

**Chemistry 139****Instructor:** Justine Furutani

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Office hour: by appointment

Website: <http://facweb.northseattle.edu/jfurutani/139/>**Course meeting times:** Daily, 12:00 - 12:50 in AS 1627. We will meet in AS 1519 for demonstrations on some Fridays.**Text:** *Introductory Chemistry* by Peters and Cracolice, 3<sup>rd</sup> ed.**Other required materials:**

- Scientific calculator (strongly recommended, especially for exams)

This is a college chemistry preparatory class for science and engineering majors who intend to take the three quarter sequence of general chemistry. It is a chemistry skills class and is not intended to be a complete course in chemistry.

**This is not a lab course.**

**Content:** This course will cover the following chapters in this order: **1, 2, 3, 5, 11, 12, 13, 6, 7, 8, 9, 10, 15.3, 16, 19.** In order to do this the pace will be about a chapter and a half per week. Don't panic yet, some of the chapters are very short and a lot of them overlap. Topics covered include: matter and energy, measurement and calculations, atomic theory, nomenclature, reactions, stoichiometry, bonding, molecular shapes, solutions, net ionic equations, and redox reactions.

<b>Grading:</b>	Exams	3 at 100 pts each	300
	Activities	12 (drop 1) at 20 pts each	220
	Homework	13 at 20 pts each	260
	Final Exam	200 pts	200
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Grades will be assigned as follows:

4.0    95%                      3.0    85%                      2.0    75%                      1.0    65%

A 1% drop corresponds to a 0.1 drop in grade. The lowest passing grade is 0.7 at 62%. The grade 0.0 will be assigned to all lower percents.

**Homework:** Assigned problems have answers in the back of the text for self-check. No credit on assignments more than a week late. NC will be assigned only at student request.

**Activities:** These are intended to be collaborative, so that you will help each other learn and catch each other's errors. I prefer that a group copy (3 or 4 collaborators) be turned in, but each student should retain his or her own copy. These assignments may be done individually also, but the intent is to stimulate discussion. Submit your answers on the form, showing work. Activities are due the day after collaboration, but may be turned in later, as long as I receive it before the graded assignment is returned or discussed in lecture. The lowest activity will be dropped.

**Exams:** The exams are 50 minutes long. These items represent individual learning, so no collaboration is allowed. Sharing of books, notes, calculators or other materials are **not** allowed during exams. Exams cannot, in general, be made up.

**Cheating:** Don't. Cheaters earn a zero for the assignment. It also means I would be unable to write a favorable recommendation letter for you in the future.

**Attendance:** I will take attendance only at the start of the quarter, but it is imperative that you come to each meeting. If you miss class, contact a reliable fellow student to determine what you've missed.

**Preparing for class:** You should read the appropriate material in the text before lecture. The text is great for beginning students. There are a lot of step-by-step examples to help build your skills and your confidence. In lecture I may skip over some points, assuming you picked them up while reading. You are responsible for all material in the chapters we cover unless I specifically tell you otherwise. I will be including some material that is not in the text for which you are also responsible .

**Chemical sensitivities:** Due to the increasing numbers of individuals developing chemical sensitivities and the increasing awareness of such conditions, everyone who attends this class is asked to refrain from wearing any fragrance or perfume. The greatest feasible efforts will also be taken to ensure a fresh air environment free of not only the above-mentioned fragrances but also potentially harmful substances such as carbon monoxide, formaldehyde, carpet odor, organic solvents, etc. Individuals who are unsure of the importance of this policy should see the Dean for additional information.

**Dates to remember:**

Last day to withdraw without a W	October 3
Last day to drop course	November 14
Last day of instruction	December 10
Final Exam	Tuesday December 9, 1-3 pm

**Electronic devices:** These have become a problem in the classroom recently. The ringing or beeping of such devices disrupts class, particularly during exams. Show respect for your fellow students and your instructor by turning them off when in class.

## HOMEWORK ASSIGNMENTS

Due Date	#	Chapter Exercises
9/25	1	<b>Ch.2</b> 1-43 (odd), 47-61(odd), 65, 69-71(all), 73, 75, 76
9/30	2	<b>Ch.3</b> 1, 3, 9, 11, 15, 17, 35, 37, 41, 43, 45, 49, 59, 71, 85, 87, 89, 91, 98
10/3	3	<b>Ch.5</b> 1-21 (odd), 25-29 (odd), 35-41 (odd), 45, 52, 54
10/10	4	<b>Ch.11</b> 1-5 (odd), 9-27 (odd), 31-61 (odd), 65-81 (odd), 85-89 (odd), 93, 95, 103, 104-108 (even)
10/14	5	<b>Ch.12</b> 1-5 (odd), 9-39 (odd), 43, 45, 47-52 (all), 54, 57, 59, 61
10/17	6	<b>Ch.13</b> 1-53 (odd), 69, 70, 72, 74, 76, 77
10/24	7	<b>Ch.6</b> 1-79 (odd)
10/30	8	<b>Ch.7</b> 1-5 (odd), 7abc, 9-21 (odd), 25, 29, 33-41 (odd), 45, 49, 53-63 (odd), 67, 69, 72, 73
11/4	9	<b>Ch.8</b> 1a,3-65 (odd), 71-76 (all), 78
11/7	10	<b>Ch.9</b> 3-17 (odd), 19,25, 29, 39, 45-77 (odd)
11/14	11	<b>Ch.10</b> 1-11 (odd), 27-35 (odd), 41-47 (odd), 57-65 (odd), 71, 73
11/25	12	<b>Ch.16</b> 5, 9, 11, 25, 27, 33-41 (odd), 45, 47, 53, 83, 85, 91, 97-103 (odd), 141, 145, 146, 148
12/3	13	<b>Ch.19</b> 5-39 (odd), 43-51 (odd), 56, 61, 62

September 22	23	24	25	26
Ch.1,2		Ch.3	<b>HW 1</b>	
29	30	October 1	2	3
Ch.5	<b>HW 2</b>		Ch.11	<b>HW 3</b>
6	7	8	9	10
		Ch.12		<b>HW 4</b> <b>Exam 1</b>
13	14	15	16	17
	Ch.13 <b>HW 5</b>			Ch.6 <b>HW 6</b>
20	21	22	23	24
				Ch.7 <b>HW 7</b>
27	28	29	30	31
		Ch.8	<b>HW 8</b> <b>Exam 2</b>	<b>Reactions</b> <b>Demo</b>
November 3	4	5	6	7
Ch.9	<b>HW 9</b>		Ch.10	<b>HW 10</b>
10	11	12	13	14
	Veterans Day			Ch.15.3 <b>HW 11</b>
17	18	19	20	21
Ch.16				
24	25	26	27	28
Ch.19	<b>HW 12</b> <b>Exam 3</b>		Thanksgiving	
December 1	2	3	4	5
		<b>HW 13</b>	Review	Last lecture Review
8	9	10	11	12
	<b>Final Exam</b> 1-3 pm	Last day of Quarter		