

CASPER COLLEGE COURSE SYLLABUS

SEMESTER: FALL 2015

COURSE NUMBER & TITLE: CHEM 2320 01 ORGANIC CHEMISTRY I

LECTURE HOURS: 3

LABORATORY HOURS: 0

CREDITS: 3

CLASS TIME: 11:00AM - 11:50AM

DAYS: M,W,T,H,F

ROOM: PS 315

INSTRUCTOR'S NAME: E. J. Mechalke, Ph.D.

INSTRUCTOR'S OFFICE: PS 312

PHONE: 268-2450

OFFICE HOURS: :9:00-10:00 a.m. on M,W,F, and 9:00-11:00 a.m. on Th

COURSE DESCRIPTION: One problem class per week. This is the first of a two semester sequence in modern organic chemistry. Topics covered are: bonding, structure, alkanes, alkenes, alkynes, kinetics, stereochemistry, cycloaliphatic compounds, aromaticity and arenes.

STATEMENT OF PREREQUISITES: CHEM 1035 or permission of instructor. The laboratory to accompany this course is CHEM 2325.

GOAL: Competency in the knowledge and analytical skills involving the topics listed in the course description.

OUTCOMES: Demonstrated mastery of General Objectives by performance on written exams via mainly essay question responses.

METHODOLOGY: Lecture plus questions and discussion in problems class.

EVALUATION CRITERIA:

Grading System

| | % of course average |
|------------------------------------|---------------------|
| Short Quizzes | 25% |
| Hourly Exams | 75% |
| Four will be given. | |
| The highest 3 will count 25% each. | |

| COURSE AVERAGE | GRADE |
|----------------|-------|
| 90-100 | A |
| 80-89 | B |
| 60-79 | C |
| 50-59 | D |
| below 50 | F |

Policy on missed quizzes and exams

No quizzes will be given before or after the scheduled time. Makeup quizzes will not be given either. The above policy also holds for exams except that the final exam will take the place of an unavoidably missed hour exam. The percent score of the final exam will be the missing fourth hour exam, so one of the four hour exams will be dropped.

REQUIRED TEXTS, READINGS, MATERIALS:

LAST DATE TO CHANGE TO AUDIT STATUS OR TO WITHDRAW WITH A "W" GRADE:

11-12-15

STUDENT RIGHTS & RESPONSIBILITIES:

Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College student.

Chain of Command:

If you have any problems with this class, you should first contact the instructor in order to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head/Program Director, the Academic Dean, and lastly the Vice President for Academic Affairs.

Academic Dishonesty - Cheating & Plagiarism:

Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct.

ADA Accommodations Policy:

It is the policy of Casper College to provide appropriate accommodations to any student with a documented disability. If you have a need for accommodation in this course, please make an appointment to see me at your earliest convenience.

TENITIVE SCHEDULE: Sequence of Topics

| Week Beginning | Chapter in Wade (7th ed.) | Topic |
|----------------|------------------------------|---|
| August 24 | 1 | Introduction and Review |
| August 31 | 2 | Structure and Properties of Organic Molecules |
| September 7 | 3 | Structure and Stereochemistry of Alkanes |
| September 14 | | Cont. |
| | Exam I 9/18, | |
| September 21 | 4 | The Study of Chemical Reactions |
| September 28 | 5 | Stereochemistry |
| October 5 | 6, | Alky Halides: Nucleophilic Substitution and Elimination |
| October 12 | | Cont. |
| | Exam II, 10/16 | |
| October 19 | 7 | Structure and Synthesis of Alkenes |
| October 26 | 8 | Reactions of Alkenes |
| November 2 | 9 | Alkynes |
| November 9 | | Cont |
| | Exam III, 11/13 | |
| November 16 | 10 | Structure and Synthesis of alcohols |
| November 23 | 11 | Reactions of Alcohols |
| November 30 | | Cont. |
| December 14 | Exam IV, TBA | |

The number of homework assignments completed will replace the lowest quiz score.

