

CURRICULUM ALIGNMENT – Costs & Benefits of Electricity Generation

Saskatchewan

Grade	Course Name and Number	Unit/Module	Specific Outcome
9	Science 9	Physical Science – Characteristics of Electricity (CE)	Outcome CE9.4 Critique impacts of past, current and possible future methods of small and large-scale electrical energy production and distribution in Saskatchewan.
10, 11, 12	Energy and Mines 10, 20, 30	Module 1: Introduction to Energy and Mines (Core)	Learning Objective 1.1: To review forms and sources of energy in the context of human activity.
10, 11, 12	Energy and Mines 10, 20, 30	Module 1: Introduction to Energy and Mines (Core)	Learning Objective 1.2: To become familiar with Internet resources pertaining to human use of renewable and non-renewable energy resources.
10, 11, 12	Energy and Mines 10, 20, 30	Module 1: Introduction to Energy and Mines (Core)	Learning Objective 1.4: To identify major Saskatchewan renewable and non-renewable energy resources.
10, 11, 12	Energy and Mines 10, 20, 30	Module 1: Introduction to Energy and Mines (Core)	Common Essential Learning: To develop and practice appropriate research and analytical skills.
10, 11, 12	Energy and Mines 10, 20, 30	Module 1: Introduction to Energy and Mines (Core)	Common Essential Learning: To design effective ways of presenting information about energy and mineral resources.
10, 11, 12	Energy and Mines 10, 20, 30	Module 4: Sustainability (Core)	Common Essential Learning: To gather and interpret information on complex social and environmental issues from a variety of primary and secondary sources.
10, 11, 12	Energy and Mines 10, 20, 30	Module 4: Sustainability (Core)	Common Essential Learning: To develop appropriate research and analytical skills to gather, examine and interpret statistical data.
10, 11, 12	Energy and Mines 10, 20, 30	Module 4: Sustainability (Core)	Common Essential Learning: To gather and interpret information on complex social and environmental issues from a variety of primary and secondary sources.
10, 11, 12	Energy and Mines 10, 20, 30	Module 14: Uranium - Refinement, Distribution and Uses (Optional)	Learning Objective 14.7: To explore the pros and cons of nuclear power plants as compared to other types of electrical generation, particularly coal-fired thermal and hydroelectric.
10, 11, 12	Energy and Mines 10, 20, 30	Module 14: Uranium - Refinement, Distribution and Uses (Optional)	Common Essential Learning: To use correct terminology in describing uranium processing and nuclear energy.
10, 11, 12	Energy and Mines 10, 20, 30	Module 14: Uranium - Refinement, Distribution and Uses (Optional)	Common Essential Learning: To research nuclear technology and nuclear issues using the Internet.

10, 11, 12	Energy and Mines 10, 20, 30	Module 14: Uranium - Refinement, Distribution and Uses (Optional)	Common Essential Learning: To use statistics and economic data in exploring aspects of the nuclear industry.
10, 11, 12	Energy and Mines 10, 20, 30	Module 14: Uranium - Refinement, Distribution and Uses (Optional)	Common Essential Learning: To examine and present arguments on both sides of controversial issues.
10, 11, 12	Energy and Mines 10, 20, 30	Module 15: Workplace Safety, Environmental Safety and Careers (Optional)	Common Essential Learning: To examine community concerns regarding the impact of uranium exploration, mining, milling, transport, refining and use as nuclear fuel.
11	Social Studies 20	Unit 3 Concept: Environment	Foundation Objective: Learn the steps of the problem-solving process: define and understand the problem; generate solutions to the problem; define goals and establish criteria to evaluate the available alternatives; decide upon a course of action; decide on a plan to determine whether the course of action is successful; and, decide whether the results of the action plan meet the criteria established to solve the problem.
11	Social Studies 20	Unit 3 Concept: Environment	Foundation Objective: Practice dialectical thinking skills: make a value claim expressing what is good, right or worthwhile concerning a problem; and provide lines of support for taking that particular position on the issue; set out the counter argument to the issue and provide lines of support for it; and come to a dialectical conclusion.
12	Physics 30	Core Unit IV: Nuclear Physics B: Nuclear Reactors	Learning Outcome 9: State some of the facts that supporters of the use of nuclear energy use to substantiate their position.
12	Physics 30	Core Unit IV: Nuclear Physics B: Nuclear Reactors	Learning Outcome 12: Suggest how environmental concerns regarding the use of non-nuclear methods of electrical generation might be alleviated with the use of nuclear energy.