

Subject	Grade	Stream	Course	TERM	Source	UNIT Number	Unit Name	Number of Periods	Module Number	Module Name	Lesson Number	Lesson Name	Type of learning
Chemistry	G12	ADV	ADV/CHM.C.101	T1	Book available in printed version, and in Digital	U3	Matter, Energy, and equilibrium	12 periods	USM14	Energy and Chemical Change	USM14.1	Energy	Self Learning Direct Learning (Applications)
											USM14.2	Heat	Direct Learning
											USM14.3	Thermochemical Equations	Direct Learning
											USM14.4	Calculating Enthalpy Change	Direct Learning
											USM14.5	Reaction Spontaneity	Self Learning Direct Learning
											USM14.6	Reaction Rate Laws	In-school direct learning / Virtual direct learning
								12 periods	USM15	Reaction Rates	USM15.1	A Model for Reaction Rates	In-school direct learning / Virtual direct learning
											USM15.2	Reaction Rate Laws	In-school direct learning / Virtual direct learning
											USM15.3	Reaction Rate Laws	In-school direct learning / Virtual direct learning
								9 periods	USM16	Chemical Equilibrium	USM16.1	A State of Dynamic Balance	Self Learning (What is equilibrium) Direct Learning
											USM16.2	Factors Affecting Chemical Equilibrium	Self Learning (explanation through an experiment) Direct Learning
											USM16.3	Using Equilibrium Constants	Direct Learning Self Learning
				T2		U3	Matter, Energy, and equilibrium	12 periods	USM17	Acids and Bases	USM17.1	Introduction to Acids and Bases	Self Learning
											USM17.2	Strengths of Acids and Bases	Self Learning
											USM17.3	Hydrogen Ions and pH	Direct Learning
											USM17.4	Neutralization	Self Learning (experiment + applications) Direct Learning
											USM17.5	Acid-Base Equilibria	Self Learning (experiment + applications) Enrichment (Salt Hydrolysis)
											USM17.6	Acid-Base Equilibria	In-school direct learning / Virtual direct learning
				T1		U4	Oxidation and reduction reactions	8 periods	U4M18	Redox Reactions	U4M18.1	Oxidation and Reduction	In-school direct learning / Virtual direct learning
											U4M18.2	Balancing Redox Equations	In-school direct learning / Virtual direct learning
											U4M18.3	Redox	In-school direct learning / Virtual direct learning
								10 periods	U4M19	Electrochemistry	U4M19.1	Voltaic Cells	In-school direct learning / Virtual direct learning
											U4M19.2	Electrolysis	Direct Learning
											U4M19.3	Electrolysis	Self Learning (Summary)
T1		U5	Organic and Nuclear chemistry	10 periods	USM20	Hydrocarbons	USM20.1	Introduction to hydrocarbons	Self Learning				
							USM20.2	Alkanes	In-school direct learning / Virtual direct learning				
							USM20.3	Alkenes and Alkynes	In-school direct learning / Virtual direct learning				
							USM20.4	Hydrocarbon Isomers	In-school direct learning / Virtual direct learning				
							USM20.5	Aromatic Hydrocarbons	Class materials and worksheets are provided Self Learning (Summary)				
							USM20.6	Alkyl Halides and Acyl Halides	In-school direct learning / Virtual direct learning				
				8 periods	USM21	Substituted Hydrocarbons and Their Reactions	USM21.1	Alkyl Halides and Acyl Halides	In-school direct learning / Virtual direct learning				
							USM21.2	Alcohols, Ethers, and Amines	In-school direct learning / Virtual direct learning				
							USM21.3	Carbonyl Compounds	In-school direct learning / Virtual direct learning				
							USM21.4	Other Reactions of Organic Compounds	In-school direct learning / Virtual direct learning				
							USM21.5	Polymers	Enrichment				
							USM21.6	Polymers	In-school direct learning / Virtual direct learning				
U3	Matter, Energy, and equilibrium	3 periods	USM15	Reaction rates	USM15.4	Reaction instantaneous and Reaction Rates	In-school direct learning / Virtual direct learning						