**CHEM 30A (40573 Lecture)**

**INTRO CHEMISTRY – Fall 2014**

Instructor: Dr. Small; email: **chemsmall789@gmail.com**

Web site: http://www.laney.edu/wp/vsmall/

Office Hrs: TTh 12:30-1:00 pm: L-A239

Lecture (A239) TTh 1:00-2:15 pm

Lab TTh 2:30-3:45 pm

**Required textbooks and tools:**

* "Fundamentals of General, Organic, and Biological Chemistry" by McMurry, John E.; Hoeger, Carl A.; Peterson, Virginia E.; Ballantine, David S. 7th edition.

ISBN 9780321750839.

**NOTE:** Chem 30A will be covering only the first 11 chapters of McMurry

* Chem 30A Laboratory Manual, Laney IMC. Available online at my website:
* Scientific Calculator (eg, TI30X): must have exponential, log, and square root.

No programmable calculators, and no online devices during testing.

**Recommended:**

* If your math needs help: Problem solving books such as Leo Michel’s Basic Math for Chemistry, or the Schaum outline series (both at bookstore and online).

**Prerequisite, etc:**

* College English: for ESL, this corresponds to the 200 and 240ESL series
* Math 201 or 210D or Math 208

**Course description**:

Chem 30A is an introductory chemistry course designed for nursing and allied-health majors. Topics include dimensional analysis, inorganic nomenclature, atomic and molecular structure, bonding, chemical reactions, gas laws, solutions, acid-bases, oxidation-reduction, equilibrium and electrolyte systems. No prior knowledge of chemistry is assumed.

**Student Learning Outcomes:**

1. Use dimensional analysis to solve quantitative problems on exams, homework, and laboratory reports. Evaluate the results of calculations to make sure they are physically reasonable.

2. Explain qualitative chemical concepts and trends clearly on written exams.

3. Describe, explain, and model chemical and physical processes at the molecular level in order to explain macroscopic properties on exams.

4. Manipulate laboratory equipment effectively in the laboratory. Perform lab techniques correctly using appropriate safety procedures.

5. Calculate experimental values from laboratory data. Interpret the results of laboratory experiments.

**Course Structure:**

**Labs:** Lab reports are due at the end of each lab—no exceptions unless granted by me. A maximum of three labs can be missed; missing four laboratories constitutes ***failure*** in this class. Reports will be graded on legibility/neatness, completeness, and correctness—show all math work. **NO MAKE-UP LABS**, but I do drop the two lowest grades. A lab report cannot be turned in for a lab you missed.

Note that we will work in pairs in the lab, but each student is expected to carry their own weight, and will be graded accordingly. Students must show all math work on the reports. Furthermore, students are expected to bring the ‘report’ for the day’s lab (printed from my website). I will provide reports at a cost of 5 points (out of 100).

**Exams:** There will be three exams given—check syllabus for tentative exam dates. **NO MAKE-UP EXAMS**, and I do not drop any exam grades. For one missed exam, the exam grade will be the same as the grade on the final. No more than one missed exam will be permitted. Math problems on the math portion of the exams/quizzes must show all work.

The **final exam** is comprehensive—It will include a standardized ACS Test section. **Missing the final exam will constitute course failure**. Don’t miss it!

**Homework**: See homework handout. Typically, only random questions will be graded for correctness—show all math work or receive a “0”for the questions involved. All homework is due at the end of the class one week following the last lecture on that chapter. For example, if we finish Ch 1 on a Wednesday, that Ch 1 homework will be due the following Wednesday at the end of class. No exceptions excepting holidays.

**Student responsibilities:**

It is the student’s responsibility to add and drop the class.

It is the student’s responsibility to keep copies of all graded exams, labs, homework.

Note that the lecture is not intended to be exhaustive. Lecture will cover *selected* chemical concepts and math problems from the text in order to help the student access (understand) the material assigned in McMurry. On exams, etc., the student will be held responsible for **all** the material assigned in the McMurry text.

**Class Participation:**

Attendance will be taken during each lecture and lab. Lecture attendance will be taken during each class only once! The lab report, handed in at the end of lab, will usually constitute lab attendance. A lab report cannot be turned in for a lab you missed.

**Grading:**

The overall course grade will be based on total points. The final grade will be made up of approximately 16 lab reports, 3 exams, homework, class participation, and a final exam with the following contributions. The final is comprehensive!

Lab reports = 100 pts

Homework = 75 pts

Class Participation = 25 pts

Exams = 300 pts (3 @ 100 pts each)

Final = 200 pts

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**= 700 pts**

Grading scale: A—90%; B—80%; C—65%, and D—55%

**Academic Honesty Policy:**

Students are expected to perform honestly and ethically in completing homework and class assignments. Behaviors that are dishonest and unethical include plagiarism, cheating, fabrication, aiding and abetting dishonesty, and forgery, alteration, or misuse. Students found cheating will receive an F on the activity, and may be referred to the Dean of Instruction.

**Student Code of Conduct:**

The Student Code of Conduct is guided by the California Education Code. The Peralta District upholds expectations regarding student standards of behavior, both academic and non-academic, which may result in disciplinary actions.

**Rehabilitation Act:**

The Rehabilitation Act of 1973, Section 504, requires Laney College to make all programs accessible to qualified individuals with learning, physical, or psychological disabilities. Any student who feels s/he may need an accommodation based on a disability should contact me privately to discuss your specific needs.

**Early withdrawal from class**

Please consult with me before deciding to withdraw from the class. If after discussing the situation, the decision is made to early-withdraw, it is the student's responsibility to submit a drop slip to the admissions office. Students who fail to do so will receive an F grade in the class.

**Important dates for Chem 30A**

31 Aug Last day to drop and get refund

31 Aug Last day to drop with no ‘W’

31 Aug Last day to add classes

2 Sep Census date

8 Sep Last day for Pass/No pass option

15 Nov Last day to withdraw with a ‘W’