

CHMB41H3, ORGANIC CHEMISTRY I, 2006 FALL

Lectures Fall: M 8 a.m.; W 8 a.m.; F 8 a.m. . AC 223 Janet Potter (Office S633A),
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Textbook: *The same textbook is used in CHMB42H3, often in CHMC47H3, and sometimes in CHMC41H3 & C42H3, to make it cost effective.*

"Organic Chemistry" 5th ed., by Paula Yurkanis Bruice, Prentice - Hall Inc., 2006. The text, a study guide and solutions manual, and ACE access code, a chemistry tutorial and on-line testing access module, will be available, as a package. I am giving references also to the 4th edition of Bruice's text for those with who already have this text.

If you already have a textbook and only need the ACE access material, it will be on sale for around \$30, in September. If you previously purchased the ACE access code, it is good for 12 months from first activation.

The publishers web site at: <http://www.prenhall.com/bruice/> includes media materials, which supplement the text.

Course Co-ordinator, Lectures and Labs : Janet Potter. [Wanda Restivo may be responsible for the laboratories for the first few weeks of term; this will be announced] Any problems with missed tests, exams, labs, etc should be addressed to J.Potter. Medical notes and other documentation should be given to her also, within a week of the missed work.

Lecture Schedule: This is a ROUGH GUIDE only.

Week of:	Ch. 4 th Ed	Ch. 5 th Ed	Subject
Sept. 11	1	1	Introduction:Electronic structure, Bonding, Acids & Bases
Sept. 18	1,2	1,2	Nomenclature, Physical properties, Structure representation
Sept. 25	2,3	2,3	Alkene Nomenclature, Structure, reactivity.Thermodynamics & Kinetics
Oct. 2	3,4	3,4	Hydrocarbons, Reactions of Alkenes.
Oct. 10	4,5	4,5	Stereochemistry: Arrangement of Atoms in Space; Addition reactions
Oct.16	5,6	5,6	Stereochemistry: Arrangement of Atoms in Space
Oct. 23	6,7	6,7	Alkyne Reactions. Electron delocalization, Resonance.
TERM TEST	100 MINS		Around this time. Date to be announced. Chapter TBA
Oct. 30	8	7	Reactions of Dienes
Nov. 6	10	8	Substitution Reactions of Alkyl Halides
Nov. 13	10,11	8,9	Substitution Reactions of Alkyl Halides; Elimination Reactions of Alkyl Halides; Competition.
Nov. 20	11,12	9,10	Elimination Reactions of Alkyl Halides; Competition. Other Substitutions & Elimination Reactions; Organometallics
Nov. 27	9	11	Alkane Reactions - Radicals
Dec 9 - 21, 2006	Dec.	Exam Period	Three hour term test, Chapters 1 – 12, 4 th Ed. ; Ch1-11, 5 th Ed.. ANY TRIPS SHOULD NOT BE BOOKED TO LEAVE UNTIL AFTER THESE TIMES.

No calculators, models, pagers, cell phones or other aids will be allowed during any lecture test or exam, unless announced previously. Approved calculators (Texas Instruments, TI30;(TI32); TI34; Sharp EL-531; EL-509;(EL-530); Casio fx-65;fx-250; fx-260; (fx-280).) may be allowed during laboratory quizzes and tests. Models in (parenthesis) are no longer available, but may still be used.

Persons who miss a lab, test or exam are expected to contact the Coordinator immediately. Documentation, for approval, **must be given within one week** (e.g. Doctor's note - which should say that you were seen on the day in question, and that in the Doctor's opinion you were unable to write a test that day). If the documentation is insufficient, you may be required to obtain further, signed, paperwork. Those presenting a valid, documented reason for absence, in writing, within this time frame, will be allowed to be excused OR to write a make-up test, AT THE INSTRUCTOR'S DISCRETION. Any make-up test will be scheduled by the Instructor, and will normally be on the second Wednesday after the original test.

Marking Scheme:

Term Test	Online quizzes	Laboratory	Final Exam	Total
25%	5%	25%	45%	100%

The Laboratory mark breakdown is given on the first page of the lab. manual.

