General Chemistry 10400: Fall 2023



Lecture: Gabriela Smeureanu
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Office Hours: Tue 4-6pm (or by appointment)

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Goal of the course: This is the second semester of a 2-semester general chemistry sequence that begins to prepare you for a science-based career. CHEM 104 is a demanding course and while its primary objective is to introduce you to the fundamental principles that underlie the chemical sciences, to achieve success in this course you will need to organize large quantities of information in coherent ways so that you are able to recall and apply your knowledge. Organization of your time will be essential! And the mathematics is more demanding than in CHEM 102!

This semester general chemistry 2 is using a flipped classroom model of instruction. In this model **you will watch videos and complete online homework weekly, then join class weekly to complete workshop assignments (during your recitation section) and participate in peer-learning activities using an iClicker Cloud/Reef on Wednesday's 10.30am-12.30pm.**

You should plan to spend *at least* 10-15 hours per week watching videos, doing your online homework, engaging with your classmates, and learning the material. We are here to support you in your learning.

Text: For practice questions purposes of this course, you can buy the General Chemistry 2 Let's Practice Workbook from the Hunter College Online Bookstore:
https://hunter.textbookx.com/institutional/index.php

You are not required to purchase a textbook. There is an OpenStax book as part of your Tophat Homework, but you should feel free to use ANY General Chemistry textbook. We will not be working through a textbook in a chapter-by-chapter fashion; rather we will cover 17 chemistry topics and use the textbook as a reference. If you feel the need to buy a recommended textbook *Chemistry, 9th Ed., Zumdahl and Zumdahl* is a good choice. *A used text from Amazon or eBay is perfectly fine!*

Web Sites and Required Homework: As part of this course, we will be using both **Blackboard** and a custom platform called **Tophat**. I will communicate with you via Blackboard and live during our class meetings. During our live meetings you will respond to our reef questions using the reef app.

The Tophat platform will be used to host our course materials and as your online homework. It has been designed specifically for our course.
Every time we meet during class session you will also log onto reef app. You can do this from another browser window on your computer or you can do this from your mobile device.

For workshops you will met with your TA-- That is in your recitation section that you are registered for.

The Tophat platform will be ready for account registration **on Monday, August 21st.**

Chem 10400

Hunter College General Chemistry 2: CHEM 10400- Fall 2023

Instructor: Gabriela Smeureanu Join Code: 238722

You should log on to Tophat (following the instructions in the email you received) as soon as you can and register for our course so that you can become familiar with the web interface. It is imperative that when we meet on Wednesday, August 30th, you are ***already registered*** for our course on the Tophat website.

The email I sent you (using your CUNYFirst email address) provides all the instructions about how to register for our course on Tophat. They are outlined briefly below.

If you received my email:

- Click on the purple "Join Course" link in the body of the email and follow the online instructions. Remember that you must use your EMPL ID number for your Student ID number. The join code for our course is **"238722"**

If you are trying to access the course directly through the tophat website:

1. Log on to https://tophat.com to create an account. (If you already have one skip to step 6.)
2. Click on the "Sign up" link in the top right corner.
3. Click on the blue "Sign up as student" link on the right.
4. Choose "Hunter College" as your school.
5. Enter your First name, Last name, Student number (EMPL ID number) and email address (CUNYFirst or BB email address).
6. Log into your account and click the blue "Join course" tab in the top right.
7. Enter the join **"238722"**

The Tophat platform will be used in lieu of making you buy a textbook and has been designed specifically for our course. This is where you will find ALL course documents including (but not limited to) the Learning Goal Analysis (LGA), Videos, Video PDF documents, Workshops, Reef session PDF documents, Online homework assignments, and Current and Old General Chemistry exams. We will use Blackboard ONLY to view your cumulate course grade at the end. I will upload Reef, Workshops and Exam grades to Blackboard. Tophat will show only your Homework grades.

Please make sure that you **use your CUNYFirst email address to register your Tophat homework account and that you INCLUDE your EMPL ID number in the student number field on Tophat**. In order to register you for the course we have uploaded your CUNYFirst email address into Tophat. If you claim your account this email will be assigned to you. Please make sure that this is the same email address that you use through Blackboard because we will be communicating with you frequently through

the BB platform. If you do not check your email daily, it is possible that you will miss important information - which is likely to have a negative impact on your grade.

Email: Please make sure that you ***use the same email address to register your Tophat account and register your reef***. This should be an email address that you check frequently as we will be using this email to communicate with the class. If you do not check your email regularly it is possible that you will miss important information - which is likely to have a negative impact on your grade.

Grading policy: Every component of this course earns you points towards your final grade, but to earn your points you must complete each component by its due date. Please see the Tophat platform and Pacing Guide for more information on due dates.

To earn full credit in this course you must accumulate 1450 points. 450 points come from your TOPIC grade and 1000 points come from your EXAM grades. The points you earn will be normalized to 100 and then assigned a letter grade according to the Hunter College grading system.

