

OGLALA LAKOTA COLLEGE

Syllabus for Chemistry 253: Organic chemistry I

Spring 2011

Location Rapid City (Pic-Tel to Pine Ridge)

Instructor: Dr. Deig Sandoval

Lecture Time: T = 9:00 - 12:00 PM

Office hours: W=10:00-12:00 PM Math and Science building at Piya Wiconi, Kyle.

How to contact me: e-mail to dsandoval@olc.edu, Telephone #: 605-4556136

Course Description

This course is an introduction to organic chemistry. Topics will include nomenclature of aliphatic and basic aromatic compounds and their derivatives, reaction predictions with industrial and environmental applications, chemical properties and synthesis, and an introduction to biochemistry. Chemistry 251 must be taken concurrently.

Prerequisites: Chemistry 243

Required textbook: Introduction to Organic Chemistry, William Brown and T. Poon, Fourth edition, Wiley and Sons. 2011

Other materials: Calculator, molecular models, periodic table

Descriptive reading load: Grade 14 reading level. One chapter every other week will be required.

Types and amounts of writing expected: Assignments and essay questions must be written in complete sentences. Simply copying sentences from the textbook constitutes plagiarism and will not be accepted. Copying from the textbook or other student results in full nullification of any work submitted! Mathematical problems must show all calculations, and final answers, where appropriate, must be in full sentences.

Lakota Perspective Provided Through: Students and instructor will treat each other with respect. This respect will also be extended to all living and natural things that will be gathered for and used in this class.

Course Objectives:

Be able to name organic compounds and recognize them from their chemical structure.

Recognize functional groups and predict their behavior in simple organic reactions.

Recognize functional organic groups and the differences some of their physical and chemical properties as well as the chemical reactions that they can undergo.

Course Requirements: Chemistry 243 (general chemistry II)

Attendance:

You must attend all scheduled classes. You are also expected to be punctual and to stay to the end of the class period. I will call attendance at the end of the lecture and if you are not

present you will be marked absent. The quizzes will be announced one week in advance and the material to be evaluated. There will not be making up quizzes. If you miss a quiz for a valid reason your next quiz will be worth twice as much.

Missed exams can only be made up if you present documented absences excuse, like a hospitalized illness. Test will be modified and possibly more difficult (since you had more time to prepare) and has to be taken before the next class session. Being absent also does not relieve you from handing in your assignments on time. It is OLC policy that you will be dropped from the course if you miss three consecutive class periods. If you miss more than 5 class periods during the semester, you will also be dropped from the course.

Assignments:

There will be nine graded homework assignments, due at the assigned date. Handing in the assignment late will result in an automatic 30 % deduction. These questions and exercises are to be found at the end of each chapter in your textbook. The exercises will be directly relate to the questions asked in the quizzes and final exam. Homework assignments handed in more than ONE WEEK past the due date will not be accepted for grading or any credit towards the overall grade in this class.

Quizzes: There will be three quizzes (see attached class schedule): Each quiz counts for 5% of the total grade.

Grade Calculation:

There will be 4 un-announced quizzes worth..... 5% points each, subtotal= 20%

There will be 5 (1 hour) exams that will cover 2 chapters each and worth 12% each.....subtotal= 60%

There will be 1 **comprehensive final exam** worth 20%

Total Grade

4 Quizzes (4x5%)..... 20%

5 Exams (5x12%)..... 60%

1 Final exam (1x20%)..... 20%

Total: 100%

Course Schedule:

Chapter # (from Textbook)	Chapter title
1	Covalent Bonding and Shapes of Molecules
2	Acids and Bases
3	Alkanes and Cycloalkanes
4	Alkenes and Alkynes
5	Reactions of Alkenes
6	Chirality and the Handedness of Molecules
7	Haloalkanes

8	Alcohols, Ethers, and Thiols
9	Benzenes and Its Derivatives
10	Amines

Tentative spring semester 2011 activities

Date	Chapters to be covered
01/26/11	Textbook chapter # 1
02/02/11	Textbook chapter # 1
02/09/11	Textbook chapter #2
02/16/11	First exam, chapters 1- 2 and Lecture chapter 3
02/23/11	Textbook chapter #3
03/09 /11	Textbook chapter #4
03/16/11	Textbook chapter #4
03/23/11	second exam, chapters 3 - 4 and Lecture chapter 5
03/30/11	Textbook chapter #5
04/06/11	Textbook chapter #6
04/13/11	Textbook chapter #6
04/20/11	Third exam, chapters 5- 6 and Lecture chapter 7
04/19/11	Textbook chapter #7
04/27/11	Textbook chapter #8
05/04/11	Textbook chapter #9
05/11/11	Textbook chapter #10
05/18/11	Final exam. It will be on chapters 7, 8, 9, & 10