## **Parkland College**

**Chemistry Courses** 

**Natural Sciences Courses** 

2015

# Chemistry 107 Chemistry for Health Professions II Online Fall 2015

David M. Wilson

Parkland College, dawilson@parkland.edu

#### Recommended Citation

Wilson, David M., "Chemistry 107 Chemistry for Health Professions II Online Fall 2015" (2015). Chemistry Courses. 21.  $http://spark.parkland.edu/chem\_course/21$ 

Open access to this Course Materials is brought to you by Parkland College's institutional repository, SPARK: Scholarship at Parkland. For more information, please contact spark@parkland.edu.

# **Syllabus**

# CHE 107: Chemistry for the Health Professions II (Fall 2015)

The mission of Parkland College is to engage the community in learning.

#### Instructor

Dave Wilson

Cell & Text: (630) 216-9617

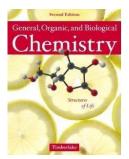
Fax: (217) 373-3830

Email: dawilson@parkland.edu

Once you have access to Cobra all email communication should take place within Cobra Email.

Note that Parkland is in the **Central Time Zone**! If you are in the Eastern Time Zone, you should subtract 1 hour to get Parkland time. Mountain Time Zone should add 1 hour and Pacific Time Zone should add 2 hours, etc. All posted due dates and times for both this course and Parkland College deadlines are based on the **Central Time Zone**.

### **Required Materials**



- 1. The required text for this course is General, Organic and Biological chemistry, 2<sup>ND</sup> edition by Karen Timberlake. Note that this is not the most recent edition of this text which means you can get it cheaply online. Check your favorite online bookstore or Amazon. Make sure you get the version with the cover shown here. **You might want to** pay for expedited shipping to make sure you get your text by the time the first module begins.
- 2. You will also need to self-register for the online homework system called Sapling. Registration instructions for Sapling can be found in Cobra.
- 3. You will also need the lab supply kits. **There are 2 of them**, but some of you may already have one of them if you took CHE 106 at Parkland recently. One of them is called the Che 100, 106, 107 kit and the other is the Che 106, 107 kit. These kits are only available through the <u>Parkland College Bookstore</u>. Note that these kits are non-returnable even if unused. The kits will contain all the lab supplies (glassware, balances, pipettes, etc) that you will need this semester. Chemicals may need to be purchased if you don't have them in your kitchen at home. Make sure the bookstore personnel give you both kits if needed. Sometimes student workers don't notice that there are 2 separate kits required.
- 4. A reliable computer with internet access. It is your responsibility to make sure that your system is in proper working order. Parkland has support for issues related to Cobra. See the Cobra login page or information towards the end of this syllabus (Computer Related Technology Assistance for Students). MasteringChemistry has good customer service on their website. Other issues can be funneled through your instructor.
- 5. The only other requirement for the course is access to a kitchen. This is an IAI approved laboratory course, so you will be performing a number of laboratories at home. Every effort has been made to choose labs that require few materials beyond that found in a normal kitchen, but there will be times when you may have to obtain additional supplies. You are strongly encouraged to preview lab assignments well before the due date so that you have ample time to obtain all needed materials.

#### **How You Will Be Evaluated**

## **Course Entry Activities**

There will be a set of activities due during the first few days of the course. These activities are designed to introduce you to the various features of Cobra that you will be required to use during the semester, to make sure that you have the proper materials needed for this course, and a few other details. There will also be an introductory discussion assignment. These Course Entry Activities (other than the introductory discussion) will not be graded. However, if you do not complete these assignments by the due date, you may be dropped from the course!

## Quizzes

Quizzes will be available within Cobra. **There are no retakes on the quizzes and no extensions on the deadlines for any reason whatsoever**. I will drop your lowest quiz grade at the end of the semester. All the quizzes will contain a combination of objective (e.g. mostly multiple choice) and subjective (e.g. short answer) questions. For this reason, feedback on your quiz will not be instant because I will have to grade the subjective questions by hand.

