

CURRICULUM ALIGNMENT – Costs & Benefits of Electricity Generation

Manitoba

Grade	Course Name and Number	Topic	Specific Outcome
9	Senior 1 Science	Cluster 0: Overall Skills and Attitudes	Specific Learning Outcome S1-0-2a: Select and integrate information obtained from a variety of sources including print, electronic, specialists and other resource people.
9	Senior 1 Science	Cluster 0: Overall Skills and Attitudes	Specific Learning Outcome S1-0-2c: Summarize and record information in a variety of forms including, paraphrasing, quoting relevant facts and opinions, proper referencing of sources.
9	Senior 1 Science	Cluster 0: Overall Skills and Attitudes	Specific Learning Outcome S1-0-3d: Summarize relevant data and consolidate existing arguments and positions related to an STSE issue.
9	Senior 1 Science	Cluster 0: Overall Skills and Attitudes	Specific Learning Outcome S1-0-3e: Determine criteria for the evaluation of an STSE decision.
9	Senior 1 Science	Cluster 0: Overall Skills and Attitudes	Specific Learning Outcome S1-0-3f: Formulate and develop options which could lead to an STSE decision.
9	Senior 1 Science	Cluster 0: Overall Skills and Attitudes	Specific Learning Outcome S1-0-4e: Work cooperatively with group members to carry out a plan, and troubleshoot problems as they arise.
9	Senior 1 Science	Cluster 0: Overall Skills and Attitudes	Specific Learning Outcome S1-0-5c: Record, organize and display data using an appropriate format. Include: labelled diagrams, graphs, multimedia.
9	Senior 1 Science	Cluster 0: Overall Skills and Attitudes	Specific Learning Outcome S1-0-9c: Demonstrate confidence in their ability to carry out investigations in science and to address STSE issues.
9	Senior 1 Science	Cluster 3: Nature of Electricity	Specific Learning Outcome S1-3-24: Use the decision-making process to address an issue associated with the generation and transmission of electricity in Manitoba.
12	Interdisciplinary Topics in Science 40S	GLOB: Science, Technology, Society, and the Environment	Specific Learning Outcome SLO B1: Identify and explore a current STSE issue.
12	Interdisciplinary Topics in Science 40S	GLOB: Science, Technology, Society and the Environment	Specific Learning Outcome SLO B2: Recognize that decisions reflect values and consider their own values and those of others when making a decision.

12	Interdisciplinary Topics in Science 40S	GLOB: Science, Technology, Society and the Environment	Specific Learning Outcome SLO B4: Recommend an alternative or identify a position and provide justification.
12	Interdisciplinary Topics in Science 40S	GLOB: Science, Technology, Society and the Environment	Specific Learning Outcome SLO C11: Synthesize information obtained from a variety of sources.
12	Interdisciplinary Topics in Science 40S	GLOB: Science, Technology, Society, and the Environment	Specific Learning Outcome SLO C14: Communicate information in a variety of forms appropriate to the purpose, audience and context.
12	Interdisciplinary Topics in Science 40S	GLOB: Science, Technology, Society and the Environment	Specific Learning Outcome SLO C15: Use bibliographic and electronic research tools to collect information on a selected topic.
12	Interdisciplinary Topics in Science 40S	GLOB: Science, Technology, Society and the Environment	Specific Learning Outcome SLO C16: Compare diverse perspectives and interpretations in the media and other public information sources.
12	Interdisciplinary Topics in Science 40S	GLOB: Science, Technology, Society, and the Environment	Specific Learning Outcome SLO C18: Collaborate with others to achieve group goals and responsibilities.
12	Interdisciplinary Topics in Science 40S	GLOB: Science, Technology, Society, and the Environment	Specific Learning Outcome SLO C20: Evaluate individual and group processes used in planning, problem-solving and decision-making or task completion.
12	Interdisciplinary Topics in Science 40S	GLOC: Scientific and Technical Skills and Attitudes	Specific Learning Outcome SLO C21: Demonstrate confidence in their ability to carry out investigations and to address STSE-related issues.
12	Interdisciplinary Topics in Science 40S	GLOC: Scientific and Technical Skills and Attitudes	Specific Learning Outcome SLO C24: Be sensitive and responsible in maintaining a balance between the needs of humans and a sustainable environment.
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12	Interdisciplinary Topics in Science 40S	GLOD: Essential Science Concepts	Specific Learning Outcome SLO D1: Integrate knowledge, as necessary, from various science specialties in order to address an issue, engage in problem solving or conduct scientific inquiries.
12	Senior 4 Physics	Topic 4.1: Medical Physics	Specific Learning Outcome S4P-0-4d: Develop a sense of personal and shared responsibility for the impact of humans on the environment and demonstrate concern for social and environmental consequences of proposed actions.
12	World Geography	Unit 4: World Resources, Energy and Environment	<p>2: World Energy: Present Status and Future Prospects:</p> <ul style="list-style-type: none"> • What is energy? What is the relationship between energy and power? • Why is energy so important today in developed and developing countries? How is quality of life affected by the amounts of energy available? • What are the common forms of energy used today in developed and developing countries? Which ones are of the greatest importance? Of lesser importance? How have energy sources changed over time? • How does energy consumption compare between developed and developing countries? What are the implications? What changes have occurred recently? • Where are the reserves of the important energy sources? What are the implications? What are the problems associated with depending heavily on one energy source? • What are the benefits and problems associated with various forms of energy?
12	World Geography	Unit 4: World Resources, Energy and Environment	<p>3: Present Challenges:</p> <ul style="list-style-type: none"> • What conclusions can be drawn if present trends in resource and energy development continue? • What changes need to be made in energy production and consumption in order to implement the principles and guidelines of sustainable development?