General Chemistry II (Flipped Classroom): Grading Scheme

TOPIC	LGA[1]	Videos[1]	Workshop	Reef	Homework[2]	TOPIC TOTAL[3]	In-Class Exams[4]	Final Exam[4]
Topic 19	1	2	W1 Review: 10	-	12 EC: 12	37		
Topic 20	1	3	W2: 10	C1: 11	12	37		
Topic 21	1	2		-	12	15		
Topic 22	1	1.5	W3: 10	C2: 11	12	35.5		
Topic 23	1	3.5	-	-	12	16.5	Exam 1	
Topic 24	1	2.5	W4: 10	C3: 11	12	36.5	(200 pts)	
Topic 25	1	4		C4: 11	12	28		
Topic 26	1	2.5	W5: 10	C5: 11	12	36.5		
Topic 27	1	3			12 EC: 12	28		Final Exam
Topic 28	1	1.5	W6: 10	C6: 11	12	35.5		(400 pts)
Topic 29	1	2.5			12	15.5	Exam 2	
Topic 30	1	2.5	W7: 10	C7: 11	12	36.5	(200 pts)	
Topic 31	1	2.5	W8: 10	C8: 11	12	36.5		
Topic 32	1	2.5			12	15.5		
Topic 33	1	2	W9: 10	C9: 11	12	36	Exam 3	
Topic 34	1	3.5			12	16.5	(200 pts)	
Topic 35	1	2	W10: 10	C10: 11	12	36		
TOTALS	**17**	**43**	**100**	**110**	**228**	**498**	**600**	**400**
Total Topic Grade Required = 450 out of a total of 498 possible points							**Total Exam Grade = 1000**	
Total number of points to be earned in the course: 450 + 1000 = 1450								

1. The points for each LGA and video set is an all or nothing score – 1 point for completion of an assignment before the deadline and 0 points for completion of an assignment after the deadline.
2. The raw points for each Topic's homework set are scaled to the totals indicated.

3. The total score for each topic is computed by summing the topic components. There are 498 total Topic points, but only the first 450 points count. Think of the extra 48 points as the points that you can waste - if

you miss an assignment. ***You cannot earn more than 450 TOPIC points***. The extra 48 Topic points cannot be applied to your exam score.

4. If you miss an in-class exam the final exam will count for 600 points instead of 400 points. ***There are NO make-up exams***.
5. **Exams:** There will be three equally weighted in-class exams (200 points each for a total of 600 points) given during the semester. There will also be a Comprehensive Final Exam (400 points) given during finals week. If your final exam grade is higher than your lowest in-class exam grades your final grade will count for 600 points and your lowest in-class exam grade will be dropped.

For your exams you will be required to bring a pencil and a calculator to class. All other materials (e.g. periodic table and/or other necessary information such as a formula sheet) will be provided for you. Exams must be taken during the designated class period. *NO MAKE-UP EXAMS will be given*. If you miss one in-class exam you will earn a grade of zero for that exam. This grade will then be dropped as your lowest in-class exam grade and your final exam grade will automatically be counted for 600 points. If you miss more than one in-class exam you will receive a grade of ZERO for the second missed exam.

The total number of points you earn out of 1450 will be normalized to a score out of 100.00 and then assigned a letter grade according to the table shown to the right. Letter grades will be determined based on a score to 2 decimal places. There will be no rounding of scores to determine letter grades.

Letter Grade	Course Requirement
A+	97.50
A	92.50
A-	90.00
B+	87.50
B	82.50
B-	80.00
C+	77.50
C	70.00
D	60.00
F	<60

CR/NC grade: There is NO CR/NC offered for this course. Last day to drop the course with a grade W is Dec 11th

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Exam schedule

- EXAM 1: **Wednesday October 11th**
  This exam is a Chem 104 placement exam. This is the most difficult exam. If you fail this exam you should consider withdrawing from the course.
- EXAM 2: **Wednesday November 8th**
  If you failed exam 1 and you also fail this exam you should begin considering the credit/no credit option as it is now too late to withdraw from the course.
- EXAM 3: **Wednesday December 6th**
  This is your last exam. Make sure you put in enough time and energy to prepare for this exam.
- Final Exam: **Wednesday TBA**

Course Outline and Pacing Guide: This semester we will cover the following 17 topics:

1. Equilibrium	10. Enthalpy
2. Predicting Chem. Change	11. Entropy
3. Acids and Bases	12. Free energy
4. pH depends on position	13. Applications of Free Energy
5. pH Calculations	14. Redox Reactions
6. Polyprotic Acids and Bases	15. Batteries
7. Buffers	16. Chemical Kinetics
8. Titration Curves	17. Arrhenius Theory
9. Heat and Work	

Required Learning Goal Analysis (LGA): Before you begin a new topic, you will be required to complete a Learning Goal Analysis on the Topahat platform. This analysis asks you to read each learning goal for that topic and assess how comfortable you feel with the content presented. There is no wrong answer to an LGA question. The goal is to help you begin accurately self-assessing your own content understanding and focus your attention on the learning goals to drive your learning. These learning goals serve as both an outline for the course and a tool to help you prepare for your exams. **USE the LGA to study for your exams**. Every single Exam question is based on at least 1 learning goal (although some will contain multiple learning goals). There is also an LGA document in the Course Documents folder on Tophat for your review.

