

CHEM 151 Elementary Physiological Chemistry A-Fall2014
Syllabus

Lectures: M,W,F 09:20-10:10 (SEC 001) Cuneo Hall 210
10:25-11:15 (SEC 002) Cuneo Hall 109

Lecturer: Dr. Polina Pine , PhD
Email: ppine@luc.edu
Office: 403, 773-508-3134
Office Hours: M,W,F 12:30-1:30

Teaching Assistants::

Jesse Goossens
Email: jgoossens@luc.edu
Office Hours: M,Th 2:00-3:00 pm
Office: FH020

Jonathan Hill
Email: jhill17@luc.edu
Office Hours: Thu 1:00-2:00 pm
Office:

Angela Mahaffey
Email: amahaf1@luc.edu
Office Hours: Tu 4:30-5:30pm (in the Lab 204)
Office: Flanner Hall 406

Discussions:

SEC 003 M 12:35-1:25pm - Jonathan Hill (TA)
SEC 004 M 1:40-2:30pm - Jonathan Hill (TA)
SEC 005 W 12:30-1:25pm- Jesse Goossens (TA)
SEC 006 W 1:40-2:30pm - Jesse Goossens (TA)

LABS

SEC 007 M 2:45-4:30pm - Jonathan Hill, Angela Mahaffey (TAs)
SEC 008 Tu 2:45-4:30pm - Jesse Goossens, Angela Mahaffey (TAs)
SEC 009 W 2:45-4:30pm - Jonathan Hill, Angela Mahaffey (TAs)
SEC 010 Tu 12:00-1:45pm - Jesse Goossens, Angela Mahaffey (TAs)
SEC 011 Tu 9:30-11:15am - Angela Mahaffey (TA)

Textbook:

Required: *Fundamentals of General, Organic, and Biological Chemistry (7th ed.)* by McMurry, Ballantine, Hoeger, and Peterson

Materials:

1. "Mastering Chemistry online learning system for the textbook" Course name *PINECHEM151F14*

You can buy the Mastering access code online at
<http://masteringchemistry.com/site/register/new-students.html>

2. A scientific non-graphing calculator
 3. Lab coat
 4. Periodic Table
- Optional: Study Guide and Solutions Manual to the textbook

Course Overview

The fundamentals of general and organic chemistry as well as selected topics from biochemistry are discussed in the course.

For success in this course, it is important that you work on problems every day and that you *do not fall behind*. Chemistry moves fast, and it is imperative that you keep up. It is strongly recommended that you do the practice problems in the textbook every day and ask questions of the instructor and teaching assistant.

Special Note: **You have to read the textbook before the class.** The Home Work in a form of Mastering Chemistry will be given on each studied chapter in the book and will be graded (refer the Tentative Schedule for the chapter list). It is very important that you constantly using the Mastering Chemistry resource every day. The publisher representative will give the detailed explanation and a short manual of the MC on the second lecture of the course.

The successful completion of the course and a good grade can be successfully achieved by completing **all** the requirements of the course:

1. Reading the textbook
2. Attending the lectures
3. Attending the discussion session
4. Completing the Mastering of Chemistry Assignments
5. Completing Lab Assignments
- 6. Fulfilling the safety rules**

Instructor Privileges

Instructor reserves the right to make changes and adjustments to this syllabus as necessary, including, but not limited to, the grading policy and course schedule.

Grading System

Exam I	100 pts
Exam II	100 pts
Exam III	100 pts
Final Exam	100 pts
Lab	115 pts
HW (Mastering Chemistry)	18-20 pts

Exams	70%
Mastering Chemistry	10%
Lab	20%

93-100%	A	65-69%	C
90-92%	A-	60-64%	C-
85-89%	B+	55-59%	D+
80-84%	B	50-54%	D
75-79%	B-	<50%	F
70-74%	C+		

With the concerns about rounding please refer to chapter 1.11 from the textbook of the course.

Tentative Schedule

Aug 25	M	Introduction, State of Matter, Measurements in Chemistry,	1
Aug 27	W	Significant Figures, Scientific Notation, Conversions, Atoms and Periodic Table	2
Aug 29	F	Atoms and Periodic Table, Ionic Compounds	2,3
Sep 1	M	Labor Day	No class
Sep 3	W	Molecular Compounds	4
Sep 5	F	Molecular Compounds	4
Sep 8	M	Chemical Reactions	5
Sep 10	W	Chemical Reactions	5,6
Sep 12	F	Chemical Reactions ,Energy Rate	6,7
Sep 15	M	Energy Rate	7
Sep 17	W	Exam I	
Sep 19	F	Gases Liquids and Solids	8
Sep 22	M	Acids and Bases	10
Sep 24	W	Acids and Bases	10
Sep 26	F	Intro to Organic Chemistry	12
Sep 29	M	Alkenes, Alkynes, Aromatic Compounds	13
Oct 1	W	Alkenes, Alkynes, Aromatic Compounds	13
Oct 3	F	Acohols, ethers,thiols	

