

PO LEUNG KUK CENTENARY LI SHIU CHUNG MEMORIAL COLLEGE  
TEACHING SCHEDULE  
2024/2025  
FORM: 6  
SUBJECT: CHEMISTRY  
TEXTBOOK: NEW CHEMISTRY A MODERN VIEW ARISTO

Cycle no.	Dates	Syllabus to be covered	Values Education & National Security Education	Remarks
1	3/9 – 11/9	-laboratory safety 61.1 Preliminary tests of substances 61.2 Detecting the presence of metallic ions in substances using the flame test 61.3 Detecting the presence of cations 61.4 Detecting the presence of anions 61.5 Detecting the chemical nature of a salt 61.7 Detecting the presence of various functional groups in carbon compounds 61.8 % Possible risks associated with chemical tests	% Commitment	
2	12/9 – 20/9	62.1 Physical methods of separation and purification 62.2 Crystallization 62.3 Simple distillation and fractional distillation 62.4 Liquid-liquid extraction 62.5 Chromatographic methods 62.6 Tests for purity of a substance 62.7 Choosing a method for the separation of a substance		
3	23/9 - 30/9	63.1 Volumetric analysis 63.2 Recording observations and presenting results for volumetric analysis 63.3 Applications of volumetric analysis		
4	2/10 – 9/10	64.1 Introducing instrumental analytical methods 64.2 Basic principles and applications of colorimetry 64.3 Identifying functional groups of carbon compounds using infrared spectroscopy		
5	10/10 - 18/10	64.4 Basic principles and applications of mass spectrometry 64.5 Determining the structural formula of an unknown carbon compounds by a combination of analytical methods		
6	21/10 – 1/11	65.1 Importance of analytical chemistry in daily life 65.2 Analysis of food and drugs 65.3 % Environmental protection 65.4 Chemical aspects of forensic science 65.5 Clinical diagnoses, treatment and prevention of diseases	% Respect for Others, Responsibility	1st UT
7	4/11 – 11/11	50.1 Development of synthetic products for modern ways of living 50.2 Advantages and disadvantages of industrial processes 50.3 Recent progress in industrial processes		
8	12/11 - 22/11	51.1 What is a rate equation 51.2 Order of reaction and rate constant 51.3 Determining rate equations by method of initial rate		

Cycle no.	Dates	Syllabus to be covered	Values Education & National Security Education	Remarks
9	25/11 – 2/12	52.1 Activation energy and energy profile 52.2 Effect of temperature change on reaction rate 52.3 Arrhenius equation 53.1 Characteristics of catalysis 53.2 How do catalysts work 53.3 Effect of catalyst on reversible reactions 53.4 Industrial applications of catalysts		
10	3/12 – 17/12	54.1 Production of fertilizers 54.2 Chloroalkali industry 54.3 Production of methanol 54.4 %Social, economic and environmental considerations of industrial processes	% Respect for Others, Responsibility	
11	18/12 – 8/1	55.1 #Principles of green chemistry# 55.2 Green chemistry practices – manufacture of acetic acid 55.3 Evaluating industrial processes using the principles of green chemistry#	% Respect for Others, Responsibility #7 Understand the impact of human activities on the ecological environment and our responsibilities, understand the needs of sustainable development, and recognise the necessity of safeguarding ecological security, resource security, nuclear security and new security domains	
12	9/1 – 13/1	Revision		
12	14/1- 27/1	Mock Exam		
13-15	10/2- 28/2	Revision and doing post mock exercises		
	3/3	F.6 Study Leave Commence		

# Topic related to National Security Education

% Twelve priority values and attitudes:

Perseverance, Respect for Others, Responsibility, National Identity, Commitment, Integrity, Benevolence, Law-abidingness, Empathy, Diligence, Unity and Filial Piety