

# 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**

Janice Crowley

Lecture room: 1910

Class meets on Tuesday and Thursday from 9:00 am – 10:30 am

Office: 1916 Bech Hall (Santa Rosa)

Office Hours: Tuesday and Thursday 12:00 – 1:15 pm

Email: [jcrowley@santarosa.edu](mailto:jcrowley@santarosa.edu)

## **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**

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

### **Final Grade Cut-offs**

90%-100%	A
78%-89%	B
65-77%	C
52%-64%	D
51% and below	F

### **Grading**

Participation & Attendance	15%
Quizzes & Assignments	30%
3 Exams	55%

## **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.

## **Attendance and Active Participation in Class:**

Attendance is mandatory for this class. Attendance and active, focused attention are crucial components to your success in learning this material. It is important not to miss a class or be late for lecture. Absences will be excused only for medical reasons or in the case of extreme necessity. Absences do affect your grade negatively. Excessive absences may result in the student being dropped from the course completely. There will be NO Make-ups on exams for any reason other than a documented medical excuse.

## **Standards of Conduct:**

All students are expected to do their own work. This does not preclude collaboration and group study, but it does mean that anything put to paper and turned in is expected to come from that student. Cheating, or anything that can be construed as cheating will result in no credit given, or even worse consequences.

No inter-student communication is allowed during exams; any comments or question are to be directed toward the instructor. Lab 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.

## **Exams/Quizzes:**

There will be 3 exams and several short announced and unannounced quizzes. No make-ups for exams or quizzes will be given in this course unless proper medical documentation is provided.

Student Learning Outcomes (COR at SRJC) are found at <https://portal.santarosa.edu/SRWeb/SRCourseOutlines.aspx?Semester=20167&CVID=36463>

## **Homework Assignments:**

Homework is an important part of the process of learning and retaining information. Carefully completing assignments and doing the assignment as soon as possible improves understanding.

### **Reading Assignments:**

Lectures are typically designed to help you understand the material present in the textbook. To get the most out of the lecture, one should always read the appropriate sections before they are discussed in class.

### **Accommodations for Students with Disabilities:**

If you use disability-related accommodations for class, please provide the authorization letter from the Disability Resources Department to me by the second day of class. I would also like to discuss the accommodations with you during office hours.

### **Re-Evaluation of Graded Work:**

Graded work may be submitted for re-evaluation within one class period from when it was received. In comparing ones graded materials with that of fellow students, any difference must be confirmed by submission of both students' work for consideration. The document in question must be submitted with written detailed rationale for any changes requested. Based on this rationale, the entire assignment will be thoroughly evaluated. This re-evaluation can result in positive, negative, or no change to the original score.

### **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.

## **Important Dates:**

<b>No Classes</b>	<b>Thursday 11/23</b>
<b>First Day of Class</b>	<b>Thursday 09/21</b>
<b>Exam 1</b>	<b>Tuesday 10/19</b>
<b>Exam 2</b>	<b>Tuesday 11/21</b>
<b>Exam 3</b>	<b>Tuesday 12/12</b>
<b>Last Day of Class</b>	<b>Thursday 12/14</b>

We will not meet during finals week.

**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**

## **Tentative Schedule:**

Date	Topic
September 21	Introduction to Chem 100. Studying resources and strategies.
September 26	Matter and Energy. Note-taking skills.
September 28	Basic math/algebra skills needed. Time management.
October 3	Scientific Notation and Significant Figures. Units & conversions.
October 5	Unit conversions aka dimensional analysis or cancelling units. Structure and theory of atoms. Periodic Table.
October 10	Class cancelled.
October 12	Class cancelled.
October 17	Class cancelled.
October 19	Class cancelled.
October 24	Types of bonds. Ionic and molecular compounds.
October 26	Scientific Inquiry and how to prepare for exams.
October 31	Exam 1
November 2	Molecular geometry.
November 7	Molecular geometry. Naming compounds.
November 9	More nomenclature.
November 14	Chemical calculations.
November 16	Chemical calculations.
November 21	Exam 2
November 28	Atomic mass and molar mass aka atomic weight, molecular weight...
November 30	Molar mass and more.
December 5	Solutions and percent calculations.
December 7	Chemical reactions and equations.
December 12	More chemical reactions.
December 14	Exam 3 Comprehensive