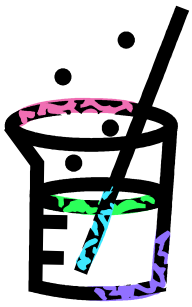
SEIU Healthcare 1199NW Multi-Employer Training Fund



# General Chemistry (Non-Science Track) [CHEM 120 or 121]

## [Outline of the General Chemistry Course]

**Course Description**

This course covers the general principles of chemistry and is usually part one of a 3 part series. Most health career fields only require the completion of the first course.

**Typical Couse Mechanics:**

-3 hours of lecture a week (or 5 hours of online video)

- One 2-4 hour lab a week

- Two midterms (online or in class)

-One final (almost always in class)

Generally, a student should expect to spend about 5-10 hours in class (or watching online videos) **and** an additional 5-10 hours doing homework/studying **per** week.

**Topics Covered and Required Prereq skills**

| Topic | Prereq required |
|---|---|
| The Atomic Nature of Matter | None |
| Stoichiometry | Intermediate Algebra (Proportions and Ratios) |
| Classes of Organic Reactions | None |
| Gases | Intermediate Algebra (rewriting equations with variables) |
| Chemical Equilibria | Intermediate Algebra (rational expressions ) |
| Acids and Bases and Aqueous Equilibria. *(This section sometimes skipped.)* | Intermediate Algebra (rational expressions) |

## [Preparing for the Course]

The following things can be done to help prepare for the course.

**Purchase 3x5 notecards:** There is quite a bit of memorization in CHEM 120. It is a good idea to make flash cards to help memorize the families of organic molecules and reaction types.

**Purchase a scientific calculator**: If you do not already own a scientific calculator, purchase one that allows you to see and edit your previous entry. One recommended calculator is the "TI-30X IIS" from Texas instruments. *Note that the Training Fund can only reimburse a calculator purchase if it is listed as required for your course.*

**Brush up on your intermediate algebra:** If you have old algebra books revisit: graphing equations of the form y=mx+b, and ratios and proportions.

## [Additional Resources]

**Solutions manual:** Often times your course text book will come in 2 packages: one with just the book and the other with the corresponding solution manual/study guide. It is recommended to get the package with the additional materials if available. Note some optional materials are not training fund reimbursable.

**Online Chemistry Materials:**
https://www.khanacademy.org/science/chemistry

**Online Algebra I Review:**
https://www.khanacademy.org/math/algebra/introduction-to-algebra
(Relevant topics: Ratios and Proportions, Graphing, and Analyzing Linear Functions)

**Training Fund Tutoring:**
Both online and in-person group tutoring is available by request. Visit:
http://healthcareerfund.org/tutoring/