BCI SCIENCE
SCH 3U

Course Outline

Welcome to grade 11 university chemistry! This course is designed to build on the chemical principles you learned in grade 10 academic science, SNC 2DI, and further develop your analytical and practical skills in chemistry. This course is divided into units according to the following outline. Remember, Chemistry is a course where content continually **overlaps** from one topic to another, so try your very best to stay caught up and seek extra help ASAP if you need it.

TOPIC	TEXT REFERENCE	APPROXIMATE DATES
Intro		4 Days **Feb. 4 – Feb. 7**
Matter & Chemical Bonding (**11%**)	Ch p. 4-103.	15 Days **Feb. 8 – Mar. 1**
Chemical Reactions (**11%**)	Ch. p. 106-215	16 Days **Mar. 4 – Apr. 1**
Chemical Quantities (**11%**)	Ch. p. 218-345	18 Days **Apr. 2 – Apr. 30**
Solutions & Solubility (**11%**)	Ch. p. 348-493	19 Days **May 1 – May 28**
Gases & Atmospheres (**6%**)	Ch., p. 496-581	10 Days **May 29 – June 11**
Exam Review		5 Days **June 12 – June 19**

A. ASSESSMENT:

- FORMATIVE: designed to give multiple opportunities for students to make improvements to their work: e.g. teacher-student conferences, peer conferencing, homework, exemplars, question and answer sessions, review games / worksheets, quizzes

- SUMMATIVE: designed to make judgments on final achievements of performance based on observations, conversations and student performance: e.g. lab quizzes, lab reports, unit assignments, unit tests, and projects

The final course mark will consist of 70 % term work and 30 % final exam.

Term Work:

Category	Assessment Styles	Examples	Percentage of term mark
Knowledge and Understanding	**UNIT WORK:** Tests/Assignments * all tests **MUST** be completed*	knowledge and application of facts, terms, laws, theories, concepts, principles and scientific skills	40 %
Thinking and Investigation / Communication	**LAB WORK:** Labs/Quizzes Lab Practicals * best 3 of 5*	scientific inquiry: required skills, use of equipment, appropriate terminology, lab reports, application of concepts to explain observations, use of technology.	30 %

** Re-write tests will be offered after each unit test on a sign-up basis in order to produce a new test average (70% best mark + 30% lower mark) ** You MUST write the unit test on the due date to be eligible to sign-up for the re-write test. **

During the semester, unit tests will be marked and corrected in class. It is the student's responsibility to make the proper corrections at this time. Some parts of the test will be retained to maintain academic integrity from semester to semester. A final summative (exam) outline will be provided and practice questions for the summative will also be provided. Students/parents will be able to view the tests with their teacher at any time during the semester.

Final exam:

Category	Assessment Style	Percentage of final mark
Knowledge and Understanding Thinking and Investigation Communication / Application	Written Exam/ Performance Task	30%

B. ESSENTIAL LEARNINGS/SKILLS:

Students must demonstrate proficiency of **all** essential learnings in order to earn this credit

- demonstrate competent scientific investigation skills (inquiry and research) in the four areas of skills (initiating and planning, performing and recording, analyzing and interpreting and communicating). **[lab reports, lab quizzes, projects]**
- investigate physical and chemical properties of common elements and compounds and relate these properties back to the periodic table and periodic trends. **[tests, assignments, lab reports]**
- understand the different types of chemical reactions, investigate these types of reactions and assess their impact on society and the environment. **[tests, assignments, lab reports]**
- understand the mole concept as it applies to stoichiometry and investigate quantitative relationships in chemical reactions to predict unknown quantities. **[tests, assignments, lab reports]**
- understand qualitative and quantitative properties of solutions, solve related problems, and assess their impact on human health, society and the environment. **[tests, assignments, projects, lab reports]**
- understand the laws that explain the behaviour of gases, investigate the laws and analyze the cumulative effects of human activities and technologies on air quality. **[tests, assignments, lab reports]**

C. CRITICAL BODY OF EVIDENCE:

To demonstrate essential learnings and skills, students will be required to complete **ALL** unit tests (5), course projects (2), best (3) lab write-ups, and the exam (1).

D. LEARNING SKILLS:

Independent work	stays on task, is non-disruptive to others
Collaboration	contributes in large and small group, interacts well with peers, is not disruptive
Organization	arrives to class prepared to work, keeps good notes with dates / titles, work is presentable, work is handed in on time
Responsibility	effective use of time & resources, homework completion
Initiative	self-motivated, attempts to exceed expectations, seeks help when needed
Self-Regulation	perseverant, self aware and reflexive, able to make smart decisions

E. EXPECTATIONS:

*** All tests **WILL BE WRITTEN** and all labs **COMPLETED**. Students validly absent on the assigned test dates **MUST**:

1) inform the teacher prior to absence when possible.
2) be prepared to write (outside of class time) on the first day of their return to school.

