Chemistry 100: Basic Chemistry Skills

Fall 2017

Course Description

Introductory course designed to develop necessary study skills to increase chances of success in general chemistry or chemistry for the allied health sciences.

Instructor

Dr. Bindu Meprathu Office: 1970 Bech Hall

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Class meets on Tuesdays and Thursdays from 10:30 am to 12 pm in Bech 1999 Office Hours: T/Th 8:15 – 9 am, T/Th 3:00-3:20 pm, and by appointment

Course Prerequisites: None

Student Learning Outcomes

Upon successful completion of this course, a student will be able to:

- 1. Describe the basic structure of matter and relate it to the physical world.
- 2. Solve basic word problems involving chemical concepts.
- 3. Apply study skills to learning chemical concepts.

Text

<u>Basic Chemistry Skills</u>, by Karen Frindell Teuscher © 2016 (available at SRJC Bookstore)

Final Grade Cut-offs		Grading	<u>Grading</u>	
88%-100%	A	Participation and attendance	15%	
77%-87%	В	Homework/Quizzes	45%	
66-76%	C	2 Exams	40%	
50%-65%	D			
50% and below	F			

Important Dates:

Exam 1 Tuesday 10/31 Exam 2 Thursday 12/14*

Last day to drop a class without a 'W' symbol: Sept. 10. Last day to opt for Pass/No Pass: Oct. 1 Last day to drop a class with "W": Nov. 19. Thanksgiving break, no class on Nov. 23.

^{*}Since this class is not a full-semester length class, the last exam will be on the last day of class (12/14). We will not meet during finals week.

Attendance: Attendance is MANDATORY for this class. Attendance and attention are vital for your learning. Please do not miss or be consistently late for the lecture. Absences will be excused only for medical reason or in the case of extreme necessity. Excessive absences will result in a significant reduction in your course grade, and may lead to the student being dropped from the course completely.

Exams/Quizzes: There will be two exams and several quizzes in this semester. Quizzes may or may not be announced in class so it is in the student's best interest to stay up to date with assignments and materials covered in class. There will be NO make-up exams or quizzes except in case of excused absence due to (documented) medical reasons.

Homework

Homework is an important vehicle for study; working out the problems is one of the most effective ways to learn and study chemistry. On occasion, the assigned problem may be the source of an exam question. Homework will be assigned from the textbook and collected on an ongoing basis.

Standards of Conduct: All students are expected to do their own work. Students are encouraged to collaborate in class assignments and group study, but any work turned in for grading must be the student's own. Cheating, or anything that can be construed as cheating will result in no credit given, if not worse. No inter-student communication is allowed during exams; any comments or questions are to be directed toward the instructor. Laboratory experiments will often be done in pairs, but each student is expected to record his or her own data. It is not acceptable for one partner to take notes and the other partner to copy everything at the end of the lab.

Reading and Class Assignments: Lectures are designed to help you understand the material presented in the textbook. To get most out of the lecture, one should ALWAYS read the appropriate sections before they are discussed in class. You will be assigned to groups and much of our problem work and class discussion will come through these groups.

Emergency Evacuation Plan: In the event of an emergency during class that requires evacuation of the building, please leave the class or lab immediately and remain calm. We will meet in the open area between Bech Hall, Shuhaw Hall and Baker Hall to make sure everyone exited the building safely and to receive further instructions. Copies of the red Emergency Preparedness Handbook are posted throughout the building and have more detailed information and procedures for most imaginable emergency situations. Any types of emergency can/should be reported to the district police dispatcher at (707) 527-1000.

<u>Accommodations for Students with Disabilities</u>: If you need disability-related accommodations for the class, please provide the authorization letter from the Disability Resources Department (located in Bertolini Student Center) to me as soon as possible. Also, please come see me during the office hour as soon as possible to discuss about the accommodations.

Lecture Topics

Skills for success in chemistry:

- Strategies for Learning Chemistry
- Time Management
- Note-taking Skills
- Using a Textbook Effectively
- Problem Solving
- Preparing for and Taking Exams
- Introduction to the Laboratory

Preparation for success in Chemistry

- Matter
- Physical and Chemical Change
- Chemistry Math
- The Scientific Method
- Atoms and Ions
- Atomic Mass
- The Periodic Table
- Ionic and Molecular Compounds
- Polyatomic Ions
- Formulas of Compounds
- Naming Compounds
- Moles
- Chemical Reactions
- Writing and Balancing Chemical Equations
- Types of Reactions
- Moles and Chemical Reactions
- Masses and Chemical Reactions
- Valence Electrons
- Bonding and Molecular Structure

^{*}This pace of this class is determined by the students and the instructor. Some topics may be omitted in favor of spending more time on others.