

# **CHEM 970**

## **ENGINEERING CHEMISTRY 2**

### **Spring 2018**

**Dr. Susan K. Maleckar**  
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**CRN 11139    MW 10:00-10:50 Gardner Steel 138**  
**and    Tuesdays 8:00-8:50 Chevron 152**

**CRN 11137    MW 11:00-11:50 Gardner Steel 138**  
**and    Tuesdays 8:00-8:50 Chevron 152**

#### **Communication**

Email is best, but my phone still works. Our course is on CourseWeb. Go there often for partial notes, quiz and exam solutions, etc.

#### **Office Hours**

Tuesdays 8:50-11:00 AM

More hours will be added shortly after the term begins. Check Courseweb for a current list.

Or by appointment – just ask!

#### **Recitation/Lab**

In addition to the above lectures, you must attend one recitation/lab section weekly. The first hour of this four hour session is the recitation portion and is led by a graduate student. Hours 2-4 are the lab portion and are usually led by a different graduate student. Lab takes place in the same room as the recitation.

Recitations give you an opportunity to ask questions in a small group setting. A quiz will also be given most weeks. See schedule at the end of this syllabus for the exact schedule. You should always go to the recitation you are registered for. But, if for some reason you miss your recitation, go to another one during that week if possible. If your TA is not the TA for the makeup section, write your normal TA's name and section info on the top of the quiz. Other than this provision, there are no makeup quizzes.

The lab portion of the course is somewhat separate from the rest of the course, although the grades are combined at the end of the term.

### **Recitation Sections:**

<b><u>Day/Time</u></b>	<b><u>Room</u></b>	<b><u>CRN</u></b>
Mon 1:00-4:50PM	Chevron 214	10369
Wed 6:00-9:50PM	Chevron 209	10365
Wed 6:00-9:50PM	Chevron 217	11269
Wed 6:00-9:50PM	Chevron 214	10366
Thu 8:00-11:50AM	Chevron 214	10874
Thu 8:00-11:50AM	Chevron 217	10370
Fri 1:00-4:50PM	Chevron 214	10873

### **Books and Materials:**

*Chemistry: Atoms First* by Burdge and Overby, 3rd edition

This textbook can be purchased from the bookstore, or from any other source of your choosing. You can also purchase an e-book at a lower cost at [www.mcgraw-hill.com](http://www.mcgraw-hill.com).

You will also need to purchase an online homework account from [www.saplinglearning.com](http://www.saplinglearning.com) for the term in order to complete the online homework required for this course. If you bought a yearlong code from them last semester, you will not need to purchase another code and should contact their customer support for instructions on how to proceed if necessary.

For the lab portion of the course, you will be required to purchase a lab book and goggles for eye safety.

## Grades

- Exams:**
- 3 exams, **100** points each
  - a cumulative final exam, **200** points
- Quizzes:**
- 11 quizzes, 10 points each, given during the recitation sections on the previous week's material
  - the lowest score will be dropped, resulting in a total of **100** points.
- Lab:** The details of the lab grade will be discussed in your lab section. Lab will account for **100** points.
- Homework:** Homework will be completed online at [www.saplinglearning.com](http://www.saplinglearning.com), Due dates will be listed at the site. Your total homework for the term will be worth **50** points.
- In-Class Activities:** Periodically I'll hand out problems to do in class. They will be open book, open neighbor, and collected in class. I don't know how many I'll hand out, but they will be worth a total of **30 points** for the term. There may be some days I just give you points for attendance.

### **Overall Grade:**

Exams	300 pts
Final Exam	200 pts
Quizzes	100 pts
Lab	100 pts
Homework	50 pts
In Class Activities	30 pts

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Total                      780 points

## **Grading**

Your total points will be added up at the end of the term. I will calculate the class average and fix that at about 75%, adding or subtracting points in order to do so. The resulting scores will then be applied to a strict 97/93/90/87/83/80.....etc scale.

Do not rely on a curve in this class. Often the curve is small. Any curve that does exist is at my discretion and will not be determined until the end of term.

## **Exam Regrade Policy**

If you feel that your exam was not graded fairly, you may request a re-grade. To do so, you must submit your exam with your dispute, **in writing**, within two class days of getting your exam back. Your dispute must explain which question you feel was incorrectly graded and an explanation of why you deserve more credit. Note: I reserve the right to re-grade the entire exam when it is handed in for a re-grade. Do not expect to request an exam regrade once the term has ended. Do not bring an exam to me long after the exam was taken.

