

Chemistry 30S

R.D. Parker Collegiate

2014-2015



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This course will spark interest and increase your knowledge surrounding chemical properties, uses, implications, and chemical issues effecting individuals and society. . The more you discover about yourself and the world, the more fascinating the world becomes! Your opportunities to make a great impact on society will grow as your understanding and knowledge of the sciences increases.

Prerequisite

Students entering Chemistry 30S have completed grade 10 science and math courses and therefore should be able to: write formulas for ionic and covalent compounds, name ionic and covalent compounds, solve three variable equations, and use scientific notation.

Content

By the end of the course students are expected to be able to complete the following essential skills.

1. Use appropriate vocabulary related to: phases and phase changes, the kinetic molecular theory, gases and pressure, chemical and physical reactions, the mole, stoichiometry, concentration, and organic compounds.
2. Solve a variety of chemistry problems.
3. Use graphs and tables to organize data.
4. Convert between a variety of units.
5. Solve relationships between a variety of variables.
6. Interpret data in a variety of forms.
7. Write complete balanced chemical reactions.
8. Name complex compounds.
9. Explain particle nature of matter.
10. Use moles in calculations.
11. Determine the arrangement of atoms in compounds.

Goals

1. To have fun learning while increasing your interest in chemistry.
2. To develop your critical thinking, problem solving, and group co-operation skills.
3. For you to apply your acquired knowledge critically to current world issues.
4. My main objective is TO MAKE YOU THINK!!!!

Evaluation

You will never be surprised with any assessments. I will always give you an outline of how you will be assessed and what you will be assessed on. You will need to keep up with your homework, study, and work hard to do well in this course and take advantage of this learning opportunity you have been given.

To achieve high marks in this course you will be expected to utilize appropriate chemical vocabulary, read and understand scientific tables and data, and to seek out extra help when needed. Students will be assessed in a variety of ways on all curricular outcomes.

Course material will be weighted as follows:

Term (70%)


Unit Tests/Assessments	60%
Quizzes, Assignments, Labs, and Projects	40%

Exam (30%)


For each unit you can anticipate approximately two lab assignments, a creative assignment, practice quiz, and a unit test. All work must be handed in to complete the course. There will be time given in class to complete most assignments so there should be no excuses.

Note: All assignments are due at the **beginning** of class.

We must use time wisely and forever realize that the time is always ripe to do right
~Nelson Mandela



We are what we repeatedly do. Excellence, therefore, is not an act but a habit.
~ Aristotle



Units	Subtopics
Properties of Matter	<ul style="list-style-type: none"> - States of Matter - State Changes - Kinetic Molecular Theory - Vapour Pressure
Gases	<ul style="list-style-type: none"> - History of Earth's Atmosphere - Gas Laws
Chemical Reactions	<ul style="list-style-type: none"> - Types of Chemical reactions - Balancing & Completing Chemical Reactions - Isotopes & Average Atomic Mass <p><i>If H₂O is water what is H₂O₄? Drinking, bathing, washing, swimming. . .</i></p>
Stoichiometry	<ul style="list-style-type: none"> - Atomic Mass & Molar Mass - The Mole - Mole Conversions - Stoichiometry Problems - Limiting Reactants <p><i>How many moles are in a guacamole? Avocado's number</i></p>
Solutions	<ul style="list-style-type: none"> - Water - Solubility - Ionization & Dissociation - Concentration & Dilution
Organic Chemistry	<ul style="list-style-type: none"> - Alkanes, Alkenes, Alkynes - Percent Composition - Alcohols - Functional Groups <p><i>According to a chemist, why is the world so diverse? Because it's made up of alkynes of people.</i></p>

Extra Help

Grade 11 chemistry is an extensive course that covers many different topics and requires understanding rather than memorization. Students who are attending regularly and putting in effort will have no problems succeeding in this course.

Please use these opportunities to receive some individual help if and when you need it.

- Tuesdays and Thursday after school (3:30 pm) – Please let me know that you are planning on coming. These times are subject to change based on other commitments I have that week at lunch.
- Other times by appointment.

Enjoy your time in chemistry. Your opportunities to learn are endless!

Required Materials

Daily: 3 ring binder, paper, dividers, pen/pencil, calculator

Upon request: graph paper, scissors, pencil crayons

Course Expectations

- 1) The Three R's.
 - a. **R**espect yourself
 - b. **R**espect others
 - c. **A**ccept **R**esponsibility for all of your actions
- 2) Research and summarize portions of the course material on your own.
- 3) Attendance is mandatory. In the event of an absence, it is *your responsibility* to obtain notes and assignments from another student and to catch up on any missed work while away.
- 4) Apply study skills early on and throughout this course.

*There is not a sprig of
grass that is
uninteresting to me.
~ Thomas Jefferson*

Science is a very exciting subject that helps you learn about yourself and the world around you.

Take advantage of this opportunity – you only get to live this year once! I look forward to learning with you!

~Mrs. Kornelsen