De Anza College

CHEMISTRY 25

MECHANICS OF THE COURSE

Summer '16

Due to the high demand for this class, any student missing any class the first two days will automatically be dropped to make room for another student. Be sure to be in class on time. Allow extra time to find a parking place. Also any student leaving class early will be dropped.

I. Instruction - Mr. Howard Garnel

E-mail: garnelhoward@deanza.edu

II. Purpose of the Course – The Main Purpose of this course is to give you (the student) a sufficient background in the fundamentals of chemistry in order to be successful in Chem 1A.

III. Textbooks - "Introductory Chemistry" (Concepts and Connections), Corwin , 7th Ed. (5th or 6 th Ed is OK)
"Introductory Chemistry – Study Guide + Solutions Manual", Corwin, 7th Ed. (5 or 6)th ed is OK (Optional)
"Introductory Chemistry – Lab Manual", Corwin, 6th Ed.
Do not purchase a used Lab Manual without first checking to determine that all pages for our experiments are present.

Other Items Needed – Safety Goggles (only the type available in the bookstore are acceptable. NO EXCEPTIONS, and a NON-Programmable (non-graphing) "Scientific" calculator (TI 30A Series recommended) (Needed First day of class)
Cell phones my not be used in class as a calculator at any time. If you have a cell phone out in class you will be asked to leave the class.

IV. Grading -

Exams (3)	100 points each
Quizzes	150 points total
Final Exam	100 points
Lab Reports 9	100 points total
Lab Final	50 points

Seven lab reports will be graded on a 10 point basis (two will be worth 20 points each). The total number of lab points (110 points) will then be divided by 1.1 giving a total of 100 points for the lab portion of your grade.

Semester grades will be based on the total number of points accumulated at the end of the semester out of 700 possible points, **88% for an A, 78% for a B, 68% for a C and 58% for a D**. Grades of incomplete, **"I"** will be given only for documented

instructor's discretion, but they will not be raised. It is the **student's responsibility** to keep a record of his/her scores on labs, quizzes and exams in order to determine his/her standing in the class.

Cheating will not be tolerated in any manner. Any evidence of **dishonesty** in class regarding exams and/or lab reports will be used as a potential basis for **dismissal** from this course with a grade of **"F".** In the lab all students must perform his/her **own** work and only use his/her own data unless approved by the instructor. Use of someone else's data, calculations etc. is dishonest and will be treated as such.

All work turned in to me asking for your name, must be shown as

LAST NAME, FIRST NAME Printed(-1 point each time if not in this manner)

V. Labs, Quizzes and Exams –

In the summer each experiment is spread over two days. If you miss either of the two days for each experiment, the maximum number of points that you can receive for that lab report is 5, 10 for the formal lab reports.
You may NOT attempt to do the entire experiment in one day.

Labs - There will be **9** experiments that must be completed to obtain a passing grade in this class. In order for you to perform these experiments you must...

1. **Have your own personal safety goggles**. (Keep these in your lab locker)
2. **Complete the "Pre-Lab Assignment" sheet** for that experiment **PRIOR** to the **STARTING TIME** of the first day of an experiment. These **"Pre-Lab Assignment Sheets"** are due at **12 PM, or 1:30 PM** (depending on your lab section) on the date of the lab. If you are late to lab they will not be accepted for credit. There **will be no time to work on these sheets in class.** The problems on the **"Pre-Lab Assignment Sheets"** must be **set up and solved** for credit. **No credit** for just the answer **even** if the answer is correct. The **"Pre-Lab Assignment Sheets"** are worth **2** of the **10** points for each experiment. Pre-labs will be confiscated from students working on them during lecture.

3. **Lab reports** will be due at the **beginning of the next lab (after completing the experiment) at 12 PM, or 1:30 PM** (depending on your lab section). **Late** "Lab Reports" will be graded for **half** credit up to two days late. After that they will receive no points. All labs must be completed to receive a passing grade in the course. Lab reports will not be graded for credit after 4 days from the due date. There is no time for making up a lab.
4. In addition the instructor reserves the right to prohibit any student from working in the lab if in the instructor's judgment, a student presents a safety hazard to himself/herself or any other person(s) in the class.
5. In the lab you may work with **one** partner (**ONLY ONE**). Both students are expected to be performing and recording their data throughout the experiment (NO

COPYING YOUR PARTNERS DATA AT THE END OF THE LAB -5 points if you do this).

Each student is expected to **actively** participate in performing the experiment in the lab.

