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Chemistry 102-003 General Chemistry II Spring 2015

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CHE 102: General Chemistry II Syllabus

Information

Instructor

Name: Steven L. Mullen, Ph.D.
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Email: Through Cobra or smullen@cobra.parkland.edu
Office hours: Monday 2:00 pm to 2:50 pm and by appointment

Meeting Times

Section: CHE-102-003

Lecture: MW 1:00 pm to 1:50 pm Room L239
T 1:00 pm to 2:50 pm Room L256
Lab: Th 1:00 pm to 3:50 pm Room M232

Required Materials (Available at the Parkland College Bookstore)

Text: *Chemistry: Atoms First*, second edition, Julia Burdge & Jason Overby, McGraw-Hill, 2015
Online Homework System: McGraw-Hill Connect, included with text or purchased separately
Laboratory Manual: There is no laboratory manual. The labs are available on Cobra.
Laboratory Notebook: "Student Lab Notebook with Spiral Binding"
Additional Materials: Scientific Calculator and Safety Goggles

Your textbook, Connect code, lab notebook, and goggles from CHE-101 can be used in this course. The textbook and Connect code must be from Fall 2014.

Policies

Attendance

The attendance policy in this course is in keeping with the policy stated in the Parkland College Catalog: "Regular and prompt attendance is expected at all classes. Regular attendance and consistent study habits are considered necessary for academic success in college. Faculty members have the prerogative of lowering grades for excessive absence."

The laboratory is a very important part of this course. Attendance at all laboratory sessions, including the first week of class, is required. If you miss the first week's lab, you must make it up before the next week's lab. If you do not, you will automatically fail the course. If you miss three labs, you will fail the course regardless of your performance in the non-lab portion. There are no make-up labs, but you are allowed to drop one lab score. This dropped lab still counts as one of the three missed labs. There are some lab scores that cannot be dropped. Details are on the lab syllabus.

Drops/Withdrawals

On January 19th, I will assess your attendance. If you have not attended regularly to that point, you will be dropped with no refund of tuition and fees. If I have not seen you in a while at midterm (March 6th), I will withdraw you and you will receive a grade of W. If you stop attending after midterm, you will receive an F if you do not withdraw yourself at the Office of Admissions and Records by the deadline.

Cobra Learning and Student Email

Cobra Learning is Parkland's Course Management System. Many course components are accessed through Cobra. You are expected to be familiar with the interface and regularly check the content. You are also expected to regularly check your Parkland student email account.

Make-ups

There are no make-ups. The dropped quiz, homework, and lab will allow for times when you must miss an assignment. You will want to save these opportunities for when you really need them. Exams can be taken any time during a two-day period, so you will be able to schedule around conflicts. I *may* make exceptions to this policy for serious documented illness or official visits to the White House.

Disabilities

If you believe you have a disability for which you may need an academic accommodation (e.g. an alternate testing environment, use of assistive technology or other classroom assistance), please contact Cathy Robinson, Room U260, 217-353-2082, crobinson@parkland.edu. I will need to see the ODS codes on your ID before making accommodations.

Syllabus Addendum

A syllabus addendum, covering Parkland policies and services not specific to this course, is available on Cobra. It is part of this syllabus, and you are responsible for the information.

Changes to the Syllabus

I reserve the right to make changes to this syllabus should I deem it necessary. You will be notified in writing through Cobra.

Assessments

Homework

Ten homework assignments will be given, but the lowest grade will be dropped. Each homework assignment is worth 10 points for a total of 90 points. Homework will consist mainly of calculation questions that test your understanding of the concepts discussed in class and your capability to solve mathematical problems. Homework is an important part of this course. It helps you understand the material covered in class and helps prepare you for quizzes and exams. The due date of the homework is listed on the Cobra calendar (due at 11:59 pm). You should not leave the homework assignments until the due date, but rather finish problems as we progress into the chapter. Homework will be online at the McGraw-Hill Connect website. The Connect access code comes with your textbook if you purchase it from the Parkland Bookstore. Otherwise, you can purchase a stand-alone version of the access code. Your code from CHE-101 is still valid if you took the course recently. Late homework will

not be accepted. If you fail to complete a homework assignment for *any* reason, it will simply count as your dropped homework. A computer or internet problem is not a valid excuse for missing homework unless I determine that there is a problem with Connect.

Quizzes

Ten quizzes will be given, but the lowest grade will be dropped. Each quiz is worth 20 points, for a total of 180 points. Quizzes will test your understanding of the material, use of math to solve chemical problems, and your capability to apply the concepts presented in class to solve or explain chemical process and techniques used in daily life. Quizzes will be taken in class on paper. There are no make-ups. If you fail to take a quiz for *any* reason, it will simply count as your dropped quiz.

Hour Exams

Three hour exams will be given. Each exam is worth 100 points, for a total of 300 points. Exams will assess your understanding of the concepts discussed in class. Exams may include, but are not limited to, multiple choice, free response, true and false, and matching questions. They will be given at the Natural Sciences Testing Center (L161) on paper. Though you will be given class time off to take each exam, you may take the exam at any time you have free during the two days it is available. The Testing Center Hours are 9:00am to 4:00pm Monday through Thursday and 9:00am to 3:00pm Friday.

Final Exam

The cumulative final exam covers material from both CHE-101 and CHE-102. It is worth 200 points. The exam will be given on May 12th at 11:00 am in the regular classroom.

Special Project

There are 50 points in this category. The special project will engage you in higher learning by allowing you use the chemistry knowledge acquired during the semester to present a more advanced chemical problem or concept (not covered directly in class). More specific information about the project will be provided during the semester. The project will include a PowerPoint Presentation in front of the class, with extra credit for presenting at the Natural Sciences Poster Session on April 29th. Preliminary checkpoints are included in this score.

Course Content and Grading

Course Objectives

After completion of CHE 102, you should be able to demonstrate your ability solve problems by collecting and evaluating facts and using methods of scientific inquiry and demonstrate your ability to compute and to think and express yourself effectively in quantitative terms. A list of specific course objectives is available on Cobra.

Time Requirement

You should expect to invest *at least* eight to twelve hours per week outside of class. The time requirement involves reading the chapters covered in class, as well as completing all assignments. Few people will do well in this class if they do not study and spend the time.

Material Covered

Below is a list of material that will be covered in lecture. A detailed list is in the Course Objectives, available on Cobra. The course calendar, also available on Cobra, gives a tentative schedule of lectures and due dates for assignments. Please note that the material covered in this course builds upon material covered earlier in the semester and in CHE-101.

Topic	Textbook Chapters
Thermodynamics, Equilibrium, and Chemical Reactions (Review)	8, 9, 10, 14, and 15
Acids, Bases, and Salts	16
Acid-Base Equilibria and Solubility Equilibria	17
Oxidation-Reduction Reactions and Electrochemistry	9 and 18
Chemical Kinetics	19
Nuclear Chemistry	20
Chemical Bonding (Review)	3, 4, 5, 6, and 7
Coordination Chemistry	22
Organic Chemistry	23 and 24

Grading

Point Distribution (1000 points total)					
Category	Activity	Points	Units	Total	Notes
Lecture	Homework	10	10	90	Drop One
	Quizzes	20	10	180	Drop One
	Exams	100	3	300	
	Final Exam	200	1	200	
Laboratory	First Day Lab	5	1	5	
	Lab Reports	15	10	135	Drop One
	Lab Assessment	40	1	40	
Special Projects	Checkpoints	1	5	5	
	PowerPoint Presentation	45	1	45	

Final Grade				
900-1000	800-899	700-799	600-699	599 or less
A	B	C	D	F

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