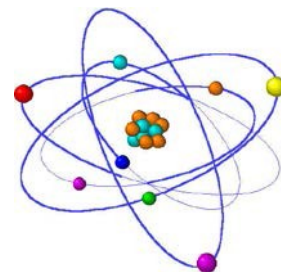




Chemistry 106  
Hunter College of the City University of New York  
Department of Chemistry & Biochemistry



TA:

Office:

Email:

Office hours:

Lab Coordinators: Dr. Gabriela Smeureanu (Room 1320HN) [gsmeurea@hunter.cuny.edu](mailto:gsmeurea@hunter.cuny.edu)  
Dr. Nadya Kobko (Room 1320HN) [nkobko@hunter.cuny.edu](mailto:nkobko@hunter.cuny.edu)

### *Welcome to Chemistry 106*

Chemistry is a challenging and often abstract science, but as you progress through this course we hope you will discover that chemistry is also exciting and that many of the key concepts in chemistry are both important and relevant to life on earth. Throughout this semester we will provide you with the basic skills and knowledge to think and feel like a chemist. You will learn that chemistry is exciting!

#### **Blackboard 9.1:**

You have to use your hunter email to log in on Blackboard.

Instructions on how to access the course website on blackboard can be found at: <http://bb.hunter.cuny.edu>. You should check the site regularly. It can also be used to communicate with your classmates.

Blackboard is an excellent tool. I will post periodically announcements, additional resources and helpful hints. We will use the discussion board to communicate as a class and to discuss laboratory data.

**Email:** You can find information about Hunter email through a link at: <http://www.hunter.cuny.edu/icit/help-docs/e-mail-faq>

Your username and password should have been mailed to you. Please make sure that if you are not using this email account, you set your mail to forward to an account that you do use. Instructions on how to forward mail can be found through the link above. We will be sending you important emails through blackboard. The information you may miss is likely to impact your grade if I don't have email contact with you.

## A. DESCRIPTION

This course will present essential facts, laws, and theories of general chemistry.

## B. OBJECTIVES

Upon successful completion of this course, the student will be able to develop problem-solving skills, use definition, concepts, and ideas to predict how a chemical process will occur, test the understanding of the basic concepts.

## C. GRADING POLICY

Your overall letter grade will be based on the total number of points you earn in the course. The total number of points that can be earned in this course is **2250**. This total will be converted to a percentage (out of 100%) and scaled according to the Hunter College Grading system.

**20 laboratories x 100 pts each**  
**Scientific Presentation 100 pts**  
**Excel exercise 40 pts**  
**Safety quiz 10 pts**  
**Attendance/class participation 100 pts**

## D. LABORATORY POLICY:

Attendance for each laboratory experiment is mandatory. You will be allowed one excused absence for the semester. Any subsequent absences will result in a grade of zero for that experiment. If you are more than 10 minutes late for lab you will not be allowed to complete the experiment. This will count as your one excused absence for the semester. NO MAKE-UP labs.

All cell phones, pagers, CD players, MP3 players, etc., must be turned off while in the class. Any students who disrupt the class will be asked to leave.

### In the first day of lab you will be required to have:

- Laboratory Manual: Chemistry 106 "General Chemistry Laboratory" by G. Smeureanu and S. Geggier (available for purchase ONLY at Hunter College bookstore from January 25<sup>th</sup>)
- Carbon Copy Laboratory Notebook 100 pages -- (available ONLY at Hunter College bookstore)
- Calculator
- Safety glasses (available at Hunter College bookstore or any hardware store)
- **Bring your own computer (if you have one) with you to the lab**

**Academic Dishonesty:** Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The college is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

Hunter College of the City University of New York  
Chemistry and Biochemistry Department

*~ Tentative Syllabus for Chemistry 106~*

	<p>Check-In/Safety video Safety Quiz 10 minutes Excel exercise</p>
	<p><b>What is around us?</b> <b>"Chemistry is LiFe" (Lab 1)</b></p>
	<p>Is volume conserved? "The sneaky ethanol molecules" ( Lab 2)</p>
	<p><b>Data Analysis "Up in the air" (Lab 3 Part A)</b></p>
	<p><b>Data Analysis "Up in the air" ( Lab 3 Part B)</b></p>
	<p>What is in my sample? "Let's find the cations (Lab 4 Part A)</p>
	<p>What is in my sample? "Let's find the cations (Lab 4 Part B)</p>
	<p>Molecular models (Lab 5)</p>
	<p><b>VSEPR and molecular shape</b> <b>"How does it look?" (Lab 6)</b></p>
	<p>How much is a mole? "Avogadro's Number Dilemma" ( Lab 7 Part A)</p>
	<p><b>How much is a mole?</b> <b>"Avogadro's Number Dilemma" ( Lab 7 Part B)</b></p>
	<p>Molecules and reactions "Foiled again" (Lab 8 Part A)</p>
	<p><b>Molecules and reactions</b> <b>"Foiled again" (Lab 8 Part B)</b></p>
	<p>Scientific Presentation 1</p>
	<p><b>Reactants and products – An Online Simulation</b> <b>"I am in equilibrium" (Lab 9)</b></p>
	<p>Le Châtelier's Principle "Where do I shift?" (Lab 10)</p>
	<p><b>Acid, bases and Ka</b> <b>"Where is my Lewis pair?" (Lab 11)</b></p>
	<p>Heartburn and "AUNTY ACID" (Lab 12)</p>
	<p><b>Drop some acid. Drop some base</b> <b>"I am a little buffer" (Lab 13)</b></p>
	<p>Acids, bases, salts and buffers "Acids and bases are pHun!!!" (Lab 14)</p>
	<p><b>Titration curves</b> <b>"Drop the Base" (Lab 15)</b></p>

	Galvanic cell "LEO the lion goes GER" (Lab 16)
	Calorimetry and Thermochemistry "Stealing Joules"(Lab 17)
	<b>Coffee-Cup Calorimetry</b> <b>"Burning Food. Where are my carbs?"(Lab 18)</b>
	Kinetics Iodine-Clock reaction (Lab 19)
	<b>Kinetics Data, Activation energy (Lab 20)</b>
	Scientific Presentation2
	Check-out

- **Bring your own computer (if you have one) for the labs that are bolded in the syllabus above**

**Important Notices:**

Whenever in lab, **Always Wear the Eye Protection: Goggles or Safety Glasses (points will be deducted from your attendance/class participation score)**

Lateness is not tolerated. If you arrive late, you are not allowed to attend the lab.

There are **NO Make Ups** for missed labs.