

# CURRICULUM ALIGNMENT – Attack of the 50 Foot Mutant: Radiation in Popular Culture

## Ontario

Grade	Course Name and Number	Strand	Expectations
10	Science, Grade 10 (SNC2P)	B. Biology: Tissues, Organs and Systems	<b>Specific Expectation B1.2:</b> Evaluate the effects that use of or exposure to a technology, substance, or environmental factor (e.g. cell phones, X-rays, UV radiation, personal audio players, cigarette smoke, pesticides, food additives/preservatives, vitamins, gene therapy) may have on the function of human tissues, organs, or systems.
11	Biology, Grade 11 (SBI3C)	B. Cellular Biology	<b>Overall Expectation B1:</b> Evaluate the impact of environmental factors and medical technologies on certain cellular processes that occur in the human body.
11	Biology, Grade 11 (SBI3C)	B. Cellular Biology	<b>Specific Expectation B1.2:</b> Analyze the effects of environmental factors on cellular processes that occur in the human body (e.g. the effect of lead on nerve cells; the effect of electromagnetic radiation on brain cells).
11	Biology, Grade 11 (SBI3C)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.3:</b> Identify and locate a variety of print and electronic sources that enable them to address research topics fully and appropriately.
11	Biology, Grade 11 (SBI3C)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.7:</b> Select, organize, and record relevant information on research topics from a variety of appropriate sources, including electronic, print, and/or human sources, using suitable formats and an accepted form of academic documentation.
11	Biology, Grade 11 (SBI3C)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.10:</b> Draw conclusions based on inquiry results and research findings and justify their conclusions with reference to scientific knowledge.
11	Biology, Grade 11 (SBI3C)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.11:</b> Communicate ideas, plans, procedures, results, and conclusions orally, in writing, and/or in electronic presentations, using appropriate language and a variety of formats (e.g. data tables, laboratory reports, presentations, debates, simulations, models).
11	Biology, Grade 11 (SBI3U)	D. Genetic Processes	<b>Specific Expectation D3.4:</b> Describe some genetic disorders caused by chromosomal abnormalities (e.g. non-disjunction of chromosomes during meiosis) or other genetic mutations in terms of chromosomes affected, physical effects and treatments.
11	Biology, Grade 11 (SBI3U)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.3:</b> Identify and locate a variety of print and electronic sources that enable them to address research topics fully and appropriately.

11	Biology, Grade 11 (SBI3U)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.7:</b> Select, organize, and record relevant information on research topics from a variety of appropriate sources, including electronic, print, and/or human sources, using suitable formats and an accepted form of academic documentation.
11	Biology, Grade 11 (SBI3U)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.10:</b> Draw conclusions based on inquiry results and research findings and justify their conclusions with reference to scientific knowledge.
11	Biology, Grade 11 (SBI3U)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.11:</b> Communicate ideas, plans, procedures, results, and conclusions orally, in writing, and/or in electronic presentations, using appropriate language and a variety of formats (e.g. data tables, laboratory reports, presentations, debates, simulations, models).
11	Environmental Science, Grade 11 (SVN3E)	C. Human Health and the Environment	<b>Overall Expectation C1:</b> Analyze the effects of environmental contaminants and a significant environmental phenomenon on human health.
11	Environmental Science, Grade 11 (SVN3E)	C. Human Health and the Environment	<b>Specific Expectation C3.2:</b> Describe various ways in which environmental contaminants can enter the human body (e.g. inhalation, ingestion, absorption).
11	Environmental Science, Grade 11 (SVN3E)	C. Human Health and the Environment	<b>Specific Expectation C3.3:</b> Explain how the human body can react to exposure to a variety of environmental factors (e.g. rashes, asthma, mercury poisoning, hearing loss, diseases such as malaria and cancer).
11	Environmental Science, Grade 11 (SVN3E)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.7:</b> Select, organize and record relevant information on research topics from a variety of appropriate sources, including electronic, print and/or human sources, using suitable formats and an accepted form of academic documentation.
11	Environmental Science, Grade 11 (SVN3E)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.10:</b> Draw conclusions based on inquiry results and research findings and justify their conclusions with reference to scientific knowledge.
11	Environmental Science, Grade 11 (SVN3E)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.11:</b> Communicate ideas, plans, procedures, results, and conclusions orally, in writing, and/or in electronic presentations, using appropriate language and a variety of formats (e.g. data tables, laboratory reports, presentations, graphic organizers, simulations, models, workplace labels).
11	Environmental Science, Grade 11 (SVN3E)	C. Human Health and the Environment	<b>Specific Expectation C3.3:</b> Describe ways in which a variety of environmental contaminants (e.g. volatile organic compounds in paints, carpets, and cleaning products;