| Assignment | Chapter | 8 th edition | Due TBA |
|------------|---------|--|------------|
| 1 | 1 | 2, 3, 6, 7, 9, 10, 12, 14, 17, 18, 20, 21, 23, 28, 29, 31, 32, 33, 36, 38, 41, 42, 43, 44, 45, | |
| 2 | 2 | 3, 4, 5, 8, 10, 11, 15, 19, 20, 21, 23, 24, 27, 30, 34, 35, 38, 42, | |
| 3 | 3 | 1, 2, 3, 4, 6, 11, 14, 16, 17, 24, 25, 27, 33, 37, 42, 44, 46, | |
| 4 | 4 | 2, 4, 7, 9, 13, 14, 18, 19, 25, 29, 30, 35, 36, 37, 38, 42, 43, 44, 45 | |
| 5 | 5 | 1, 2, 3, 5, 6, 8, 10, 11, 14, 15, 16, 17, 19, 20, 25, 27, 28, 29, 30, 31 | |
| 6 | 6 | 1, 3, 5, 6, 7, 9, 11, 12, 14, 16, 17, 18, 19, 20, 22, 23, 26, 27, 30, 33, 34, 37, 40, 41, 43, 44, 45, 46, 47, 48, 53, 56, 60, 63, 64, 65, 71 | |
| 7 | 7 | 1, 2, 4, 5, 6, 7, 10, 12, 13, 16, 21, 24a, 28, 29, 30, 32, 33, 38, 40 | |
| 8 | 8 | 1, 2, 4, 5, 9, 11, 16, 18, 21, 22, 23, 29, 33, 34, 35, 36, 39, 43, 46, 47, 50, 54 | |
| 9 | 9 | 2, 5, 7, 8, 10, 12, 13, 15, 18, 19, 23, 24, 26, 29, 30, 33a-I, 35, 40 | |
| 10 | 10 | 1, 2, 3, 5, 7, 8, 10, 12, 13, 14, 15, 17, 19, 22, 23, 27, 28, 30, 41, 42, 49, 50 | |
| | 11 | 1, 2, 5, 7, 8, 9, 10, 12, 13, 14, 19, 21, 22, 31, 39, 40, 42, 43, 44 | |

SOME HELPFUL HINTS TO CHEMISTRY STUDENTS:

This may be your first semester of college. If so, you must realize that success requires far more of your effort in college than in high school. Possibly, you are bright enough that you are able to handle your high school work without really having to study. Thus, you may now have to learn how to study. Here are some hints on how to study in general, then some specific hints relating to chemistry.

General Study Techniques

If you are a full time student, you are signed up for about 16 credit hours. This means you will spend at least that many hours per week in the classroom or lab. ALSO you are expected to spend at least 2 hours of outside preparation time for each of those credit hours. This means you must be prepared to spend $16 + 32 = 48$ hours per week on school work. Being a college student is a full time job! If you obligate yourself for too many hours of outside employment and activities, you won't have enough time for studying, and your grades will suffer.

Budget your time so there will be enough for studying and recreation. Participation in outside activities is a natural part of your education. But don't use them as an excuse not to study. Studying requires concentration, so carefully choose your place of study. The library is an excellent choice. Familiarize yourself with your textbook and consider it a tool to be heavily used. Make extensive notes in it in using it to supplement your lecture notes. Taking good notes in a lecture is a skill which must be developed. Don't write down everything the teacher says, but copy or paraphrase everything he repeats or emphasized by writing on the board; use many abbreviations.

Follow up a lecture by reading those notes as soon as possible while the instructor's words are still ringing in your ears. Then supplement the material from your text. Keep caught up! This way preparing for exams will involve a small amount of review, not many hours of initial learning. Exams are 1) your way of showing the teacher what you know and 2) your signal of how well you are doing. If you do poorly on an exam, get help soon!

Special Hints for Studying Chemistry

Use the course outline to keep informed of upcoming topics. Read the material before it covered in class, just to get acquainted with the general concepts and terms involved so you can take better notes in class. Follow up the lectures by studying the notes and book, and working on the assigned problems. Make use of problems class by asking questions on problems you can't work, concepts you don't understand, etc. Prepare for quizzes and exams with careful, efficient study. When taking exams: be cool and rested, scan over the exam so you can budget your time. Earn as many easy points as you can, then tackle hard problems, but don't get bogged down on any one. When an exam is returned to you, follow up by seeing where your errors were, so you don't make them again. Always read your lab experiments before lab so you can get the most out of each lab.