**Chemistry 12-2 Course Outline1**

**Bonar Law Memorial School**

**C. Wilson**

**carolyn.wilson@nbed.nb.ca**

**Course Synopsis**

The Chemistry 12-2 curriculum builds on stoichiometric fundamentals covered in Chemistry 11-2. Main areas of study include thermochemistry, reaction kinetics, acids and bases and organic chemistry. Throughout the semester, student learning will balanced between the development of chemistry knowledge and skills, as well as developing an understanding of the interactions between science, technology, society, and the environment (STSE).

Student assessment will include traditional pen-and-paper testing, research projects that introduce students to primary peer-reviewed scientific literature in the field of chemistry, and experimental work requiring basic data analysis, protocol development and troubleshooting.

**Units of Study**

Unit 1: Thermochemistry & Reaction Kinetics (February/March) – Chapter 17 and 18

Unit 2: Introduction to Organic Compounds (March/April) – Chapter 22

Unit 3: Acid and Base Chemistry (May) – Chapter 9

**Evaluations**

Semester Mark – 70%, Exam 30%2

Tests & Quizzes (45%)

* Test for each unit
* Quizzes or exit slips weekly or biweekly (~10)
* These evaluations will assess knowledge outcomes with minor focus on outcomes related to skills and STSE

Assignments (10%)3

* These evaluations will focus on skill and knowledge outcomes.

Projects & Presentations (15%)

* Elevator Pitch Project (February) and Literature Review (April)
* There evaluations will assess outcomes related to STSE

Lab Work & Reports (30%)4

* Tentative labs include:
	+ Design-A-Lab: Specific Heat Capacity/Calorimeter/Enthalpy (February)
	+ Design-A-Lab: Reaction Rates (March)
	+ Polymerization Lab/Demo (April)
	+ pH Determination Lab/Demo (May)
	+ Design-A-Lab: Acid/Base Titration Lab (May)
	+ Others TBA
* Lab write-ups will vary in length and formality. Self-assessment rubrics will be used to assess skill development. These evaluations will focus on skill-based outcomes, with minor focus on knowledge.

1Notice will be given if syllabus changes

2Exam Incentive: If students miss 5 or fewer classes and are in good standing (no missing assignments or projects), then the exam will be worth 15%, 30% or 50%, whichever results in the greatest advantage for the student.

3Late Assignment Policy: For every date late, 10% will be deducted from the mark. If a student is absent on a due date, a written legitimate excuse from a parent or guardian must be presented upon the students’ return, or the late-date policy will apply. A students’ mark cannot be lower than a 60% given that the student deserves a passing grade. All work must be handed in NO LATER than one week after the given due date. Due dates will be clearly posted on the calendar in the classroom.

4Lab Policy: If a student is absent during a lab without a legitimate written excuse, they will receive a mark of zero. If a student does have a legitimate excuse (bereavement or illness), an alternate arrangement may be made. Chemistry 12-2 lab activities involve a significant amount of group work. Students will be marked based on the number of days they are present and participating in class. For example, if a student earns a mark of 70% and were only there 90% of the time, the student would receive a mark of 63%.

**Our Core Values**

**Grit –** Work harder than you *think* you need to! Study.

**Empathy –** Listen to others. Go out of your way to help someone with something you have also had trouble with.

**Accountability –** Own your successes and failures. Arrange extra-help if you need it. Do your own work.

**Respect –** Be on time and attend class regularly. Respect other students, the teacher and course materials.