Since you take the quizzes outside of a traditional classroom, I do not prohibit the use of your text or any other resources. However, each quiz has a time limit associated with it and it is mandatory that you complete the quiz in the given time allowance. **Be** aware, however, that you will not have all your normal resources when you take the final exam (see below for more information on the final). This means you should endeavor to understand the material and not just get in the bad habit of looking up information as needed.

# **Labs and Group Activities**

As noted before, this is a laboratory course; therefore, the lab component is a sizable and important part of the course. While experiments done at home in a kitchen or over the internet may not seem to be as sophisticated as those done in a lab setting, my experience has been that students think more deeply and extract more value from home labs than most students do on campus.

While most of the labs will be done individually, there will be a couple labs that are group activities. These group activities can be completed in an online chat environment or you may choose to meet in person. You are responsible for finding a group of students to work with for the two group activities. I know that it is sometimes difficult for students to arrange online time with their group. So please consider your schedules very carefully when assembling your groups.

Successful group work requires planning ahead and some flexibility on your part. The benefit is that the final product of group work is always better than any individual effort. So, use your group members effectively and wisely.

#### **Online Homework**

In this class, as in most science classes, practice problems are one of the most important methods utilized in learning material. You may attempt problems several times. However, you should take the homework very seriously. This is where you will apply what you are learning in other parts of the course and will be an important component in your preparation for quizzes and the final exam. See Required Materials above for information on how to register for MasteringChemistry.

All computerized homework systems have shortcomings and MasteringChemistry is no exception. Computers are not very tolerant of slight formatting differences. If you get stuck on a problem you are always welcome to contact me, one of your classmates, or post a question in the Open Discussion forum. **Don't get yourself frustrated by attempting everything on your own – especially when you think you're correct and the system is telling you you're wrong.** Since technical issues are certain to happen and unavoidable I give full credit for homework if you score at least 90%.

# **Semester Project**

The semester project will be posted during the first week of classes. It will involve analyzing primary literature (original research) and evaluating it in terms of criteria that are considered best practices in scientific research. The introductory discussion during week 1 of the class will be designed to make sure that all of you understand the difference between primary literature and secondary literature and other publications.

#### **Final Exam**

The final exam will be administered in Cobra and will be cumulative. *It must be completed in a proctored environment and each student is responsible for finding their own proctor.* More information on finding a suitable proctor will be forthcoming. Note that the final exam is a major portion of your course grade. And this is the only assignment in which you will not be allowed to use all your normal resources (notes, text, internet, other people, etc). *Thus, it is imperative that you prepare for this from the very beginning of the semester by learning the material rather than overly relying on the use of your normal resources.* 

# **Points (subject to change)**

Category	Points per unit	Units	Total points per category
Quizzes	25	11	275
Labs	20	12	240
Online Homework	10	12	120
Semester Project	115	1	115
Final Exam	250	1	250
		Total course points	1000

Grading Scale – please note that this is <u>not</u> a typical grading scale (90%, 80%, 70%, 60%) that you see in most courses. This grading scale is due in part to the online nature of this course.

Points	Percentage	Letter Grade
920-1000	92%	А
840-919	84%	В
760-839	76%	С
680-759	68%	D
0 – 679	< 68%	F

#### **Other Course Policies**

#### **Due Dates/Working Ahead**

**Due Dates:** All assignments in the course are due by 11:59 PM on the date posted on the Cobra calendar – unless otherwise indicated. I have the discretion of assigning any late work a zero grade. However, I am flexible, so it is always better to turn in an assignment a couple days late than not at all. The only exception, as already stated, is the quizzes which must be completed within the scheduled dates.

**Working Ahead**: You are welcome to work ahead as much as you'd like in the course. The only exceptions to working ahead are the Final Exam (unless you make special arrangements with your instructor), the semester project discussions (since you will be required to reply to other students whenever those posts are made), and group activities (unless you make arrangements with all group members). Final exams are available only during the times listed on the Cobra calendar. If you need access to a future module that is not open, simply send me an email and I will open it as soon as I can.

There is a "Syllabus Addendum" which can be found on the Cobra home page for CHE107. This addendum contains information about accommodations for disabilities, code of conduct, services provided by the college designed to improve your chances of success, and other important information. Please read this information.

Revised: August 2015 by David Wilson