Drexel University
Chem 108 – Health Chemistry I
Fall 2015 Syllabus

Instructor: Dr. Molly A. O'Connor
Email: mao23@drexel.edu
Office: Stratton 410
Phone: (215) 895-2666

Note: Recitation instructor information will be provided during the first day of lecture, and will be available on the BbLearn course website.

CLASS SCHEDULE

Lecture:	W F	11:00 –11:50 am	Disque 103
Office Hours:	Mon	1:30 – 3:30 pm	Stratton 410
	Tues	1:30 – 3:30 pm	Stratton 410
	Also available by appointment		

COURSE DESCRIPTION

Health Chemistry I covers the physical and chemical properties of substances used in medical areas and related principles including but not limited to atomic structure, bonding, gases, solutions, acids and bases, oxidation-reduction, and nuclear chemistry. Examples are taken from pharmacology, nutrition, and other allied health fields

COURSE OBJECTIVES

- To understand the concept of the atomic and molecular nature of matter
- To solve problems in the quantitative areas of chemistry important in the health sciences, such as stoichiometry and mass balance, solution concentrations, and chemical reactions
- To understand the electronic structure of atoms and molecules
- To understand basic concepts of nuclear chemistry

COURSE MATERIALS

Required:

- The title of the textbook is *Health Chemistry I*, the ISBN is 9781308300283, and the publisher is McGraw-Hill. This is a custom textbook and can only be purchased through the Drexel Bookstore, either in person or using the following link: http://drexel.bncollege.com/.
- An online homework system called ***ConnectPlus®*** will be used throughout the course. Each student is REQUIRED to have his or her own access code to the system. All homework assignments must be submitted through Connect! The textbook includes a Connect access code, or you can purchase an access code directly from the Connect website at http://connect.mheducation.com/class/m-oconnor-fall-2015-wf-11am.

Web:

The "BbLearn" course website will be used extensively throughout the course. Lecture notes, course announcements, and exam information will be regularly posted. Emails will also be sent to your Drexel email account. Students are responsible for checking the course website and email on a regular basis.

COURSE EXPECTATIONS

Lecture:
Lecture will be conducted through PowerPoint lectures as well as through in-class demonstrations and activities. Lecture notes will be posted on the course website after class. Though lecture is the major portion of the course, students must still read the relevant readings from the textbook. Although an attendance grade will not be given in this course, regular attendance is ***STRONGLY RECOMMENED***!

Homework Problem Sets:
Twelve homework problem sets will be assigned and completed through the CONNECT website. Regular work on problems is *ESSENTIAL* to your mastery of the topics presented in Chem 108. The assigned problems will be posted through the CONNECT website. Due–dates for homework assignments are included in the course schedule at the end of the syllabus and on the Connect website. Each student will have the lowest assignment score dropped. Late homework assignments will not be accepted!

LearnSmart® Activities for Homework Extra Credit:
LearnSmart is an adaptive study tool provided by CONNECT. Ten LearnSmart Activities have been set up on the CONNECT website, one for each chapter. These activities are not mandatory, but are highly recommended to help students learn the material. The LearnSmart system tailors the questions to your knowledge of the material to help students better grasp the concepts. The due-dates for these activities are set for the end of term, and their completion will result in extra credit homework points for the student.

Recitation:
Recitations are designed to give you further experience in explaining and working problems. The assigned problems listed on the course syllabus will be covered in class, but students should at least attempt these problems prior to class. Recitation instructors are prepared to answer any question in this course, but priority will be given to those on the current subject matter. Recitation grades will be determined based on both participation and attendance.

If you cannot attend your regularly scheduled recitation, you must attend another recitation that same week and sign in, with that instructor's permission, to earn credit for that week. You must notify your regular instructor to let her know that you attended another recitation. You may only make up 3 recitations during the term. Please see the course website for the list of recitation meeting times and instructor contact information.

Exams:
There will be three 50-minute exams during the term and a 2-hour comprehensive final exam. All exams, including the final, will be closed book. The exam dates for the in-class exams can be found below and on the class schedule at the end of the syllabus, and will always be held from 8:00 – 8:50 AM in Disque 108 and Stratton 113.

	Time	**Date**	**Location**
Exam 1	8 – 8:50 AM	Wednesday October 14	Disque 108 & Stratton 113
Exam 2	8 – 8:50 AM	Wednesday October 28	Disque 108 & Stratton 113
Exam 3	8 – 8:50 AM	Wednesday November 11	Disque 108 & Stratton 113
Make-Up Exam	8 – 8:50 AM	Wednesday December 2	TBA

If you miss an in-class exam, a make-up exam will be given at the end of the term (location TBA). You do not need an excuse to take the make-up if you miss an in-class exam, but you *MUST* attend the make-up or receive a score of zero. You may make-up only one exam, and only because of an absence.

The date, time, and place of the final exam will be announced later in the term. ***Do not make travel plans until you know your final exam schedule***! NO MAKE-UP EXAMS WILL BE GIVEN FOR THE FINAL EXAM!

