
June 25	Ch 18 Carbonyl Compounds II
July 2	Ch 18 & 19 Carbonyl compounds II & III
July 9	Ch 19 Carbonyl Compounds III
July 16	Ch 20 Oxidation-Reduction reactions
July 23	Amines and Heterocycles
July 30	Carbohydrates

If you are using the 5th Edition the order is the same but the chapter numbers are one number less, so chapter 13 in the 6th edition is Chapter 12 in the 5th.

This is a tentative schedule. Some parts of the lecture, like naming for example, I will leave for you to go over on your own time. I hope to be doing more problems in class. Some of these will be from your text but most will be from other sources.

Tutorials- 1 hour in length -alternating with lab schedule

Even numbered practicals begin May 14, **odd** begin May 28

Day	Time	Room	Alphabetically
Monday	12-1	IC 220	A-L
	12-1	IC 230	M-Z

The tutorials will be assigned based on your lab number so you cannot sign into one. **Last day for signing into a practical section will be May 10.** Any change after that date will have to be requested of Wanda Restivo if space allows.

You will have a quiz in EVERY tutorial. You must be in the tutorial for the entire duration to be able to write it and get the credit. The lowest mark of the 5 quizzes will be dropped. (total of 3%)

Labs- 4 hours in length - every other week

Lab Manual: purchased in the bookstore and is required for all lab practicals.

Please note that we do not print enough manuals for the students in the class in the first week since students are still "shopping" their courses. **Do not wait until the last minute to purchase your manual** as you may be out of luck. If this happens you will purchase the manual from the bookstore and they will be printed on request which may take up to 3 days. If you come to lab saying that you could not purchase a manual then you will not be accommodated and will receive no credit for that lab.

Lab Notebook: Please use the lab notebook from CHMB41. Continue the page numbers and complete the first page as a Table of contents. If you do not have one then you may purchase one at a dollar store but please ensure it is large enough and it is bound (so that you cannot pull pages out of it)

Practicals: there are 5 labs and a lab test which is cumulative. It may be both written and practical. There will be a quiz (10 minutes) at the beginning of **every** lab, **including the first one.** (The questions at the back of the experiments will not be graded but will be answered in the Lab Skills Seminars.

Safety videos and quiz—see Blackboard under Labs for instructions. **You must pass the quiz before being allowed to complete the lab.**

Odd # labs begin: May 14 (Even numbered labs will have a tutorial)

Even # labs begin: May 28 (Odd numbered labs will have a tutorial)

<u>Day</u>	<u>Time</u>	<u>Room</u>	<u>Practical number</u>
Monday	12-4	SW153	1,3 / 2,4
Monday	12-4	SW159	5 , 6

There will be lab lists posted outside the lab with seat numbers.

Videos on techniques: also linked from Blackboard

<http://reel.utsc.utoronto.ca:16080/chemb41/>

<http://webapps.utsc.utoronto.ca/chemistryonline/solubility.html>

Communication:

All grading in this course will be on the UTSC **intranet**. (You will need a UTSC computer account to access it.) All of you should have one by now. You may access the intranet by going to:

<http://intranet.utsc.utoronto.ca>

All your individual marks will be displayed on the **intranet** once they have been completed. You will have 2 weeks from the time they go up to check for errors. A final date will be given, after that date- no corrections will be accepted.

All other communication will be through **Blackboard**. Discussion groups will only be found on Blackboard. You may access it at:

<https://portal.utoronto.ca/>

You should get used to checking this site frequently for any important announcements.

Emails

All emails should be from a utsc or utoronto address and use formal language. Other email providers may go directly to junk mail and not be read. Always include your full name and student number. If talking about a lab or tutorial please include the lab number and your TA in your email. Do not email chapter questions or mechanism questions. These are best done in person or better yet, posted on the discussion board so that other can benefit.(see last page)

Academic Policy:

Academic integrity is important to maintain our community which honours the values of honesty, trust, respect, fairness and responsibility and to protect you and the value of the degree towards which you are all working so diligently

<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>

It is an offence for students to:

- Use someone else's ideas or words in their own work without acknowledging that those ideas/words are not their own with a citation and quotation marks. i.e. to commit plagiarism
- Include false, misleading or concocted citations in their work.
- Obtain unauthorized assistance on any assignment
- Provide unauthorized assistance to another student. This includes showing another student completed work.
- To submit their own work for credit in more than one course without the permission of the instructor
- To falsify or alter any documentation required by the University.- eg: doctor's notes
- To use or possess an unauthorized aid in any test or exam.
-

There are other offences under the Code, but these are the most common. Please respect these rules. Offences will be dealt with according to the procedures outlined in the Code of Behaviour on Academic Matters.

Accessibility:

In this course students with diverse learning styles and needs are welcome. In particular, if you have a disability/health consideration, that may require accommodations, please feel free to approach me and/or the Access/Ability/ Services Office. I will work with you and Access/Ability /Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC Access/Ability/ 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 <<mailto:ability@utsc.utoronto.ca>>.

Our hints to your success!!

- Please stay current with the material. The course is highly cumulative. Ideas introduced early on will be used to develop other concepts later. Thus, letting things slide is unwise, as the material begins to accumulate relentlessly. As the semester progresses and other demands on your time increase, playing catch-up will be harder to do. Furthermore, it is possible, indeed likely, that many of the concepts in the course will become clear only after you have had a chance to ponder them for a while. This period of reflection is critical and hence the need for time. So try not to learn everything at once. Even a half-hour of regular study each day is likely to be more useful to you than any all-night, caffeine-powered cramathons.
- Write, write, write. The importance of this cannot be overemphasized. Simply listening to the lecture, reading your text, or watching cool graphics flash by the screen is not enough. It is all too easy to lull yourself into thinking that you understand the material. Expressing your ideas clearly in writing (which is what you will have to do in the exams anyway) requires a higher level of mastery. To reach that level you must practice writing. Don't just look at the answers in the text and think you will be able to do it the same way. Write them out and perhaps seeing them on paper will provide clues as to where you might be going wrong. This will also help prevent memorization as you know how to work through the problem logically. Trust us on this. Write, write, write.
- Make the most of the resources available to you.

1- Instructor's office hours

- 2- **A peer facilitator program, FSG-** Facilitated Study Group is being run through the Centre for Teaching and Learning. These weekly sessions are open to all students taking this course who want to improve their understanding of course material, improve their study techniques, and improve their grade. Attendance is voluntary. In these sessions you will compare notes, discuss important concepts, develop study strategies, and prepare for exams and assignments on course material. Course material is NOT re-lectured. The FSG's are lead by a trained facilitator who has previously taken the course. A survey will be taken during the first week of class to determine the best days and times for most students, and they will begin probably the 2nd or 3rd week of class. Any announcements will be announced in class, posted on Bb and also at <http://ctl.utsc.utoronto.ca/home/fsg/>
Zermeena Iqbal

3- **Lab Skill Seminars**

There will be lab skills seminars throughout the term. These are run by Science Engagement students or volunteers
Time TBD

- 4- **Online Discussion board on Blackboard-** This the best place to ask questions related to the course as the questions will get answered quickly by your peers and the answer will get out to the most people. We hope to have a science engagement student monitoring this forum. Fred Wong is monitoring

We look forward to meeting you all –Please introduce yourself to us if you see us in the hallway