ORGANIC CHEMISTRY II CHM 235
FALL SEMESTER 2009
4 Credits, Section 40584

Tu, Th 8:00 - 9:47 am, DHE 203
Roman Dembinski

COURSE CATALOG DESCRIPTION

A continuation of CHM 234. A study of the organic chemistry of functional groups and an introduction to biologically important organic compounds.

PREREQUISITE

CHM 234 (Organic Chemistry I)

Important: Each student is expected to have a thorough command of all material in the first semester of organic chemistry. A poor background is a leading cause of failure in this course.

TEXT

(4th (old) edition ISBN 0-13-140748-1 contains almost identical material and can be used)
by Paula Yurkanis Bruice and
ISBN 0-13-196328-7
by Paula Yurkanis Bruice
Pearson/Prentice Hall

Textbook and study guide are essential for passing this course. Purchase them right away.

Every problem is assigned as homework unless otherwise stated. Read the section "For the Student" carefully. None of the special topics will be covered.

BULLETIN BOARD

Handouts, exam keys, etc. will be posted on a bulletin board at the end of the hallway that runs east in the SEB building (Chemistry Department, 2nd floor, across the room 216).

LECTURES

Lectures must by necessity be rapidly paced in order to cover all of the material required for chemistry 235. Questions are welcome at any time. In fairness to all, questions of the type "what will be on the exam?" will be entertained only in class so that all students will have the benefit of the response.
Over the discussion part of lectures, homework problems will be reviewed and worked out in detail. Examinations will be discussed and analyzed. You are encouraged to come with specific questions from lectures, the text, and assigned problems.

OFFICE HOURS

Office hours for the instructor (SEB 225) are Tu 10:00 - 11:00 am, Th 10:00 - 11:00 pm, F 1:00 - 2:00 pm and 4:30 - 5:30 pm. All students are welcome at any of these. The instructor is also available on weekends (call in advance) but not later than 7:00 pm for any reason whatsoever. Office hours can be rescheduled when in conflict with Supplementary Instruction (if any). Office Phone: 248-370-2248.
CONTENTS OF LECTURES

Chapter 12. Mass Spectrometry, Infrared Spectroscopy and Ultraviolet/Visible Spectroscopy
Chapter 13. NMR Spectroscopy
Chapter 14. Aromaticity. Reactions of Benzene
Chapter 15. Reactions of Substituted Benzenes
Chapter 16. Carbonyl Compounds I: Nucleophilic Acyl Substitution
Chapter 18. Carbonyl Compounds III: Reactions at the α-Carbon
Chapter 19. More About Oxidation-Reduction Reactions
Chapter 20. More About Amines. Heterocyclic Compounds
Chapter 21. Carbohydrates
Chapter 22. Amino Acids, Peptides, and Proteins
Chapter 23. Catalysis
Chapter 26. Lipids
Chapter 27. Nucleosides, Nucleotides, and Nucleic Acids

SCHEDULE OF LECTURES and EXAMINATIONS

Week #1 (30-August) Th lecture 1
Week #2 (6-September) Tu,Th lectures 2-3
Week #3 (13-September) Tu,Th lectures 4-5
Week #4 (20-September) Tu,Th lectures 6-7
Week #5 (27-September) Tu,Th exam, lecture 8 (also half of the lecture after exam)

examination #1 chapters 1(12)-14: Tuesday 29-September
Week #6 (4-October) Tu,Th lectures 9-10
Week #7 (11-October) Tu,Th lectures 11-12
Week #8 (18-October) Tu,Th lectures 13-14
Week #9 (25-October) Tu,Th lectures 15-16
Week #10 (1-November) Tu,Th exam, lecture 17 (also half of the lecture after exam)

examination #2 chapters 1(15)-18: Tuesday 3-November
Week #11 (8- November) Tu,Th lectures 18-19
Week #12 (15- November) Tu,Th lectures 20-21
Week #13 (22- November) Tu lecture 22, Thanksgiving holiday
Week #14 (29-November) Tu,Th exam, lecture 23 (also half of the lecture after exam)

examination #3 chapters 1(19)-22: Tuesday 1-December
final examination: Thursday 10-December 8:00-11:00 AM (please bring scantron form 882-E or equivalent for 100 answers)

OTHER EXAMINATION DETAILS

(1) A grade of 0 (zero) is assigned for missed exams. There are no make-up exams. Any circumstances involving illness or deaths must be (a) communicated in advance of the exam, and (b) fully documented, with signed statements from a medical doctor (not a chiropractor) or a county coroner. Voice mail may be left at (248) 370-2248.
(2) Students are responsible for checking their exams for blank or missing pages (the number of pages and problems will be indicated on the face page).
(3) Errors can occur in grading. If you have grading questions on your exam, take the following steps: (a) check your answers vs. those on the key that is posted on the bulletin board; do not write on or mark your exam; (b) meet with the instructor. No regrading will be allowed five working days after the return of an exam. Some graded exams will be copied prior to their return.
(4) Any and all incidents of cheating will be referred to Academic Conduct Committee. Please consult the university Academic Conduct policies.
(5) ID checks will be required at the examinations.
COURSE GRADING

Each midterm will count as 20% of the course grade, and the final will count as 40% of the course grade. Grades will not be assigned to individual exams, but rankings (distribution curves) will be posted. "Wild Card Rule": The instructors reserve the right to factor "surprise quizzes" into the final grades (up to 15% total).

Grade distributions (%) previously given by the instructor in Chemistry 234 and 235 include:

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Incompletes: The official University policy will be rigorously followed, which means it will be almost impossible for anyone to be given an incomplete.

Withdrawals: The official University policy will be rigorously followed.

The following grading was used for this course last offering (points out of 500)

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ASSIGNMENTS

It is expected that the following will be completed in advance of the specified chapter lectures:

Read the chapter, complete all problems within the chapter, and complete all additional problems at the end of the chapter.