

Chemistry

Course Outline

Content An introduction to gases, thermochemistry, rates of reactions, and the equilibrium of solutions, including acids and bases. If time allows electrochemistry (optional topic) will be covered. For more details see booklet.

Materials needed

- (1) loose leaf for tests
- (2) thick copybook for daily homework
- (3) pen, pencil
- (4) binder to keep tests and lab reports
- (5) ruler
- (6) calculator

Materials We Supply:

- (1) Chemistry Notes and Exercises
- (2) Chemistry Student Booklet
- (3) Chemistry Lab and Pretests Manual
- (4) Web Site: www.emsb.qc.ca/laurenhill/science/chem534.html

Evaluation:

Competencies 2 and 3		Competency 1	
Tests	90% (If Test 1 \geq Test 2, 45% each) (If Test 2 > Test 1, 63% T ₂ , 27% T ₁)	Labs: Results and reports	40%
Homework	10%	Lab exam	60%

Industrial Game for Bonus Marks at the end of each term

Preparation for CEGEP Year 1 of Preuniversity Science

(Note that most of the topics in the following two courses are an in-depth exploration of concepts seen in STE and Chemistry 534)

202-NYA05 **GENERAL CHEMISTRY**

Credits: 2.66

Prerequisite: 912-016 or 70% or more in High School Chemistry 534 or in Cegep 202-006. It is strongly recommended that the student have an adequate background in High School Physics and Functions.

Class: 3 hrs./wk. Lab: 2 hrs./wk.

This is a course in the basic principles of contemporary chemistry. Topics include: stoichiometry; nomenclature; atomic structure; the periodic table; chemical bonding; molecular geometry; thermochemistry; gas laws and the kinetic theory of gases; condensed phases and phase changes; nuclear chemistry and descriptive chemistry.

202-NYB05

CHEMISTRY OF SOLUTIONS

Credits: 2.66

Prerequisite: 202-101

Class: 3 hrs./wk. Lab: 2 hrs./wk.

This course is a continuation of Chemistry 202-NYA05. Topics include: introduction to

thermodynamics; solution processes; chemical kinetics; chemical equilibria; acids and bases; oxidation and reduction; and electrochemistry.

NOTE: It is usually possible to take Chemistry 202-HTJ05 simultaneously with Chemistry 202-NYB05 when Chemistry 202-NYA05 has been taken previously.