**WARNING: I will be copying a portion of the exams before handing them back to students. If you change your answers after you get your exams back and then submit them for a re-grade, you risk being caught in violation of the academic integrity guidelines. The consequences for this are severe.**

## **Makeup Policy**

**THERE ARE NO MAKEUP EXAMS.** If you have extreme circumstances, see me ASAP. If you suddenly have reason to miss an exam (extreme sickness, death, etc), you are responsible for contacting me as soon as humanly possible. If you know ahead of time that you cannot make an exam, talk to me as soon as possible to make other arrangements.

Note: Sleeping in **IS NOT** an acceptable reason for a makeup.

## **Academic Integrity**

All of us are expected to follow the University of Pittsburgh's academic integrity guidelines. They can be obtained from the CAS Dean's Office or at [www.fcas.pitt.edu](http://www.fcas.pitt.edu), the undergraduate studies site. **Violations of these guidelines can result in zero points for an exam or failure for the course.**

## **Disabilities**

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of Disability Resources and Services, 216 William Pitt Union, 412-648-7890 as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course.

## **Additional Help**

In addition to this, the Academic Resource Center (ARC) will be offering in The Gardner Steel Conference Center. There is also free tutoring on the Ashe Balcony on the second floor of Chevron. The schedule is posted by the fishbowl door in multiple places in Chevron, including the first floor hallway by the mail slots outside Chevron 107.

## **Final Exam Policy**

You need to check your final exam policy early in the term. If you have three or more finals on the same day, you need to print the form from the Registrar's website, obtain faculty signatures, and file the form with the Registrar. They will move one of your finals for you. Please note that there is a deadline for the submission of this form, and students filing forms after that date will not be given relief.

## CHEM 970 LECTURE SCHEDULE

<b>Week</b>	<b>Dates</b>	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>
1	Jan 8, 9, 10	Chapter 13	Chapter 13	Chapter 13
2	Jan 15, 16, 17	<b>No class MLK</b>	Chapter 19	Chapter 19
3	Jan 22, 23, 24	Chapter 19	Chapter 19	Chapter 15
4	Jan 29, 30, 31	Chapter 15	Chapter 15	Chapter 16
5	Feb 5, 6, 7	Chapter 16	<b>Exam 1 Ch 13, 19, 15</b>	Chapter 16
6	Feb 12, 13, 14	Chapter 16	Chapter 16	Chapter 16
7	Feb 19, 20, 21	Chapter 17	Chapter 17	Chapter 17
8	Feb 26, 27, 28	Chapter 17	Chapter 17	Chapter 17
9	Mar 5, 6, 7	<b>Spring Break</b>	<b>Spring Break</b>	<b>Spring Break</b>
10	Mar 12, 13, 14	Chapter 14	Chapter 14	Chapter 14/18
11	Mar 19, 20, 21	Chapter 18	<b>Exam 2 Ch 16, 17</b>	Chapter 18
12	Mar 26, 27, 28	Chapter 18	Chapter 18	Chapter 18
13	Apr 2, 3, 4	Chapter 20	Chapter 20	Chapter 20
14	Apr 9, 10, 11	Chapter 20	Chapter 20	Potpourri
15	Apr 16, 17, 18	Potpourri	<b>Exam 3 Ch 14, 18, 20</b>	Potpourri
16	<b>April 25 FINAL 10:00-11:50AM Wednesday ROOM TBA</b>			

This schedule is approximate and can change without notice. So, come to class!

# Lab & Recitation Schedule

## Chem 970 Spring 2018

Week	Dates	Recitation	Lab
1	Jan 8 – 12	Welcome	Check-in & #1 Scientific Measurements
2	Jan 15 – 19	Mon: no recitation <b>Online quiz 1 (Sapling)</b> Tues-Fri: normal	No Lab Monday (MLK) Tues-Fri: #2: Chromatography
3	Jan 22 – 26	Quiz 2	#3: Freezing Points of Solutions
4	Jan 29 – Feb 2	Quiz 3	#4: Thermochemistry I
5	Feb 5 – 9	<b>No Quiz</b>	#5: Molecular Modeling
6	Feb 12 – 16	Quiz 4	#6: Rates of Reaction
7	Feb 19 – 23	Quiz 5	#7: Equilibrium Study
8	Feb 26 – Mar 2	Quiz 6	#8: Acids, Bases, Salts, and Buffers
9	Mar 5 – 9	<b>No Class</b>	<b>No Lab -- Spring Break</b>
10	Mar 12 – 16	Quiz 7	#9: Acid-Base Titrations
11	Mar 19 – 23	Quiz 8	#10: Thermochemistry II
12	Mar 26 – 30	Quiz 9	#11: Thermochemistry & Solubility of KHT
13	Apr 2 – Apr 6	Quiz 10	#12: Redox Reactions
14	Apr 9 – 13	Quiz 11	#13: Electrochemistry
15	Apr 16 – 20		Checkout/Survey/Lab Final