

# CURRICULUM ALIGNMENT – From the Outside In: Biological Effects of Radiation

## Manitoba

Grade	Course Name and Number	Topic	Specific Outcome
9	Senior 1 Science	Cluster 1: Reproduction	<b>Specific Learning Outcome S1-1-15:</b> Investigate and describe environmental factors and personal choices that may lead to a genetic mutation or changes in an organism's development.
9	Senior 1 Science	Cluster 0: Overall Skills and Attitudes	<b>Specific Learning Outcome S1-0-1b:</b> Select and justify various methods for finding answers to specific questions.
9	Senior 1 Science	Cluster 0: Overall Skills and Attitudes	<b>Specific Learning Outcome S1-0-2a:</b> Select and integrate information obtained from a variety of sources. Include: print, electronic, specialists, other resource people.
9	Senior 1 Science	Cluster 0: Overall Skills and Attitudes	<b>Specific Learning Outcome S1-0-2c:</b> Summarize and record information in a variety of forms. Include: paraphrasing, quoting relevant facts and opinions, proper referencing of sources.
9	Senior 1 Science	Cluster 0: Overall Skills and Attitudes	<b>Specific Learning Outcome S1-0-4e:</b> 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	<b>Specific Learning Outcome S1-0-5c:</b> Record, organize and display data using an appropriate format. Include: labelled diagrams, graphs, multimedia.
12	Senior 4 Physics	Topic 4.1: Medical Physics	<b>Specific Learning Outcome S4P-4-4:</b> Describe the following types of radiation: alpha, beta and electromagnetic radiation.
12	Senior 4 Physics	Topic 4.1: Medical Physics	<b>Specific Learning Outcome S4P-4-8:</b> Describe the effects of non-ionizing and ionizing radiation on the human body.
12	Senior 4 Physics	Topic 4.1: Medical Physics	<b>Specific Learning Outcome S4P-0-2i:</b> Select and integrate information obtained from a variety of sources.
12	Senior 4 Physics	Topic 4.1: Medical Physics	<b>Specific Learning Outcome S4P-0-4b:</b> Work co-operatively with a group to identify prior knowledge, initiate and exchange ideas, propose problems and their solution, and carry out investigations.