6. If you are unable to complete an experiment due to absence (for any reason) you may satisfy the requirement for that lab by writing a 2 or 3 page paper on **a full feature article (6-8 pages)**, from **ANY** issue of **Scientific American** on a topic dealing with some **aspect of chemistry**. **Be sure to include a copy of the article with the paper**. Scientific American is available online, in the library, Barnes and Noble, etc. The paper (like the lab report) is due **at the same time the missed lab** is due and will loose points for being late just like a lab report. The paper must show that you have completely read and comprehend the article. You may also have to discuss the article with the instructor. Only **ONE** missed lab may be made up in this manner. **If a second lab is missed for any reason you will automatically be dropped from the class with a failing grade**. There is no time outside of class for make-up experiments.

7. The last day to turn in **all** lab work is **Aug. 2 at 12 PM, or 1:30 PM** (depending on your lab section). Lab work will not be graded for credit after that. This includes all lab reports, worksheets and Scientific American Reports (if any).

Quizzes – There will be between 8 and 13 quizzes in lecture. I will drop one quiz (your lowest). If we have 12 or more I will drop your two lowest quizzes. The quizzes will be worth 150 points (**equivalent to one and a half exams**). There are no make-up quizzes. If you miss a quiz for any reason, that will be the quiz that is dropped. If you miss more than one quiz you will receive a zero on any additional quizzes that are missed. This is another reason to attend all classes and be on time. You will not get extra time if you are late to class. Quizzes are unannounced, but you should expect one in almost every lecture session. Any questions regarding the grading of a quiz must be presented and resolved on the day that the quiz is returned to you.

Exams – Only **NON-programmable (graphing calculators are programmable)** Scientific calculators may be used on exams and quizzes. Make-up exams can be given only for **documented** legitimate cause. If you cannot take a scheduled exam, notification must be given to the instructor **prior** to the exam by e-mail (**garnelhoward@deanza.edu**). Be sure to leave a phone number where I can reach you that day. Unless I approve of your absence a missed exam represents a **zero** and cannot be erased. Arrangements must be made at this time for a make up. Also **no exams will be dropped** in this class (all exams are used to compute your final grade in the class).

- Please do not attempt to **plea bargain** more points on graded papers (**labs, quizzes** & **exams**).
- There is no extra credit available in this class.

VI. Instructional Methods - The class is taught in a lecture-discussion format. Much complex material is contained in this class. In order for you to effectively learn this material it is inherent that you properly prepare for each class. **This includes your reading the material prior to coming to class**. This is a very important part of the learning process and will significantly enhance your ability to comprehend the material.

You should plan on study time of **at least 2 hours** for **each hour** of lecture for you to be successful in this class. Trust me this is necessary for the class. If you cannot commit to this, you will not be successful in this class.

It is also imperative that you review and practice the material presented as soon as is possible, after each lecture while the material is still fresh in your mind. The longer that you wait the more difficult it will be and will require significantly **more total time.**

You may even find that you will enjoy the class!!!!

VII. Specific Objectives - Students will be expected to answer questions and solve problems similar to those assigned for this class (text and worksheets).

VIII. Other Items –

- **Tardies** - Excessive tardies (**more** than **two** for the quarter) may result in a **lowering** of your grade.
- **Attendance** - Students are expected to attend all classes. A student may be dropped for excessive absences. See college policy in the **current college catalog**. If a student wishes to drop a class, it is his/her responsibility to complete the drop process **including checking-out in the lab**. If he/she does not do this and is still on the roll at the end of the quarter a grade of **"F"** will be received in the class. Also I will **not** back date drop slips.
- All **electronic communications & music devices (cell phones, ipods, mp3 players etc.)** must be turned off in both **lecture** and **lab (and no earphone in your ears)**. It is **NOT OK** to leave lecture to answer cell phones. This is disruptive to the class and not fair to your fellow students. **Texting** during class will be grounds for removal from class. Failure to follow these rules will result in **expulsion from this class**. Please do not let this happen.
- Be sure to remove hats, hoods, ear-phones etc in class.
- Shorts may not be worn in the Lab at any time.
- If a student's behavior is disruptive to the class, the instructor may remove the student from the class. If it happens more than once the instructor may drop the student from the class with a grade of "F" in the class.
- Be sure to sit only in the your designated seat for the class.

IX. Final Exam – Thurs. Aug. 4, 10:00 AM – 12:00 PM I will not accommodate requests for an alternate day or time (no exceptions).

