Subject Area	Course and Grade	Selected PLOs related to Sustainability & the Environment	Complexity	Aesthetics	Responsibility	Ethics
SCIENCES	Science 8	*Cells and Systems*				
		• demonstrate knowledge of the characteristics of living things	C	A		
		Water Systems on Earth				
		• explain the significance of salinity and temperature in the world's oceans	C			
		• describe how water and ice shape the landscape	C	A		
		• describe factors that affect productivity and species distribution in aquatic environments	C	A	R	E
	Science 9	*Physical Science: Characteristics of Electricity*				
		• relate electrical energy to power consumption	C		R	E
		Earth and Space Science: Space Exploration				
		• analyse the implications of space travel	C		R	E
		Processes of Science				
		• demonstrate ethical, responsible, cooperative behaviour	C		R	E
		Atoms, Elements, and Compounds				
		• describe changes in the properties of matter	C		R	E
	Science 10	*Energy Transfer in Natural Systems*				
		• explain the characteristics and sources of thermal energy	C		R	
		• explain the effects of thermal energy within the atmosphere	C		R	E
		• evaluate possible causes of climate change and its impact on natural systems	C	A	R	E
		Sustainability of Ecosystems				
		• explain the interaction of abiotic and biotic factors within an ecosystem	C	A		
		• assess the potential impacts of bioaccumulation	C		R	E
		• explain various ways in which natural populations are altered or kept in equilibrium	C	A	R	E
		Processes of Science				
		• demonstrate ethical, responsible, cooperative behaviour	C		R	E

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SCIENCES	Biology 11	*Taxonomy*				
		• apply the Kingdom system of classification to study the diversity of organisms	C	A		
		Evolution				
		• describe the process of evolution	C	A		
		Ecology				
		• analyse the functional inter-relationships of organisms within an ecosystem	C	A	R	E
		Plant Biology				
		• analyze how the increasing complexity of algae, mosses, and ferns represent an evolutionary continuum of adaptation to a land environment	C	A		
		• analyze how the increasing complexity of gymnosperms and angiosperms contribute to survival in a land environment	C	A		
		Animal Biology				
		• analyze how the increasing complexity of animal phyla represents an evolutionary continuum	C	A		
		• analyze the increasing complexity of the Phylum Porifera and the Phylum Cnidaria	C	A		
		• analyze the increasing complexity of the Phylum Platyhelminthes, the Phylum Nematoda, and the Phylum Annelida	C	A		
		• analyze the increasing complexity of the Phylum Mollusca, the Phylum Echinodermata, and the Phylum Arthropoda	C	A		
		• relate the complexity of the form and function of vertebrates to the evolutionary continuum of animals	C	A		
	Earth Science 11	*Introduction to Earth and Space Science*				
		• explain the significance of Earth and space science	C	A	R	E
		Earth Materials (Rocks and Minerals)				
		• assess the extraction and use of geological resources		A	R	E
		Surface Processes and the Hydrosphere				
		• explain the characteristics and significance of the atmosphere	C		R	E
		• describe the function of the hydrologic cycle	C		R	E
		• relate the processes associated with weathering and erosion to the resulting features	C		R	E
		• describe features and processes associated with physical oceanography	C		R	E

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SCIENCES	Science and Technology 11	*Agriculture*				
		• describe elements of agricultural systems found locally, provincially, and globally	C	A		
		• describe the role of genetics in agriculture	C	A	R	E
		• evaluate different methods, including those from Aboriginal cultures, of food production, processing, and preservation	C	A	R	E
		• analyse the effects of changing technology in agriculture on society	C	A	R	E
		Applied Chemistry				
		• classify chemicals commonly found in household products	C			
		• identify safe chemical disposal methods and compare them to common practices in the community	C	A	R	E
		• design and conduct an experiment to identify and compare properties of household products and demonstrate an awareness of the health, safety, economic, and environmental issues related to their use	C	A	R	E
		Natural Resources and the Environment				
		• describe the major natural resources found in British Columbia	C	A		
		• evaluate methods used in the extraction, processing, use and management of a locally used or produced resource	C		R	E
		• discuss the impact of society on natural resource management and the environment	C		R	E
		• analyse the impact of technologies on the environment	C		R	
		Transportation				
		• describe the roles of transportation in society and the effects transportation has had on society				
		• describe a transportation system and evaluate its impact on society	C		R	E