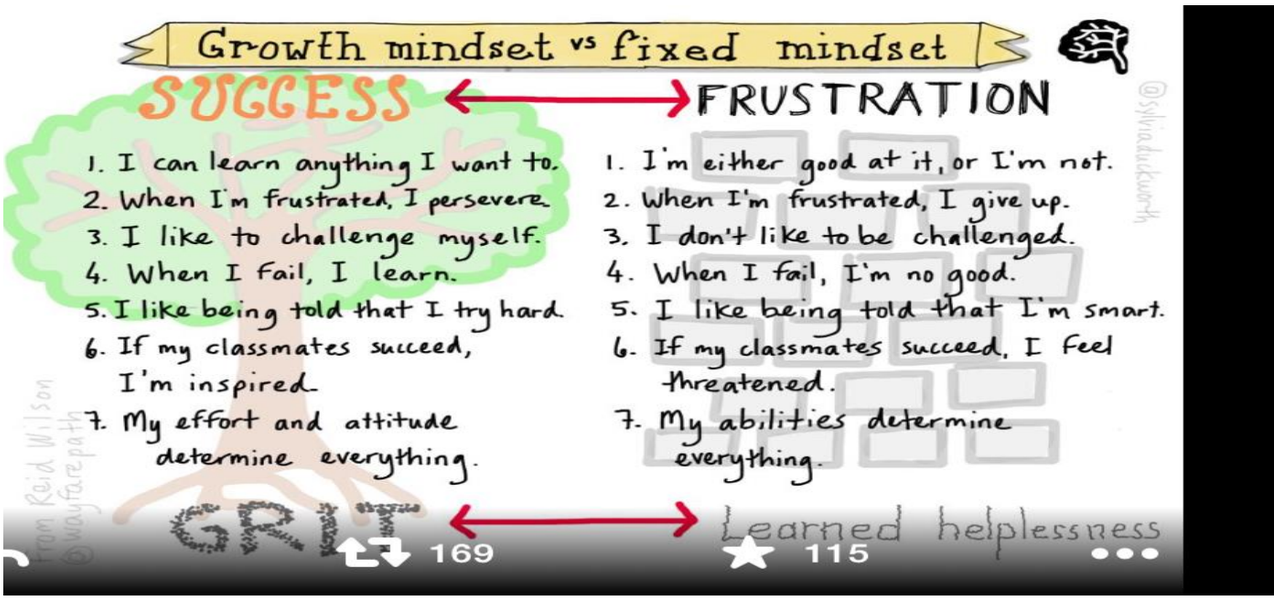
*** Labs/Assignments are due at the **BEGINNING OF CLASS**. Formal labs may involve a lab quiz. Missed labs (or absence when lab is due) **must still be handed in** within an acceptable time frame but a numerical mark may or may not be given. Once marked assessment items have been **RETURNED** to the class, students who have not handed it in will have lost that opportunity to demonstrate their understanding and professional discretion will be used.

*** Students are responsible for **ALL** work missed or handed in during an absence.

*** Students can expect to have on average **15 min** to **30 min** of homework most nights of the week. Therefore it is encouraged to plan your time effectively, work as hard as you can in class and at school so you don't have to work as hard at home. Even when you don't have homework you can always be reviewing your study sheets, etc.

F. IT HAS BEEN MY OBSERVATIONS THAT … :

Students that surpassed their goal	Students who achieved their goal …	Students that did not achieve thei goal …
- browsed textbook section before class for **bold** terms and diagrams - asked questions during lesson - when needed after the lesson, read textbook section for clarification - transferred main concepts from each lesson to a one page study sheet each day and reviewed their study sheet 10 min a night - attempted as much homework as possible - completed all unit study sheets - came in for extra help when needed - asked focused questions when they needed help - adhered to timelines - studied in group settings - attempted all practice tests a minimum of 3 days prior to the unit test in order to be able to clarify misconceptions or improve calculations	- asked questions during lesson - attempted as much homework as possible - adhered to timelines - sought extra help when needed - made a study sheet prior to test but did not necessarily add to it after every lesson or review it each night - attempted all practice tests a minimum of 3 days prior to the unit test in order to be able to clarify misconceptions or improve calculations	- did not ask questions - rarely came in for extra help - attempted some homework but did not complete it on a regular basis - did not attempt practice tests



G. KEYS TO SUCCESS: i) complete as much work assigned as possible and check your answers. Prepare thoroughly and in a timely fashion for all tests/quizzes/labs/assignments
ii) **Review** material on a DAILY basis; **self-assess** your learning goals! **/4**
iii) listen, ask, and participate
iv) get help when needed (teacher, friends, etc)

Note outlines may be printed from the web at: http://www.arthurscience.weebly.com

H. CLASSROOM PROCEDURES:

1) NO food in classroom, water is GOOD
2) NO use of cell phones (i.e. TEXTING) allowed in class (note home), if persists will visit your VP
3) NO mp3 players, i-pods, head phones during lesson or lab (note home) or NO use if proven unable to multitask (listen and work?)
4) Washroom – one at a time: sign-out on board with NAME and TIME

I. CHEM BUDDY:

Your Chem Buddy is someone in class who will serve to: 1) pick up extra sheets when you are away; 2) tell you about due dates; 3) help you by peer conferencing with lab reports; 4) be a person to do group study with, etc, etc

CHEM BUDDY 1: _____ CHEM BUDDY 2: _____
CELL # _____ CELL # _____
E-MAIL _____ E-MAIL _____

**** If you are having any difficulties make sure to talk to me **AHEAHD OF TIME**. There is very little I can do after the fact ****

J. Academic Dishonesty:

Please review the academic integrity section on the bluevale website@ **http://bci.wrdsb.ca/academics/** which addresses late and missed assessment items as well as cheating and plagiarism.

K. TEXTBOOK:

** Replacement fee for Course Textbook: $_____

L. EXTRA HELP:

I am available for extra help: i) before school 7:45-8:15 a.m.
ii) 2nd half of lunch 11:20 a.m. -11:50 a.m.
iii) after school by appointment
** Remember to always bring a **BUDDY** or two! … And a list of questions ;) **

M. MR. ARTHUR'S CONTACT INFO:

School Phone #: **519-885-4620**
e-mail: **steven_arthur@wrdsb.ca**