Summer 2016	CHEMISTRY 25		
Corwin, 7 th Ed			H. Garnel
LECTURE AND STUDY ASSIGNMENT SHEET			
LECTURE ASSIGNMENT	**SECTIONS**	**PAGES**	**PROBLEMS/Exercises**
Chapter PSS "Prerequisite Science Skills"			
Measurements, Scientific Notation & Significant Figures (1 & 2)	PSS.1 - 7	11 - 23	1 - 49 (odd)
Chapter 2 "The Metric System"			
Unit Analysis (3)	2.1 - 2.4	29 - 39	1 - 25 (odd)
Density (4)	2.8	47 - 50	47 - 57 (odd)
Temperature and Heat (5)	2.9 - 2.10	51 - 55	59 - 71 (odd)
Chapter 3 "Matter and Energy"			
Matter & Elements (6)	3.1 - 3.2	64 - 69	1 - 15 (odd)
The Periodic Table (6)	3.3 - 3.4	69 - 77	17 - 33 (odd)
Chapter 4 "Models of the Atom"			
Atomic Notation (7) & Atomic Structure (7)	4.4	104 - 107	11 - 23 (odd)
Atomic Mass (8)	4.5	107 - 110	25 - 357 (odd)
Electron Configuration (9, 10)	4.6 - 4.11	110 - 124	47 - 85 (odd)
Chapter 5 "The Periodic Table"			
Chemical Families (11)	5.1 - 5.3	132 - 138	9 - 27 (odd)
Periodic Trends (12)	5.4 - 5.6	139 - 145	29 - 55 (odd)
Valence Electrons & Charge (12)	5.7 - 5.10	145 - 152	57 - 79 (odd)
<13>	**Exam # 1**	**Thurs July 7, 2016**	
Chapter 6 "Language of Chemistry"			
Formulas of Ionic Compounds (14, 15)	6.1 - 6.6	161 - 176	1 - 43 (odd)
Molecular Compounds (15)	6.7	176 - 179	45 - 47 (odd)
Chapter 7 "Chemical Reactions"			
Balancing Equations (16)	7.1 - 7.3	189 - 196	1 - 19 (odd)
Types of Chemical Reactions (16)	7.4 - 7.6	196 - 203	21 - 45 (odd)
Double Replacement (17)	7.10	209	71 - 73 (odd)
Chapter 8 "The Mole Concept"			
The Mole & Molar Mass (18, 19)	8.1 - 8.4	222 - 230	1 - 21 (odd)

LECTURE AND STUDY ASSIGNMENT SHEET

LECTURE ASSIGNMENT	SECTIONS	PAGES	PROBLEMS
Chapter 9 "Chemical Equation Calculations"			
Stoichiometry (20, 21)	2.1 - 2.4	250 - 258	1 - 27 (odd)
<23>	**EXAM # 2**	**Thurs July 14, 2016**	
LECTURE ASSIGNMENT	**SECTIONS**	**PAGES**	**PROBLEMS**
Chapter 10 The Gaseous State"			
Properties of Gases (24)	10.1 - 10.3	280 - 285	1 - 13 (odd)
Gas Laws (24, 25)	10.4 - 10.7	285 - 295	15 - 45 (odd)
Ideal Gas Law (26)	10.10 - 10.11	299 - 303	55 - 65 (odd)
Chapter 12 "Chemical Bonding"			
Chemical Bonds(26)	12.1 - 12.3	342 - 349	1 - 31 (odd)
Structural Formulas (27, 28)	12.4 - 12.7	349 - 361	33 - 57 (odd)
Molecular Geometry (28, 29)	12.10	363 - 365	71 - 77 (odd)
Chapter 13 "Solutions"			
Solutions (30)	13.2 - 13.3	378 - 380	7 - 17 (odd)
Concentration, Dilution (30, 31)	13.8 - 13,10	387 - 392	43 - 47 (odd)
Chapter 16 "Chemical Equilibrium"			
Collision Theory (32)	16.1 - 16.3	464 - 472	1 - 19 (odd)
Keq & LeChatelier's Principle (33, 34)	16.4 - 16.9	472 - 486	21 - 55 (odd)
Chapter 14 "Acids & Bases"			
Naming Acids (35)	6.8 - 6.9	178 - 180	49 - 55 (odd)
Properties of Acids & Bases (35)	14.1 - 14.4	404 - 412	1 - 25 (odd)
Kw and pH (36)	14.7 - 14.10	417 - 426	43 - 69 (odd)
Neutralization Reactions (37)	7.11	210	75 - 77 (odd)
<38>	**Exam # 3**	**Thurs July 28, 2016**	
Chapter 17 "Oxidation Reduction"			
Redox Equations (39, 40)	17.1 - 7.4	496 - 510	1 - 35 (odd)
	Lab Final	**Wed Aug 3, 2016**	
	Final Exam	**Thurs. Aug. 4 10:00 AM - 12:00 PM**	
Exam Dates are Subject to Change			