

2015

Chemistry 101-001 General Chemistry I Fall 2015

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Syllabus

CHE-101-001, Fall 2015

Class Information

Prerequisites

Recent high school chemistry or CHE 100 with a grade of C or higher, and MAT 098 with a grade of C or higher.

Meeting Times

Lecture:	WR	8:00 am to 8:50 pm	Room L242
	F	8:00 am to 9:50 pm	Room L242

Lab:	M	8:00 am to 10:50 pm	Room M232
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Instructor

Name: Steven L. Mullen, Ph.D.

Office: L262

Phone: 351-2285

Email: Through Cobra

Office hour: Thursday 9:00 am to 9:50 pm and by appointment

Required Materials (Available at the Parkland College Bookstore)

Text: *Chemistry: Atoms First*, 2nd edition, Julia Burdge and Jason Overby, McGraw-Hill, 2015

Online Homework: McGraw-Hill Connect Plus, included with text or purchased separately

Clicker: Any model of i>clicker

Laboratory Manual: *Chemistry 101 Experiments*, Parkland Chemistry Staff

Laboratory Notebook: "Student Lab Notebook with Spiral Binding".

Additional Materials: Scientific calculator and safety goggles

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 introduction, is required. **If you fail to attend the first laboratory session you will not be allowed to participate in subsequent labs** unless you attend the makeup lab offered before your second lab session. **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. Details are on the lab syllabus.

Drops/Withdrawals

On census day (8/31), I am required to assess your attendance. If you have not attended regularly to that point, you will be withdrawn with no refund of tuition and fees. Also, at midterm (10/16) I will withdraw you if

you have not been attending class. After midterm, you are responsible for your own withdrawal at the Office of Admissions and Records by the deadline. Non-attendance after midterm will result in an F if you do not withdraw yourself.

Cobra and Student Email

Cobra 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.

Course Assessments

Exams

Five exams will be given: four hour-exams and one cumulative final exam. **The hour-exams are worth 50, 70, 95, and 95 points respectively, for a total of 310 points. The final exam is worth 200 points.** Hour exams will be given in the Natural Sciences Testing Center, L161, and they will be in the traditional closed-notes, paper and pencil format. You may take the exam any time the Testing Center is open over a designated two-day period. You will be given one class or lab period off either to take the exam or as compensation for taking it on your own time. **You must use the calculators that are supplied by the Testing Center.** The final exam will be given in the classroom, and you may use your own calculator.

Quizzes

Twelve quizzes will be given, but the two lowest grades will be dropped. Each quiz is worth 12 points, for a total of 120 points. You are expected to do your own work on quizzes. Quizzes are open-book and are taken online on any computer with Internet access (home or school) within the specified range of dates and times. The start date listed on the Cobra calendar indicates the date the quiz will first be available (at 6:00 am) and the end date listed on the Cobra calendar indicates the final date you can access the quiz (at 11:59 pm). Late quizzes will not be accepted. There are two special notes about taking the quizzes:

- 1) You should begin your quiz well before the deadline. Saving each question as you proceed is a good idea. Cobra will auto-submit the quiz at the deadline if you are still working on it.
- 2) Once you begin the quiz, the clock starts running and does not stop, even if you leave the quiz or log out of Cobra. Once you start the quiz, you should plan on finishing in the same sitting. However, if there is time left you may go back and resume even if the quiz crashes or you have logged out.

If you fail to take one or two quizzes for any reason, those will simply count as your dropped quizzes. This includes quizzes which you fail to take or complete due to technical issues not related to the college servers. Because I do not distinguish between technical and non-technical issues, you will want to use your opportunities wisely, saving your dropped quizzes for when you really need them. Do not waste a dropped quiz by waiting until the last minute and then finding that you have Internet access difficulties. If you have unreliable service from home, take the quizzes from a location with more reliable service, such as Parkland.

Homework

Fourteen homework assignments will be given, but the lowest two grades will be dropped. Each homework assignment is worth 10 points for a total of 120 points. Homework is a very important part of this course. It helps you understand the material covered in class and better prepares you for quizzes and exams. Each homework assignment consists of two parts: LearnSmart and problems. LearnSmart is a tutorial that customizes itself based on your responses and helps you learn chemical concepts. The due date of the homework will be listed on the Cobra calendar (due at 11:59 pm). You should not leave the homework assignments until the due date. Instead, try to finish problems as we progress into the chapter. **Homework is 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 it online. As with the quizzes, **if you fail to do one or two homework assignments for any reason, those will simply count as your dropped homework.** Late homework will not be accepted.

