

Chemistry 108
Fundamentals of Chemistry
Spring 2013

Course Instructor: Dr. Jie Floyd
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Lecture: Mon. Wed., Fri. 10:20-11:10, 204 Collier
Problem Session: Thur. 10:20-11:10, 204 Collier

Office Hrs: Fri. 9:25-10:25am

Labs: Mon. or Fri. 1:15-4:15, 210 Collier
or Tues. 8:30-11:30, 210 Collier

Required Materials:

Text: Karen C. Timberlake *Chemistry. An introduction to General, Organic, and Biological Chemistry, 11th Edition, Prentice Hall*

Scientific Calculator: Must be able to calculate logs | no cell phones!

Course Goals:

- Use real-life examples, particularly those that are health related, to illustrate the relationship between chemical principles and living organisms.
- Relate the properties of atoms and molecules with the organization of elements in the periodic table.
- Recognize relationships between physical properties of atoms, compounds, and molecules; and the physical states of matter, solubility, reactivity, molecular shape, and biochemical function.
- Apply qualitative and quantitative aspects of chemistry to problem solving.
- Use the scientific method to actively seek knowledge through the study of chemical processes in a laboratory environment.

Attendance: It will be *very difficult* for you to learn chemistry concepts and follow them over the semester if you miss course meetings (class, problem sessions, and laboratories). If you anticipate an unavoidable absence, please *notify me ASAP before* you are absent. Makeup exams, and labs are given at the discretion of the instructor. As a reminder, the college policy on attendance can be found at <http://www.moravian.edu/studentLife/handbook/academic/academic.html>

Academic Honesty: Please be familiar with the college policy on academic honesty <http://www.moravian.edu/studentLife/handbook/academic/academic2.html>

Learning Differences: Students should contact the Office of Learning Services for disclosure of a learning difference and to request appropriate amendments to this course <http://www.moravian.edu/studentLife/handbook/academic/academic4.html>

Grading: Your grade will be determined only by the percentage of the total points you achieve.

Percentage Based Grading Scale			
97-100	A +	73-76	C
93-96	A	70-72	C-
90-92	A-	67-69	D+
87-89	B+	63-66	D
83-86	B	60-62	D-
80-82	B-	< 60	F
77-79	C+		

There are a total of 1000 pts that will be factored into your final grade in this course. A point on an exam, quiz, or laboratory counts the same amount.

4 Exams	550 pts
Quizzes	150 pts
Graded homework	50 pts
10 Labs	250 pts
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Total	1000 pts

Exams: Three in-class exams (130 pts each) and one final (160 pts).

While the material you will be responsible for each exam could vary, (dependent upon the pace of the course) the following dates will be used for examinations:

Exam 1	Monday, February 11
Exam 2	Monday, March 18
Exam 3	Monday, April 15
Final	Tuesday, April 30, 8:30am

Quizzes: Quizzes will be given based on each chapter or chapters. The 10-20 minutes quizzes will be given at the end of problem session period. The material to be covered by the quiz will be announced in lecture prior to the quiz. **No make up quizzes will be given** and any unexcused missed quizzes will be assigned the grade of zero. Your *lowest two quiz scores will be dropped* at the end of the term.

Graded homework: Homework will be assigned based on each chapter or chapters. These assignments will be collected on occasions and the grade from these assignments will constitute the homework portion of the grade. To get credit for a collected homework assignment, the student must be present at the lecture during which the assignment is collected. **No late assignments will be accepted.** All assignments not turned in will be assigned a grade of zero, unless a written excuse for absence from the lecture is provided. Homework can be worked on and turned in as a group of two or three.

Labs: Ten laboratory experiences (20 pts for each lab) consisting of:

- Group write up and summary data 10pts
- Individual participation, being on time, and working safely 5pts

- Group participation, the group cooperates positively 5pts
Your *lowest one lab score will be dropped* at the end of the term.

Makeup Labs, and Exams: If an excused lab is missed, arrangements should be made to make up the lab within one week. Any unexcused missed lab will be assigned the grade of zero. Missed and excused quizzes and labs will *typically* be counted as one of the “dropped” scores (see grading section above). You are responsible for understanding the content of the material covered during a missed quiz or lab. Makeup exams will be given at the discretion of the instructor for absences that have been documented by the Dean of Students Office and/or a health professional.

Class Etiquette:

Turn off or silence cell phones! NO-text messaging during class

- Do not record or take pictures of classmates or instructors without their permission.

Email Etiquette: Although email may seem like an instantaneous form of communication, it is not. Just because you sent me an email, does not mean that I have: 1) read it, 2) understood it, and/or 3) approved any requests you made in it.

- I will reply individually, or as a class response to all email received.
- Assume that email sent between the hours of 9PM and 9AM has NOT been read.

Pace of the Course: The schedule below is a guide for course coverage this semester.

Tentative Lecture Schedule

Week Beginning	Topic	Text Ref. Chapter
1/14	Measurements, Matter, Energy	1,2
1/21	Atoms and Elements	3
1/27	Compounds and Chemical Bonds	4
2/4	Chemical Quantities and Reactions	5
2/11	Exam 1 Gases and Solutions	6,7
2/18	Acids and Bases	8
2/25	Nuclear Radiation	9
3/4	Spring Break	
3/11	Alkanes, Unsaturated Hydrocarbons	10, 11
3/18	Exam 2 Organic Compounds with Oxygen and Sulfur	12
3/25	Carbohydrates	13
4/1	Carboxylic Acids, Esters, Amines and Amides	14
4/8	Lipids	15
4/15	Exam3 Amino Acids, Proteins, and Enzymes	16
04/22/13	Nucleic Acids and Protein Synthesis	17
04/30/13 8:30am	Final Exam	