Oct 6	M	Mid Semester Break	No class
Oct 8	W	Acohols, ethers,thiols	14
Oct 10	F	Acohols, ethers,thiols	14
Oct 13	M	Acohols, ethers,thiols, Amines	14,15
Oct 15	W	Review Organic Chemistry	
Oct 17	F	Exam II	
Oct 20	M	Amines	15
Oct 22	W	Carboxylic acids and their derivatives	17
Oct 24	F	Carboxylic acids and their derivatives	17
Oct 27	M	Carboxylic acids and their derivatives	17
Oct 29	W	Amino Acids and Proteins	18
Oct 31	F	Amino Acids and Proteins	18
Nov 3	M	Amino Acids and Proteins	18
Nov 5	W	Enzymes and Vitamins	19
Nov 7	F	Enzymes and Vitamins	19
Nov 10	M	Enzymes and Vitamins	19
Nov 12	W	Lipids	24
Nov 14	F	Lipids	24
Nov 17	M	Lipids	24
Nov 19	W	The Generation of Biochemical Energy	20
Nov 21	F	The Generation of Biochemical Energy	20
Nov 24	M	Exam III	
Nov 26	W	Thanksgiving	No class
Nov 28	F	Thanksgiving	No class
Dec 1	M	The Generation of Biochemical Energy	20
Dec 3	W	The Generation of Biochemical Energy	20
Dec 5	F	Review	
FINAL for CHEM 151 - Tuesday 12/16 (Dec 16th) 9:00 to 11:00 in FH-133			

MAKE-UP EXAMS AND QUIZZES WILL NOT BE GIVEN: If a properly documented emergency (minimally written, signed, and documented by doctors, judges or similar officials, along with notification prior to the examination as well as appropriate reason

and valid time period is required) prevents one from taking an exam, the instructor may allow an averaging of the other two examinations to calculate a grade for an excused exam. Absence from the final examination will result in a zero for that exam. Note—*no makeup work, extra credit, or the like will be awarded*; such an opportunity would not be fair to the others in the class and will not be entertained.

LABORATORY: There is a lab portion of this course.

Grading:

There will be a Safety Quiz worth 5 points on your first day of lab followed by equipment check-in. There will be a total of nine experiments. The procedure for each experiment can be found on Sakai. Each lab meeting will start with submission by students of the completed Pre-lab on the experiment to be performed that day. The Pre-lab will be worth 3 points. The lab report, due immediately after completion of the experiment, and your technique, during the experiment, will be worth 7 points. There will be a final lab exam worth 10 points, which will be given by your Teaching Assistant. The entire 151 Lab will be worth a total of 115 points.

Please note: NO MAKE-UP LABS will be given.

**SAFTY NOTE: ABSOLUTLY NO DRINKS (INCLUDING WATER) AND FOOD
IN THE LAB!!!**

POINTS WILL BE REDUCED FOR NOT FOLLOWING THE SAFTY RULES

Tentative Lab Schedule:

<i>Week of</i>	<i>Experiment</i>
Aug 25-29	Check-in Safety Quiz, Data Analysis Lab
Sep 1-5	Labor week - No Labs
Sep 8-12	Measurements and Density
Sep 15-19	Chemical/Physical Changes, Temperature Profile
Sep 22-26	Temperature/physical states of water
Sep 29-Oct3	Acid Base Titration
Oct 6-10	Mid Semester Break – No Labs
Oct 13-17	Hydrogen Ion Concentration, pH of Acids Bases and Buffers
Oct 20-24	Organic Structures and Models
Oct 27-31	Reactions of Hydrocarbons
Nov 3-7	Reactions of Alcohols
Nov 10-14	Amino Acids and Proteins
Nov 17-21	Lab Exam and Checkout
Nov 24-28	Thanksgiving Week – No Labs
Dec 1-5	Last week of the semester – No Lab

Academic Integrity

Trust and integrity are important qualities in students, nursing students in particular. All submitted work must represent your own work and your own work only. Academic dishonesty of any kind, such as plagiarism and cheat sheets on exams, will not be tolerated. Any student caught cheating on an assignment in any way will receive a “zero” for that assignment and be reported to Chairperson of the Chemistry Department and the Dean of the Nursing School. For further information regarding the Academic Integrity policy and disciplinary procedures, refer to the Undergraduate Studies Catalog: http://www.luc.edu/academics/catalog/undergrad/reg_academicintegrity.shtml.

Academic Dishonesty

The pressure of getting excellent grades can lead to frustration. However do not let such pressure interfere with your academic honor. It will be an unpleasant situation and there will be consequences if you are caught cheating, a failing grade for the course will be given. No note cards or other material can be used during exam.

Nursing students’ integrity and trust is one of the most important aspects of professionalism. Any student found cheating on any examination will receive an automatic “zero” for that exam and his/her name will be brought to the attention of the Chairman of the Chemistry Department as well as the Dean of the Nursing School. It will then be decided whether further disciplinary action is necessary (in such situations, a permanent note of academic dishonesty will be attached to one’s official records and transcripts).