Laboratory

Eleven laboratory experiments/reports will be assigned, but the lowest grade will be dropped. The labs are worth a total of 180 points. Details are in the lab syllabus.

Miscellaneous

There will be clicker questions in class, and your total will be scaled to **30 points**. The clicker questions will also serve to record your attendance. Your total score will be based both on correct answers and attendance. I also expect you to participate in class by asking questions when you need to and responding when I ask a question. There is also a semester project worth **30 points** with preliminary checkpoints worth **10 points**. Details on the project will be given later in the semester.

Make-up Policy

There are no make-ups. The dropped quizzes, 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.

Academic Honesty

It is your responsibility to read and understand the Academic Honesty section of the Parkland Student Policies and Procedures Manual. A portion of this section reads, "Depending upon the nature of the case, [the resolution of the incident] could carry the penalty of a failing grade for that assignment or for the course." See [Student Policies and Procedures](#) for more detail. The penalty depends on how serious and how intentional I judge the dishonesty to be. At minimum, you will lose half of the points on the assignment and more likely all of the points. Be especially careful of plagiarism on the semester project.

Material Covered

This is a list of the chapters that will be covered in lecture. The course calendar, available on Cobra, gives a tentative schedule of lectures and due dates for assignments. **Please note that the material covered in this class builds upon material covered earlier in the semester.** A list of course objectives is available on Cobra.

Unit 1	Chapter 1: Chemistry: The Science of Change Chapter 2: Atoms and the Periodic Table Chapter 3: Quantum Theory and the Electronic Structure of Atoms Chapter 4: Periodic Trends of the Elements
Unit 2	Chapter 5: Ionic and Covalent Compounds Chapter 6: Representing Molecules Chapter 7: Molecular Geometry, Intermolecular Forces, and Bonding Theories
Unit 3	Chapter 8: Chemical Reactions Chapter 9: Chemical Reactions in Aqueous Solution Chapter 10: Energy Changes in Chemical Reactions Chapter 11: Gases
Unit 4	Chapter 12: Liquids and Solids Chapter 13: Physical Properties of Solutions Chapter 14: Entropy and Free Energy Chapter 15: Chemical Equilibrium

Course Grading

Point Distribution (1000 points total)	
Quizzes (top 10 out of 12)	120
Homework (top 12 out of 14)	120
Hour-Exams (4)	310
Cumulative Final Exam	200
Laboratory	180
Project and Clicker Questions	70

Final Grade				
90% or greater	80-89%	70-79%	60-69%	59% or less
A	B	C	D	F

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.

Assistance

Center for Academic Success

The Center for Academic Success provides a wide range of academic support services to enable you learn well, grow as a student, succeed in your classes, and excel at what you do. These services include the following:

- **Tutoring and Learning Assistance:** Make use of walk-in tutoring services provided by faculty, staff and trained peer tutors on a daily basis. Many students come to get help in reading, writing, math (all levels), and study skills.
- **For-credit Instructional Modules and Supplemental Tutorials:** Enroll in one-credit hour tutorials to supplement classroom instruction in reading, writing, and math. Instructional Modules are also available to eligible students to complete certain coursework requirements.
- **Advising and Advocacy:** Work with our team of advocates and academic advisor to plan a semester schedule, understand transfer requirements, or manage issues that stand in the way of school.

For more information, please contact Anita Taylor (353-2005) or Sue Schreiber (351-2441) in D120. You may also email the CAS at CenterForAcademicSuccess@parkland.edu.

Writing Lab

The Writing Lab is a free service in which English instructors will review your writing projects, offer feedback, and answer your questions. The Writing Lab is located in the Center for Academic Success in Room D120.

Computer Related Technology Assistance for Students

Contact the TechSD for assistance with technical questions and issues regarding Parkland's student e-mail, Cobra Learning System, Wi-Fi access, or my.parkland. You may email TechHelp@parkland.edu or call 217-353-3333. If you wish to visit in person, the hours are Monday to Thursday 7:30 am to 6:00 pm and Friday 7:30 am to 5:00 pm in Room A184 or Monday to Thursday 10:00 am to 2:00 pm and Friday 10:00 am to 12:00 noon in the Parkland Library.

Students with 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 U264, 217-353-2082, crobinson@parkland.edu.

Mass Notification System

In the event of a significant campus emergency, Parkland College will activate its mass notification system. You may sign up for this free service and select how you would like to be notified: text message, audio message, or email message, at <http://www2.parkland.edu/publicsafety/alerts.htm>.

Parkland College Mission Statement

To engage the community in learning