Subject Area	Course and Grade	Selected PLOs related to Sustainability & the Environment	Complexity	Aesthetics	Responsibility	Ethics
SCIENCES	Sustainable Resources 11	• analyze the environmental, social, and economic significance of agriculture at the local, provincial, and global levels	C	A	R	E
		• analyze the environmental, social, and economic significance of fisheries at the local, provincial, and global levels	C	A	R	E
		• analyze the environmental, social, and economic significance of forestry and related industries at the local, provincial, and global levels	C	A	R	E
		• analyze the environmental, social, and economic impacts of acquiring mineral resources, and hydrocarbons from fossil fuels, at the local, provincial, and global levels	C	A	R	E
		• analyze the environmental, social, and eco-nomic significance of energy generation and use at the local, provincial, and global levels	C	A	R	E
		• describe the processes associated with the generation and use of energy resources	C			
		• investigate current practices related to the management of sustainable energy resources	C	A	R	E
	Sustainable Resources 12	Agriculture 12				
		Components of Sustainable Agricultural Systems				
		• debate the concept of sustainability as it relates to agriculture	C	A	R	E
		• investigate the components of an agricultural system	C	A		
		• assess the impact of water management practises on the sustainable production of agricultural commodities	C		R	
		• analyze the use of current land and soil management practises on the sustainable production of agricultural commodities	C			E
		• evaluate the roles of various forms of energy in agricultural production	C			E
		• analyze the use of water, fertilizers, pesticides, and pharmaceuticals in agricultural activities	C		R	E
		• investigate the role of climate in agricultural production	C			
		Agricultural Supports and Challenges				
		• discuss environmental issues as they relate to agricultural practices	C	A	R	E

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SCIENCES	Sustainable Resources 12	Fisheries 12				
		Structure and Function of Aquatic Ecosystems				
		• examine the biotic and abiotic components of a variety of aquatic ecosystems	C	A		
		• investigate interactions found within aquatic ecosystems	C	A		
		Fishery Issues and Challenges				
		• determine environmental issues and challenges related to fisheries	C	A	R	E
		• analyze sustainability issues and challenges related to fisheries	C	A	R	E
		• assess issues and challenges related to aquaculture	C	A	R	E
		Sustainable Fishery Operation and Management				
		• examine methods of assessing fishery stocks	C			
		• assess management practices related to different fisheries	C		R	E
		Forestry 12				
		Forest Resources and Society				
		• analyze current forest management practices	C		R	E
		Forest Ecology				
		• examine the components of forest ecosystems	C	A		
		• investigate the interactions found within a forest environment	C	A		
		• assess the impact of environmental components and changes on a forest ecosystem	C	A	R	
		• analyze the structure and growth of trees	C	A		
		Sustainable Forestry Opportunities and Challenges				
		• outline the challenges impacting the health and sustainability of forest resources in BC	C	A	R	E
		Mining 12				
		Sustainability and Environmental Issues				
		• evaluate the environmental assessment processes conducted for proposed hydrocarbon and mineral extraction operations and associated processing plants			R	E
		• evaluate the processes of site reclamation during and after hydrocarbon and mineral extraction			R	E
		• assess the future of hydrocarbon and mineral resource development			R	E
		Mining Opportunities and Challenges				
		• analyze environmental impacts of various activities related to hydrocarbon and mineral resources extraction, processing, and use	C	A	R	E
	Geology 12	*Earth Resources*				
		• trace the origins of geological resources including mineral deposits, coal, petroleum, and natural gas				
		• explain the significance of geological resources and their economic development				