	11 (SVN3M)		mercury in fish; E. coli in the water at public beaches) can enter the human body (e.g. inhalation, ingestion, absorption).
11	Environmental Science, Grade 11 (SVN3M)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.7:</b> Select, organize, and record relevant information on research topics from a variety of appropriate sources, including electronic, print, and/or human sources, using suitable formats and an accepted form of academic documentation.
11	Environmental Science, Grade 11 (SVN3M)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.10:</b> Draw conclusions based on inquiry results and research findings and justify their conclusions with reference to scientific knowledge.
11	Environmental Science, Grade 11 (SVN3M)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.11:</b> Communicate ideas, plans, procedures, results, and conclusions orally, in writing, and/or in electronic presentations, using appropriate language and a variety of formats (e.g. data tables, laboratory reports, presentations, debates, simulations, models).
11	Physics, Grade 11 (SPH3U)	D. Energy and Society	<b>Specific Expectations D3.10:</b> Compare the characteristics of (e.g. mass, charge, speed, penetrating power, ionizing ability) and safety precautions related to alpha particles, beta particles, and gamma rays.
11	Physics, Grade 11 (SPH3U)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.3:</b> Identify and locate a variety of print and electronic sources that enable them to address research topics fully and appropriately.
11	Physics, Grade 11 (SPH3U)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.7:</b> Select, organize, and record relevant information on research topics from a variety of appropriate sources, including electronic, print, and/or human sources, using suitable formats and an accepted form of academic documentation.
11	Physics, Grade 11 (SPH3U)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.10:</b> Draw conclusions based on inquiry results and research findings and justify their conclusions with reference to scientific knowledge.
11	Physics, Grade 11 (SPH3U)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.11:</b> Communicate ideas, plans, procedures, results, and conclusions orally, in writing, and/or in electronic presentations, using appropriate language and a variety of formats (e.g. data tables, laboratory reports, presentations, debates, simulations, models).
11	World History Since 1900: Global and Regional	Change and Continuity	<b>Specific Expectation:</b> Describe major technological and economic changes since 1900 and their impact on society.

	Perspectives (CHT30)		
11	World History Since 1900: Global and Regional Perspectives (CHT30)	Change and Continuity	<b>Specific Expectation:</b> Describe how belief in progress and technological improvements provides a framework for understanding history since 1900.
12	Biology, Grade 12 (SBI4U)	D. Molecular Genetics	<b>Specific Expectation D3.4:</b> Explain how mutagens, such as radiation and chemicals, can cause mutations by changing the genetic material in cells (e.g. the mechanisms and effects of point mutations and frameshift mutations).
12	Biology, Grade 12 (SBI4U)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.3:</b> Identify and locate a variety of print and electronic sources that enable them to address research topics fully and appropriately.
12	Biology, Grade 12 (SBI4U)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.7:</b> Select, organize, and record relevant information on research topics from a variety of appropriate sources, including electronic, print, and/or human sources, using suitable formats and an accepted form of academic documentation.
12	Biology, Grade 12 (SBI4U)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.10:</b> Draw conclusions based on inquiry results and research findings and justify their conclusions with reference to scientific knowledge.
12	Biology, Grade 12 (SBI4U)	A. Scientific Investigation Skills and Career Development	<b>Specific Expectation A1.11:</b> Communicate ideas, plans, procedures, results, and conclusions orally, in writing, and/or in electronic presentations, using appropriate language and a variety of formats (e.g. data tables, laboratory reports, presentations, debates, simulations, models).