Chemistry 11 Course Outline

**Texts:** “Heath Chemistry – Laboratory Experiments” is required for Chemistry 11. Students will also have an opportunity to purchase a “BC Science Chemistry 11” workbook for a small fee. If students choose not to purchase the workbook they can borrow one from the school.

**Mark Distribution:**

Terms 1 and 2 Classroom Tests 70%

Classroom Quizzes 10%

Labs 20%

Term 3 Classroom Tests 60%

Classroom Quizzes 5%

Labs 15%

Final Exam 20%

# Important Notes

**Absences:** If you are absent from a class you are responsible for finding out what material was missed BEFORE the next class. You will NOT be excused from a quiz because you missed the previous class. If you are absent from a test you must have a parent/guardian phone the school and leave a message. Arrangements will be made to write the test upon your return.

**Cheating:** Any incident of cheating will result in a zero for all students involved. Receiving a zero on a test will have a serious negative impact on your grade.

**Lab Reports:** Chemistry 11 involves substantial experimentation, where safety is of the utmost importance. Students are expected to be fully prepared to perform the experiment by having read the lab and prepared any data tables *before* arriving to class. Any inappropriate behaviour during a lab will result in the student(s) being removed from the class and receiving a zero for the lab activity.

**Your Job:** School is your job. You must show up on time and prepared to do work. Being prepared means having your textbook, notebook, pen, pencil, and calculator. You cannot borrow these things from me.

**Topic Outline**

Lab Safety Chapter 1

Measurement Chapter 1

* Metric unit conversions
* Measuring and recording significant data
* Graphing

Introduction to Chemistry Chapter 2

* Properties of matter
* Classification of matter
* Methods of separation

Naming Compounds Chapter 2

* Predicting formulae
* Ionic compound nomenclature
* Covalent compound nomenclature
* Acids and bases

Atomic Structure Chapter 5

* Atomic models and Bohr diagrams
* Atomic number and mass
* Isotopes
* Ion charges

Periodic Table Chapter 6

* Similarities and trends
* Families of elements
* Development and usage
* Quantum mechanics and electron configuration

Bonding Chapter 6

* Electron role
* Predicting ionic or covalent bonds
* Lewis diagrams

The Mole Concept Chapter 3

* Relative atomic mass
* Avogadro’s number
* Molar mass
* Molar volume
* Molar concentration and dilution
* Percent composition and empirical formulas

Chemical Reactions Chapter 4

* Balancing equations
* Types of reactions
* Predicting products
* Energy changes

Stoichiometry Chapter 4

* Mole ratios
* Limiting reactants
* Percentage yield

Solution Chemistry Chapter 7

* Solubility
* Dissociation and conductivity
* Net ionic equations