Americans with Disabilities Act:
Students requesting accommodations due to a disability at Drexel University need to present a current Accommodation Verification Letter (AVL) to faculty before accommodations can be made. AVL's are issued by the Office of Disability Resources (ODR). For additional information, visit the ODR website at http://www.drexel.edu/oed/disabilityResources, or contact the Office for more information: 215-895-1401 (V), or disability@drexel.edu

Electronic Devices:
Students may use computers, laptops, and electronic tablets for note taking purposes ***ONLY***. The use of computers, laptops, and electronic tablets for ***any other purposes***, as well as the use of cell phones, iPods, mp3 players etc., will be ***strictly prohibited*** during class! If students are unable to abide by these rules, all electronic devices will be prohibited!

GRADING

Tentative grade cutoffs are shown below. The instructor reserves the right to lower some or all of the grade cutoffs.

Letter Grade	**A**	**A-**	**B+**	**B**	**B-**	**C+**	**C**	**C-**	**D+**	**D**	**F**
%	100-93	92-90	89-87	86-83	82-80	79-77	76-73	72-70	69-67	66-65	Below 65

The grading rubric for the course is as follows:

Homework Assignments	10%
Recitation	10%
In-class Exams	50%
Final Exam	30%

Academic Honesty:
Drexel University is committed to a learning environment that embraces academic honesty. In order to protect members of our community from results of dishonest conduct, the University has adopted policies to deal with cases of academic dishonesty. Please read, understand, and follow the academic policies on Academic Dishonesty located at
http://www.drexel.edu/provost/policies/academic_dishonesty.asp.

Add, Drop And Withdrawal Policies:

- You can **add** this course until the end of week 2
  See http://www.drexel.edu/provost/policies/course_add.asp
- If you add this course after the start of the term, you are responsible for completing ALL work that you may have missed.
- You can **drop** this course until the end of week 2; the course will then be removed from your transcript – See http://www.drexel.edu/provost/policies/course_drop.asp
- The course **withdrawal** deadline is November 6th. You will have received some graded work prior to this deadline. If you have any questions about your progress at any time of the term, please contact me. If you choose to Withdraw, a "W" will be recorded in your transcript
  See http://www.drexel.edu/provost/policies/pdf/course_withdrawal.pdf

TENTATIVE SCHEDULE

The instructor reserves the right to change the schedule of topics, readings, homework assignments, etc., if necessary. Appropriate advance notice will be given by in-class announcement and on the course website. The dates of in-class exams and the final exam will not change.

Week	Lecture Dates	Lecture Topics	Recitation Assignment	Due Dates and Notes
1	W 9/23	• Matter & Measurement (Ch 1)	• **Recitation will not meet this week!**	***Classes Cancelled Friday!***
2	W 9/30 F 10/2	• Matter & Measurement (Ch 1) • Atoms & Periodic Table (Ch 2)	• **Chapter 1**: 69, 73, 79, 85 • **Chapter 2:** 37, 44, 54, 58, 59, 67, 83, 93	
3	W 10/7 F 10/9	• Atoms & Periodic Table (Ch 2) • Ionic Compounds (Ch 3)	• **Chapter 3**: 33(abc), 60(abc), 62(abc), 72(bcd), 80(ace), 82(agh), 89, 91	***Welcome to CONNECT HW and Ch 1 HW due M 10/5*** ***Ch 2 HW due Sat 10/10***
4	W 10/14 F 10/16	• Covalent Compounds (Ch 4) • Chemical Reactions (Ch 5)	• **Chapter 4:** 28, 36(abc), 41, 44, 54, 56, 72(cd), 91	**Exam 1 W 10/14** ***Ch 3 HW due Th 10/16***
5	W 10/21 F 10/23	• Chemical Reactions (Ch 5)	• **Chapter 5**: 52(abd), 54, 62, 72(ac), 74(a), 76(b), 88, 93, 101	***CONNECT Drawing Tools HW and Ch 4 HW due Th 10/22***
6	W 10/28 F 10/30	• Energy (Ch 6 & Specific Heat)	• **Chapter 6:** 40, 42, 44(ac), 49, 62, 68ac, 74, 93 • **Specific Heat (Suppl. Material):** 10	**Exam 2 W 10/28** ***Ch 5 Part 1 HW due M 10/26***
7	W 11/4 F 11/6	• Gases, liquids, & Solids (Ch 7)	• **Chapter 7**: 70, 72, 80, 90, 92, 96, 101, 105	***Ch 5 Part 2 HW due M 11/2***
8	W 11/11 F 11/13	• Solutions (Ch 8)	• **Chapter 8:** 34(ace), 38(abc), 45, 51, 64(ac), 66, 86, 115	**Exam 3 W 11/11** ***Ch 6 HW due M 11/9***
9	W 11/18 F 11/20	• Acids and Bases (Ch 9)	• **Chapter 8:** 96, 99(abd), 114 • **Chapter 9:** 38(abc), 48(ab), 62, 76, 86, 90	***Ch 7 HW due M 11/16***
10	T 11/24	• Acids and Bases (Ch 9) • **Lecture will meet T 11/24 as a make up for F 9/25!**	• **Thanksgiving Break - No Recitations this Week**	***Ch 8 HW due M 11/23***
11	W 12/2 F 12/4	• Nuclear Chemistry (Ch 10) • Final Exam Review	• **Chapter 9:** 94, 106, 116 • **Chapter 10:** 36, 68, 75, 78, 82	***Ch 9 HW due M 11/30***
12	**Final Exams Week 12/8 – 12/12: Date, Time, and Location TBA**			***Ch 10 HW due M 12/7***