



Organic Chemistry - CHMB42

Winter 2012 Course Syllabus

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

<u>Lectures:</u> Tuesday 5-6, Wednesday 8-9 a.m., Friday 2-3 in AC223 (the ARC)

Instructors: Wanda Restivo until Reading Week

but lab coordinator for whole term. SW-639and SW 162, 416-287-7222

restivo@utsc.utoronto.ca

office hours TBA: Mon 1-3, Wed 2-3, Thursday 10-11 in SW639

Dr. Lana Mikhaylichenko from mid Feb until April SW- 155B and SW 633, 416-287-7207 mikhay@utsc.utoronto.ca

CHMB42 provides an introduction to compound determination using various spectroscopic methods. As well you will learn about aromatic substitution, carbonyl chemistry and biologically important compounds such as carbohydrates, and heterocycles. You will have a four hour lab every other week alternating with a one hour tutorial.



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.

If you did not use it last term you may purchase it in the bookstore along with the study guide

The publisher's web site at: http://pearsoncanada.ca/ includes media materials, which supplement the text.

Chapters: 13-17 inclusive will be covered in the first half of this course.

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-DRILL-PUNKA-BEGAN-PETRI-POSES

<u>Please use your student number as your ID</u> (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 __4097____ for CHMB42H Winter 2012

. The problem sets will be released every <u>Friday evening</u> after each chapter is finished and they are due the following <u>Friday at 11 pm. First will be due</u> <u>January 27th.</u>

The assignments will be equally weighted and recorded as a percentage. They will cover the material discussed in class.

<u>Late assignments will not be graded.</u> In the final calculation the lowest mark 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

All of these problem sets will count equally to the 3% total.

<u>Clickers:</u> 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:

<u>Lectures</u>- Total of 3 hours per week.

The lecture schedule is a rough guide. Incomplete notes will be provided for you on **blackboard**. 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 will be posted with the lecture material. 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
Jan 9	Ch 13- Mass Spec
Jan 16	Ch 13 IR (not covering UV) and start NMR
Jan 23	14 NMR
Jan 30	15 Aromaticity- Benzene
Feb6	16 Reactions of substituted benzenes
Feb13	17 Carbonyl Compounds I

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.

This course requires diligent work. It is NOT a course where you will be successful in a last minute effort.

Tutorials- 1 hour in length -alternating with lab schedule

Even numbered practicals begin Jan 18, **odd** begin Jan 25

Day	Time	Room	Practical Number
Wednesday	<mark>12-1</mark>		
		HW 402	1/3, 2/4
		HW 408	<mark>5/7, 6/8</mark>
Thursday	1-2		
		HW 408	9/11,12/14
		PO 101	13/15, 16/18
Friday	11-12		
		HW 408	17/19, 18/20

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 Jan 13. Any change after that date will have to be requested of Wanda Restivo if space allows.

There will be 5 tutorials. You must attend at least 4 of them. I do not need to have a reason or note if you miss one. It will be your choice. However if you miss 2 tutorials (i.e. attend only 3) then you will have 1.25.% deducted from your final grade. You will have a further 1.25% deducted for every subsequent absence. Again no notes or excuses will be accepted. So use this "free" day wisely.

You will have 2 surprise quizzes in the tutorials. Whichever one is the higher mark will count towards 2% of your final grade.

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.

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 and the answers are on Blackboard. Try to do them before you look at the answers. They will ask you things that you may not have thought of when reading the experiment.)

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: Jan 18(Even numbered labs will have a tutorial)
Even # labs begin: Jan 25 (Odd numbered labs will have a tutorial)

Day	<u>Time</u>	Room	Practical number
Wednesday	9-1	SW153	1,3 / 2,4
Wednesday	<mark>9-1</mark>	SW159	<mark>5,6/7,8</mark>
Thursday	1-5	SW153	9, 11 / 10 ,12
Thursday	1-5	SW159	13, 15/ 14,16
Friday	<mark>9-1</mark>	SW153	17, 19 / 18, 20

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

Course evaluation:

1 Midterm test- (~2 hours) Chapters: 13 to 17 inclusive Exam schedule TBA	25%
Tutorials- online homework	<mark>2 + 3%</mark>
Lab 5 experiments and final lab test- see manual *There will be no makeup for the lab test.	25% must pass to pass course
Final exam during final exam schedule (cumulative)	45% must either midterm or final to pass course
Extra credit- more on this later	Up to 3%- 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 either the midterm or the final exam. If you fail both you will <u>NOT</u> receive a passing grade. The extra credit will not be counted towards achieving a pass in the course.

Communication:

<u>All grading</u> 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.

Lecture notes, announcements, pre-lab answers will be found on on **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.

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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 <u>ability@utsc.utoronto.ca</u> <mailto:ability@utsc.utoronto.ca>.



Where to get help for this course:

- 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/

3- Lab Skill Seminars

There will be lab skills seminars throughout the term. These are run by Science Engagement students. They are booked for Tuesday 6-7 in AC223 and Fridays 3-4:30 in SW221. Any changes will be posted on Blackboard

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. Our Science Engagement student Taleen Karneig will be monitoring this forum.

5- **Chem Aid Centre-** volunteers will be available in SW221 to help you with any questions in course material. These are students who have taken several chemistry courses and will be able to help you with any problems. Days and times of their availability will be posted on Blackboard once finalized

Extra problems sessions (called Discussion Sessions) –these are scheduled for a 1-2 hour session each week and your attendance is voluntary. We will be going through extra problems either assigned or not from the text and other sources. Due to scheduling problems it may not be a time that everyone can come, therefore find a friend who can and get their notes and ask them to go over the material. These sessions will not be videotaped. They will start the week of Jan 22. Time and room TBA

This course has a reputation for being tough which is unfounded. It **S** a course that requires a lot of **TIME and PRACTICE**. You will be unsuccessful if you do not keep up on the material every day.

This course is like building a house. If the foundation is not well built the rest will crumble. You may have to go over your material from CHMB41over and over. Use your text book to its fullest potential.

As soon as you are having difficulty with a problem.....ask for help. We are here to help you understand organic chemistry so don't feel shy. We do not judge you, we want to help.

There is no trick to this course but you must practice it every day.



I look forward to meeting you all -Say hi to me in the hallway!!

Wanda



