

### ENTG 1001 CHEMISTRY 1

### TENTATIVE WORK PLAN

#### Faculty Information

Faculty's Name: *Amanda McPherson*  
Office Location and Number: *3330*  
Campus: *Waterfront*  
Office Telephone: *902-491-4616*  
Facsimile: *902-491-1275*  
Email: *amanda.mcpherson@nscC.ca*  
Availability: *Monday to Friday 8:30 am – 4:30 pm. Excluding lunch hour OR by appointment.*

#### Required Text Book(s), Resources, and Supplies

Title: Introductory Chemistry – Concepts & Connections, 7<sup>th</sup> Edition + CD-ROM.  
Edition:  
Author: Corwin, Charles H.  
Publisher: Pearson Prentice Hall, Inc. Copyright Date: 2014  
ISBN: 978-0-321-80490-7

Title: Prentice Hall Laboratory Manual – Introductory Chemistry, 5<sup>th</sup> Edition.  
Author: Corwin, Charles H.  
Publisher: Pearson Prentice Hall, Inc. Copyright Date: 2009  
ISBN: 978-0-13-604301-0

#### Accreditation

*The Environmental Engineering Technology program is accredited nationally with the Canadian Council of Technicians and Technologists through the Canadian Technology Accreditation Board at the ENGINEERING TECHNOLOGIST Level.*

#### Methods of Assessment & Evaluation

A variety of formal and informal methods will be used for evaluation including but not limited to:

- Labs
- Tests and exams
- Pop quizzes

- **ENTG 1001 Evaluation Scheme**

Labs: 11 @ 2.73%	30%
Pop Quizzes: 8 @ 1.25%	10%
Tests: 3 @ 20%	60%
	100%

**NOTE: In accordance with the NSCC academic policies, all learning outcomes must be met. That means that a separate passing grade of 60% in both lab and theory components is required. If a passing grade is achieved in both components, the above evaluation scheme will be applied. If a passing grade is not achieved in either or both components, the student will not pass the course, and the final grade will be the lower of the two marks.**

**The student will be entitled to write a supplemental exam if their final mark is between 50 and 59%.**

### Tentative Schedule – Subject to Change

Because every class is different, it is effective to tailor the pace, workload, and delivery method to the strengths of the class. In a creative learning environment, **you should expect some variations** from this tentative work plan as well as a variety of informal assessments throughout the course. The following chart is an example..

Week	Subject/Topic/Description	Learning Outcome Number(s)	Value/Evaluation/ Due Date (if Applicable)
1	Review of Course Outline. Introduction to Chemistry. Ch. 1		
2	Lab 1: Safety including quiz/test	LO2	Lab – 2.73%
	The Metric System. Ch. 2	LO3	
3	Lab. 2: Introduction to Chemistry		Lab - 2.73%
	The Metric System... Ch. 2		
4	Lab. 3: Instrumental Measurements		Lab - 2.73%
	Matter and Energy. Ch. 3		
5	Lab. 4: Density of Liquids and Solids		Lab - 2.73%
	Matter and Energy. Ch. 3		
6	Test # 1 Ch 1-3		Test - 20%
	Models of the Atom. Ch. 4	LO4	
7	Lab. 5: Freezing Points and Melting Points		Lab - 2.73%
	Models of the Atom. Ch. 4		
8	Lab. 6 Physical Properties & Chemical Properties		Lab - 2.73%
	The Periodic Table. Ch. 5	LO1	
9	Lab. 7: Atomic Fingerprints		Lab - 2.73%
	The Periodic Table. Ch. 5		
10	Lab. 8: Families of Elements		Lab - 2.73%
	Chemical Bonding Ch 11	LO4	
11	Lab. 9: Identifying Cations in Solution		Lab - 2.73%
	Language of Chemistry. Ch. 6		
12	Test #2 – Ch. 4, 5, and 11		Test - 20%
	Language of Chemistry. Ch. 6	LO2	
13	Lab. 10: Identifying Anions in Solution		Lab - 2.73%
	Chemical Reactions. Ch. 7	LO5	
14	Lab. 11: Analysis of a Penny		Lab - 2.73%
	The Mole Concept. Ch. 8	LO3	
15	Test #3 – Ch. 6-8		Test - 20%

- **Submitting Assignments**
  - Assignments are to be handed in on or before the specified date, and will incur a late penalty of 10% per day. Late assignments or labs will not be accepted after assignments have been corrected and returned to other learners.
  - **Illnesses, Absences and Make-Up Tests**
- If you miss an evaluation because of illness or emergency, and have informed your **Faculty Office (Phone number : 491-4616)** by telephone on the morning of your absence, then you may be eligible to complete a make-up evaluation. If an evaluation is missed, it is your responsibility to:
- Determine whether you are eligible to write the make-up evaluation.
  - Find out the date/time of the make-up evaluation.
  - Determine the material to be covered on the make-up evaluation.

### Responsibilities

Your responsibility is to be prepared for learning activities and to participate in the ongoing process.

### Participation/Preparation

Your degree of preparation, class attendance, independent homework assignments, and participation in discussions will affect your level of success in this course. You are expected to participate in class discussions and all group work. It is assumed that you will have read all assigned readings prior to class meetings. Oral presentations are mandatory. You are responsible for having the appropriate textbooks and supplies.


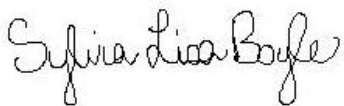
- **Expectations and Marking Standards**

Once you are an employee, everything you write or say will reflect the competency and care with which you do your own work. It also will reflect the quality of work performed by the organization itself, as you will be its representative. It is critical that your work be technically competent and that it is accurate and knowledgeable for your field of study. Consequently, all the work done in this course will be assessed at an industry-standard level, so you will become familiar with what is expected. The purpose of this course is to allow you to acquire the skills and confidence necessary to perform well in the workplace.

