

CHEMISTRY 11

INSTRUCTOR: Stanley Lau
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SCHEDULE: Tuesday/Thursday 10:00am-2:00pm
Monday/Wednesday 4:00pm-9:00pm
LEARNING CENTRE HOURS: Monday-Friday 10:00am-2:00pm
Monday-Thursday 4:00pm-9:00pm
The Learning Centre is closed all statutory and school holidays.

INTRODUCTION

Chemistry is the science which deals with the properties and reactions of materials. It is concerned with the identification, characterization, and transformation of matter, and with the energy changes accompanying these transformations. Chemical science focuses on the structure and interaction of matter at the atomic and molecular levels. In common with other scientific disciplines, chemistry is both a body of knowledge (facts, concepts, laws, theories) and a process for obtaining this knowledge. Furthermore, a core of fundamental chemical knowledge is central to an understanding of other science disciplines and applied sciences (e.g. biology, geology, physics, medicine, pharmacy).

PRESCRIBED LEARNING OUTCOMES

Students are expected to know the following:

- quantum mechanical model and electron configuration
- valence electrons and Lewis structures
- chemical bonding based on electronegativity
- bonds/forces
- organic compounds
- applications of organic chemistry
- the mole
- dimensional analysis
- reactions
- stoichiometric calculations using significant figures
- local and other chemical processes
- green chemistry
- solubility of molecular and ionic compounds
- stoichiometric calculations in aqueous solutions
- analysis techniques

Source: <https://curriculum.gov.bc.ca/curriculum/science/11/chemistry>

LEARNING RESOURCES

CHEMISTRY 11 – A Workbook for Students (Hebden)

Moodle: online lessons, videos, practice questions, practice tests

CHEMISTRY 11 at Coquitlam Learning Opportunity Centre

Chemistry 11 at Coquitlam Learning Opportunity Centre is a self-paced, self-directed course. You will be expected to work independently and to manage your time productively. If needed, individual help will be available from an instructor in the Learning Centre. The skills to be mastered in each unit and the corresponding workbook assignments are listed in each unit outline. Each unit consists of lessons, videos, and practice exercises to facilitate skill mastery. An important element for success in Chemistry 11 will be your study skills. Successful students establish a study schedule and stick to it.

EVALUATION

Evaluation in Chemistry 11 will include unit tests, a midterm exam, and a final exam. ONE REWRITE will be available for each unit test. There is NO REWRITE for the midterm exam or the final exam. The tests will be weighted as follows:

<u>TEST</u>	<u>CONTENT</u>	<u>PERCENT</u>
Unit 1	Activities of Science	5
	Finding Out About Matter	
Unit 2	Unit Conversions	5
	Naming and Formulas	
Unit 3	The Mole	15
	Solutions	
Unit 4	Chemical Reactions, Stoichiometry -	15
	Calculations Involving Reactions	
MIDTERM	Units 1-4	15
Unit 5	Atoms, molecules and the	10
	Periodic Table	
Unit 6	Organic Chemistry	10
FINAL	Units 1-6	25
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