Required Recitation Workshops: In addition to completing the videos and LGA assignments, you are responsible for submitting a weekly recitation assignment called a workshop. Workshops are to be completed in groups of 4 students and must be submitted to your recitation instructor. Workshops are available for printing on tophat platform under the workshop folder.

There are 10 required workshops/quizzes assignments this semester. Each workshop is worth 10 points. You must attend the recitation section that you registered for every day to earn these points. If you miss a workshop, you do not earn the points for that workshop. **Remember that there are 48 extra points**

built into your topic grade so if you miss a workshop, you can use 10 of these extra points to make up the loss. Please see the Workshop Grading Policy on tophat platform for more Information.

Reef Questions: As part of this course, we will be making use of the Reef app feature to respond to in-class questions during our reef class every Wednesday. This will serve a dual purpose:

1) Your responses will provide me with real-time feedback about student understanding of course content
2) Your participation will help you practice the material and grow as a chemistry student.

Remember that you MUST take a detailed set of notes during every Reef class meeting. All Reef sessions are required and count for points. These class meetings are grouped into the 18 Topic sessions (see the pacing guide), each worth a total of 11 points. You earn 1 point for attending the reef class for the grade session and then 1 point for every question that you answer correctly during the class. The maximum number of points you can earn per grade session is 11 so only 10 correct responses will be counted for each session. We will generally complete 10-14 questions during each session.

There are 10 graded reef sessions this semester.

You will need to buy an access code and log in to Clicker Reef account using a web browser. You need to use the web browser first, later you can use any device to participate in the class.
https://app.reef-education.com/#/login
You need to sign up using Hunter College CUNY as institution: https://app.reef-education.com/#/account/create
Then follow the registration and purchased the access code.
Then make sure you join our class.
OUR class is CUNY HUNTER COLLEGE Chemistry 10400 Smeureanu (Fall 2023)
LINK: https://join.iclicker.com/HGUS

To register your Reef

1. Go to https://app.reef-education.com/#/account/create
2. Complete the registration questions. **Note:** You must register using your full first and last name and the **same email address you used to register your Topahat account.** Your email address will be used to link your Reef responses to our online student roster.

Grading policy and Pacing Guide: Every component of this course earns you points towards your final grade, but to earn your points you must complete each component by its designated due date. Please see the Pacing Guide and the Tophat platform due dates for more information on assignment due dates. Notice that all the due dates are also associated with the individual assignments on Tophat. The due dates that are listed on Tophat indicate the assignment "**end date and time**". You must make sure that you have completed all the work associated with a given assignment by this date and time. The pacing guide shown in the following page indicates the due dates for every assignment in the course. There will be NO extensions to these due dates so please plan accordingly. The video questions due dates are always Monday evening before you will need to use the information during workshops and for in-class reef questions (Wednesday). The homework end dates are all on Sunday nights at 11:59pm. **To earn full credit in this course you must accumulate a total of 1450 points. 450 points come from your TOPIC grade and 1000 points come from your EXAM grades.**

Accommodating Disabilities: Hunter College is committed to providing access to all programs and curricula to all students. Students with disabilities who may need classroom accommodations are encouraged to register with The Office of AccessABILITY.
http://www.hunter.cuny.edu/studentservices/access

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, see:

http://www.hunter.cuny.edu/studentaffairs/student-conduct/academic-integrity/cuny-policy-on-academic-integrity

Students who are caught cheating on an exam in this course will automatically obtain a grade of ZERO for that exam and will be reported for Academic Dishonesty. This grade of ZERO cannot be used as your lowest exam score to be dropped in the course.

ADA Statement: "In compliance with the ADA and with Section 504 of the Rehabilitation Act, Hunter College is committed to ensuring educational access and accommodations for all its registered students. Hunter College's students with disabilities and medical conditions are encouraged to register with the Office of AccessABILITY for assistance and accommodation. For information and appointment contact the Office of AccessABILITY located in Room E1214 or call (212) 772-4857 /or VRS (646) 755-3129."

Hunter College Policy on Sexual Misconduct: "In compliance with the CUNY Policy on Sexual Misconduct, Hunter College reaffirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-based harassment retaliation against students, employees, or visitors, as well as certain intimate relationships. Students who have experienced any form of sexual violence on or off campus (including CUNY-sponsored trips and events) are entitled to the rights outlined in the Bill of Rights for Hunter College.