Marked Term Tests - an announcement will be made, in lecture and/or on the intranet, when tests are marked. You have one week to check your test with Janet Potter, during any lab times, or other announced times. Re-marking claims will only be considered for one week after the announcement has been made. Claims must be accompanied by a written statement, outlining the difficulty and presenting data (referenced, if necessary) to support your claim for extra marks.

FIRST TERM TEST: TO BE ANNOUNCED. PROBABLY the end of October. PROBABLY CHAPTERS 1-6, ONLY. WILL BE CONFIRMED ONCE DATE IS KNOWN, in lecture and on the intranet.

On Next Page: Suggested Problems to try, from Organic Chemistry, 5th Ed. Bruice, 2006. (PearsonEd) **N.B.: Chapters have been rearranged from the 4th edition.**

NO SECTIONS OF TEXT ARE OMITTED IN CHAPTERS 1-6

Suggested Problems From Organic Chemistry, 4th Ed. Bruice, 2003. (PearsonEd)

NO SECTIONS OF TEXT ARE OMITTED IN CHAPTERS 1-3.

It is probably best to try these problems before you try the ACE online problems.

ACE Online quizzes: Due dates will be given on the intranet also. There are several assignments. They will disappear at midnight on the due date, but may be put up again at the end of the term, for practice.

Assigned Problems for CHMB41H3 from Bruice's "Organic Chemistry"

The assigned problems are the minimum number suggested for you to try. You should always attempt as many problems as possible, as Organic Chemistry is mainly learned by "doing". The best way to do this is to keep up with the lecture material as much as possible, getting help with any problems as soon as you can. Students will likely not be successful in the course if they put off doing problems until immediately before an exam. It is probably best to try these before you try the ACE online problems.

Chapter	Assigned Problems, 4 th ed.	Chapter	Assigned Problems, 5 th ed
1	50a,e,g;51a,b,g;52b;53a,d,f;54c.f;56a,e; a->f;58b,c;59i,3,5;60a,b,c;62;63a- >d;66,69	1	68a,e,g;69a,b,g;70b;71a,d,f;75a,e;76,77b, c;80i,4,5;81,83,84,88,92,
2	40c,k,m;41d,f,g,j;42a;43;44a,b,c;46b,d, 47;52;53;54a,d,e;56a,b,d,e;57;63	2	45b,k,m;464,6,7,10;47a;48;49;51b,d,h; 53;58;59;60a;62a,b,d,e;63;68;
3	27b,c;28a,b;29a,c;30a,b;31a- >f;32;34;35;36;37;38c,d,e,i;39	3	34b,c;35a,b;36a,c;37;38;39;42;44;45;46; 48c,d,e,i;50;
4	34;35;36;37;38;40;41;43;44;45;46;47;50 53 OMIT SECTION 4.15	4	38;39;41;43;44;46;48;49;50;51;54;58;60;
5	53;55;56;57a,c,d,e,h,o;58;60b,d,e;61;64 6;69g;70;81;82	5	58;61;62;63a,d,f;64;65;68;69;73;75;77;78; 90;91;
6	22;25;26;30;31;32;34;36;37a,b,e;39;40a ;42	6	24;27;28;33;35;36;38;40;41a,b;43;44a,d; 46
7	18, 21, 22(1->6), 23, 24,25,26,27,28,29,30,31,33,35. OMIT SECTION 7.11	7	40;45;46;47-1,2,4,11,12,14;49;50;51;52; 53;54;55;56;58;60;63;65;66;70;71;72;75;77
8	25-32, 33,34,37,41,42,43, 47,53. OMIT SECTION 8.9-8.13	7	33;34;35;36;37;38;39;40;42;44;45;49;50; 57;61
10	32-41, 44,45,48, 50,54.	8	33-40,42,44-5,49,50,57,61
11	29-34, 35, 38,44a,b, 48, 49.	9	31-33,35,36,37,40,43,47,52,55
12	. 38-42,45,48, 53, 56, 59,60, 65, 67. .OMIT: Section 12.8 (Arene Oxides); Section 12.9 (Crown Ethers).	10	43,44,45,46,47,48,55,56,61,64,67, 68,73,76
9	15-18, 20,22,24,25.	11	20,21,24,28,33,34,36