- **Integrity of Learning Environment**

NSCC is committed to ensuring fair and equitable treatment of all members of its community while maintaining the academic integrity of programs and curriculum and an academic climate conducive to learning, free from disruptive or inappropriate behaviour.

- Cell phones, CD players, MP3 players, other portable electronic communicating devices, personal digital assistants (PDAs) or similar devices shall not disrupt class, shop, lab or library activities. If absolutely essential, cell phones may be left in vibrate mode for emergency purposes during regular classes. In such cases learners are asked to respect the learning environment of their fellow classmates and not answer calls in class.
- No texting on cell phones or other portable devices will be permitted in class or lab.
- No portable electronic communicating device is permitted during tests or exams. Any learner who uses or attempts to use such a device for any purpose shall be asked to submit their paper and leave the test or exam room immediately.
- **Safe Working Environment**
- *The School of Trades & Technology has specific requirements for health and safety practices and procedures for shops and labs. Students will practice 5S&S quality systems daily and throughout the entire program of study.*

	
Signature of Faculty	Signature of Academic Chair, Manager Alternate Delivery, or Dean's Designate
<b>Amanda McPherson</b>	<b>S. Lisa Boyle</b>
Name of Faculty	Name of Academic Chair, Manager Alternate Delivery, or Dean's Designate
<b>June 8, 2015</b>	<b>August 24, 2015</b>
Date	Date

### Useful Information

#### NSCC Common Links

- Academic Regulations: [http://www.nscC.ca/Admissions/Academic\\_Regulations.asp](http://www.nscC.ca/Admissions/Academic_Regulations.asp)
- Recognizing Prior Learning: <http://nscC.ca/Services/RPL/>
- Applied Learning Placements(i.e. Work Experience, Co-op, Service Learning etc.): [http://nscC.ca/Learning\\_Programs/Work\\_Experience/index.asp](http://nscC.ca/Learning_Programs/Work_Experience/index.asp)

**ENTG 1001****Chemistry I****Course Weight:** 90.00**Course Description**

This course will cover items including the periodic table, measurement and significant digits, matter and energy, atomic structure, chemical nomenclature, chemical reactions, the mole concept and stoichiometry. If time permits, properties of gases and chemical bonding will be covered.

**Rationale**

Chemistry is an essential discipline to the Environmental Engineering Technologist. The knowledge and skills learned in this course will prepare the learners for applications to other courses that follow such as well water chemistry, water supply and treatment, wastewater treatment and disposal and contaminant hydrology.

**Prerequisite(s):**

None

**Corequisite(s):**

None

**Learning Outcomes**

Learners are required to successfully complete each course outcome. In keeping with NSCC's approach to portfolio learning, learners will have demonstrated the ability to:

1. Read the periodic table and the properties of the major families of elements.
2. Function safely in a lab environment in accordance with OH&S, WHMIS and 5S+S practices.
3. Perform chemical and stoichiometric calculations using the appropriate number of significant figures.
4. Write electron configurations for atoms and ions based on Bohr's atomic model.
5. Identify and interpret various types of reactions (Synthesis, Decomposition, Single replacement, Double replacement and Hydrocarbon combustion).

**Grading**

The pass for this course is 60%.

**Required Supplies**

See instructor for details.

**Other Course Notes**

The NSCC has clear policy on the following:

- Portfolio.
- Appeals process.
- Safe and respectful learning environment.
- Supports for students with disabilities.

It is the responsibility of the student to review and understand the Nova Scotia Community College academic policies. Those directly applicable to students can be found in the student handbook and the "Great Expectations" documents. Additional information may also be obtained from the College website:

[http://www.nsc.ca/Admissions/Academic\\_Regulations.asp](http://www.nsc.ca/Admissions/Academic_Regulations.asp). To obtain other policies, or clarification on a policy, the student is encouraged to ask Faculty, Academic Chair or Staff at Student Services.

**Workplan**

A workplan for this course is attached and will be reviewed by your faculty member (s) within the first week of class study.

Software Sites Tucows Software Library Shareware CD-ROMs ZX Spectrum DOOM Level CD ZX Spectrum Library: Games CD-ROM Images. Featured. image All Image latest This Just In Flickr Commons Occupy Wall Street Flickr Cover Art USGS Maps. Metropolitan Museum. Top. NASA Images Solar System Collection Ames Research Center. Brooklyn Museum.Â dsk. Identifier.

An\_Introduction\_to\_Basic\_Chemistry\_Concepts. Scanner. Internet Archive Python library 1.4.0. plus-circle Add Review. comment. Reviews. There are no reviews yet. Honors Chemistry/Chemistry II. Introductory Chemistry 5e Â©2015, Tro. Read the Preface.Â Chemistry: A Molecular Approach with MasteringChemistryÂ®, Fourth Edition is an innovative, pedagogically driven text that explains challenging concepts in a student-oriented manner. Nivaldo Tro creates a rigorous and accessible treatment of general chemistry in the context of relevance and the big picture.Â ExamViewÂ® CD-ROM ISBN: 9780134291741 The ExamView computerized test bank includes hundreds of questions, allowing teachers to build, edit, print, and administer tests based on text objectives. Algorithmically based, ExamView enables teachers to create multiple but equivalent versions of the same question or test with a click of a button. Introductory Chemistry book. Read 3 reviews from the world's largest community for readers. This text is carefully crafted to help students learn chemica...Â Goodreads helps you keep track of books you want to read. Start by marking â€œIntroductory Chemistry: Concepts & Connectionsâ€ as Want to Read: Want to Read savingâ€| Want to Read.