

COURSE: Chemistry 12 (CH12)

INSTRUCTOR

Glen Stiven
gstiven@sd22.bc.ca

RECOMMENDED PRE-REQUISITES

Chemistry 11

CREDITS

4

OVERVIEW

The Big Ideas, Content, and Curricular Competencies for this course can be found here: [Chemistry 12](#)

BIG IDEAS

Reactants must collide to react, and the reaction rate is dependent on the surrounding conditions.	Dynamic equilibrium can be shifted by changes to the surrounding conditions.	Saturated solutions are systems in equilibrium.	Acid or base strength depends on the degree of ion dissociation.	Oxidation and reduction are complementary processes that involve the gain or loss of electrons.
---	---	--	---	--

Welcome to Chemistry 12! I look forward to working with you to complete this online course. Chemistry 12 explores the nature of chemical reactions. Students will investigate how this can be applied to produce useful chemical products or generate energy such as heat or electricity. Concepts of chemical reactions such as collision theory, solubility, catalysts and chemical equilibrium are included. Primary areas of investigation relate to acid/base reactions, electrochemistry (chemical reactions that use or produce electricity), solubility, equilibrium, and reaction kinetics.

The unit content outlined below, which I hope you will find interesting and relevant to your life, will be used as the framework for the continued development of your curricular competencies in Chemistry and Science in general.

Course Layout:

Unit	Topic
1	Reaction Rates
2	Reaction Energies
3	Equilibrium
4	Solubility
Midterm	
5	Acids and Bases
6	Acids and Bases Calculations
7	Redox Reactions
8	Redox Cells
Final Exam	

COURSE: Chemistry 12 (CH12)

ASSESSMENT

Your grade for the course will be calculated as follows:

Category	Weighting
Learning Guides	10%
Projects	25%
Unit Exams	20%
Midterm Exam	20%
Final Exam	25%

Learning Guides and Projects:

Please focus on accurate, neat, and organized assignments. If you cannot figure out a question, do some research to ensure assignments are complete. You can also contact me by email for help. Projects allow you to make some choices on how you wish to improve your understanding of the science content and develop your science competencies. As you work through the units look for projects that will enhance your understanding in areas of interest to you. Everyone is to complete any five (5) projects of their choice from five different units.

Course Pacing Expectation:

Our online courses have continuous enrollment and are self-paced but to remain active in your course you are required to show steady progress in your course work and communicate with me each week. The suggested pace for this course is to complete one unit every two weeks. If you cannot meet this requirement, please contact me to communicate your plan for continuing or catching up.

Exam Supervision:

Before you write a unit exam, you must send me all the unit assignments leading up to the exam. Unit quizzes can be done on your own (not supervised). Use them as practice – i.e., Try them first, then refer to the notes if you need a little extra help. Keep track of where you needed help and review that material prior to your Midterm and Final exams. The Midterm exam and Final exam are "closed book" and require supervision. These exams can be written at vLearn or with your DL mentor at your home school.

Resources:

All required materials are included in your online course.

Keys to Success:

1. Actively work through each lesson, trying examples and reflecting on material.
2. Use the Learning Guide as your tool for documenting your understanding. Lay it out neatly and well organized.
3. Make sure you understand any quiz/exam question you get wrong. If you cannot figure it out, ask for help.

COURSE: Chemistry 12 (CH12)

4. Be sure to use your school district email for regular communication with me.

REGISTRATION

Please note – vLearn is a District Online School and can only serve students in the SD22 Catchment Area. Grade 8/9 students need approval from their home school administrator to take courses with vLearn. Please use your SD22 email address to register (000000@sd22.bc.ca)



[Click HERE
to register](#)