Chem_OX 100 -12A

Introductory Chemistry Fall 2016

Instructor: Dr. Simbarashe Nkomo

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Office Hours: Monday 2:00 -3:30 pm, **Thursday** 10: 00 - 11: 30 am, and by appointment. You can stop by my office at any time and I will be able to assist if I am not assisting another student. I am not available during my class times MWF 9:00- 1:10 pm and lab times WF 2:00- 5:30 pm.

Class Schedule: Monday, Wednesday, and Friday, 12:00 PM -1:05 PM, OSB 423

Oxford College and Liberal Arts. Oxford College is dedicated to a liberal arts education, and science, including chemistry, is an integral part of the liberal arts.

Learning goals.

The primary goals of this class are

- Utilize critical thought and reasoning to understand chemical behavior at the microscopic and macroscopic levels.
- Develop solutions to problems which you have not encountered before.
- Apply physical chemistry principles to address current challenges in our everyday lives.

Course Materials

- " General, Organic, and Biological Chemistry" 5th Ed. by Karen C. Timberlake
- Laboratory materials will be distributed periodically and/or provided on Canvas in advance of the laboratory sessions. Safety goggles and laboratory carbon-copy notebooks are required for the laboratory
- Non-programmable scientific calculator and should be brought to every class.

Tentative Schedule

1. Chemistry in Our Lives
   Chemistry and measurements
   Matter and Energy
   Atoms

   Exam 1 (Sept 30)

2. Ionic and Molecular Compounds
   Chemical Reactions and Quantities
   Gases
   Exam 2 (Oct 4)

3. Solutions
   Acids and Bases
   Introduction to Organic Chemistry: Hydrocarbons
   Exam 3 (Nov 23)

Grading

Exams	45%
Quizzes	5%
Final Exam	20%
Graded worksheets	5%
Problem Set Assignments	5%
Laboratory	20%
TOTAL	100%

Grading scale.
Grades are normally assigned as follows:

93.0 and up A	77.0 – 79.9 C+
90.0 – 92.9 A-	73.0 – 76.9 C
87.0 – 89.9 B+	70.0 – 72.9 C-
83.0 – 86.9 B	67.0 – 69.9 D+
80.0 – 82.9 B-	60.0 – 66.9 D
60.0 and below F	

Note: You must have a passing grade in BOTH the lecture and lab sections of the course. You will receive an F grade if you fail either of the sections regardless of your final average.

Grades are assigned based on your performance in the course (exams, lab, attendance) and are not open for discussion after being assigned.

Grades are not automatically rounded. If you are near a border of 2 grades, consideration is given to such items as attendance, improvement over the semester, and class participation.

Grading queries:
Graded exams, quizzes, and assignments should be immediately upon return. Any there are any errors or you have questions, submit a request for a re-grade in writing no later than 3 days after the exam was returned.

Quiz and Exam keys will be posted on Canvas after the 24 hours after the exam is returned in class.

Academic Honor

It is the student's responsibility to understand the rules and procedures of the Oxford College Academic Honor Code. Exams and quizzes require independent effort. You are encouraged to seek help from other students, instructor or any other sources for your problem sets. You must acknowledge any assistance, collaboration or sources used. Do not copy answers from the solution's manual. It is important for you to understand the process and rationale that leading to the answer.

Exams

There are four mid-term hour exams and one cumulative final exam. Exams are (tentatively) scheduled for the following days:

Sept 30, Oct 4, and Nov 23.

Final Exam, Tuesday 13-Dec-2016, 7:00 -10:00 PM

Let me know ahead of time if there is any conflict. The Final Exam will be taken as scheduled. Take into account the schedule of exams as you make your travel plans. No make-up examinations will be given. Any excuse for missing an exam or conflicts such religious holidays should be presented before the scheduled exam by email. If the excuse is accepted, the grade obtained on the final exam grade with count in place of the missed exam. If the excuse, is not accepted you will receive a zero for that exam.

Review

A review session will be held before the exam. The reviews will not take up the whole class period. You are encouraged to bring questions.

Attendance and Make-up

Students are expected to attend all regular scheduled meetings. It is in your best interest to come to lectures. I encourage you to notify me in the event of an emergency, which may result in an absence.

You are allowed 3 absences without any point loss. If your cumulative absences exceed 3, points will be deducted as follows:

1. 1 point for 4 absences
2. 2 points for 5 absences
3. 3 points for 6 and beyond absences

The points will be deducted from your final average.

You will lose one point for coming to class LATE. Coming into class after I have finished checking the roaster counts as LATE. If you come to class 15 minutes late or leave the class early, that counts as an ABSENCE.

Quizzes

Quizzes will be administered nearly every week during Monday's lecture. These will be 10 points each and will take about 10 minutes to complete. The nature of questions will vary from conceptual to application type questions. You are expected to work independently. Always bring your scientific calculator to class. You will drop your two lowest quizzes. No make-up quiz or exam will be given.

Problem Sets

Problems sets will be assigned on a BI-WEEKLY basis and will be due one week after being posted. The problem set and due dates will be posted on Canvas. The problem sets are designed to build your skills and simultaneously provide me with the opportunity to assess areas that need re-emphasis to ensure that you understand the essential material. Assignments should be complete and the papers stapled in order. Work should be presented clearly, with answers circled. Where necessary, provide explanations (or calculations), demonstrating how you arrived at your answers. You are expected to read the literature in the required textbook, and complete all assessment exercises prior to attending class in order to actively and meaningfully participate during each lecture.

Worksheet problems

Worksheet problem are assigned to give formative assessments of your progress. The worksheet assignment includes, but not limited to, in–class problems, follow-up problems, and research-type problems. These are given on an ongoing basis. Only the even numbered worksheet assignments will be graded and the grade contributes to your final average. Worksheets submitted late will be graded and 2 points will be deducted for each day past the deadline.

Electronic devices

Use of cell phones, ipads, laptops etc will not be allowed during class activities. If there are special circumstances where you need to use your laptop in class, please make arrangements with me beforehand. If there is section of the course that would require us to use an of these electronics, I will advise you ahead of the specific lecture or lab.

Laboratory requirement

All students are expected to observe the safety rules. Open-toed shoes, sandals, and shorts are not appropriate for the lab. Safety goggles are required. Students must record detailed observations during experimentation. Laboratory sessions will be held in OSB423. Organize your work clearly and show your working in calculations.

Additional information and handouts

Additional helpful handouts and resources will be posted on **Canvas**.

Proper Behavior in Class. Class is a learning environment; expected behavior includes:

- Coming to class on time and being attentive in class.
- Not going in and out of class (unless you're sick) – please get a drink or use the restroom before or after class.
- Not eating or drinking in class. Water bottles are acceptable.
- Not working on material for another class.
- Not bringing a cell phone to class. Should you bring one and it goes off, or should you use it in any way, you will leave the class and be counted absent. If this happens a second time, you may not return to class.
- Not bringing a laptop computer to class unless you need a computer to assist you in class and you have made arrangements with me.
- Bringing your textbook and all handouts to each class.

- Not respecting the learning environment in class can affect your grade and future recommendations.