

CURRICULUM ALIGNMENT – Food Irradiation: What’s the Scoop?

Ontario

Grade	Course Name and Number	Strand	Expectations
12	Science, Grade 12 (SNC4M)	A. Scientific Investigation Skills and Career Development	Overall Expectation A1: Demonstrate scientific investigation skills (related to both inquiry and research) in the four areas of skills (initiating and planning, performing and recording, analyzing and interpreting, and communicating).
12	Science, Grade 12 (SNC4M)	A. Scientific Investigation Skills and Career Development	Specific Expectation A1.3: Identify and locate a variety of print and electronic sources that enable them to address research topics fully and appropriately.
12	Science, Grade 12 (SNC4M)	A. Scientific Investigation Skills and Career Development	Specific Expectation A1.7: 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	Science, Grade 12 (SNC4M)	A. Scientific Investigation Skills and Career Development	Specific Expectation A1.10: Draw conclusions based on inquiry results and research findings and justify their conclusions with reference to scientific knowledge.
12	Science, Grade 12 (SNC4M)	A. Scientific Investigation Skills and Career Development	Specific Expectation A1.11: 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).
12	Science, Grade 12 (SNC4M)	C. Pathogens and Disease	Overall Expectation C1: Evaluate the impact of scientific and technological knowledge and individual behaviour on the control of pathogens and the prevention of disease.
12	Science, Grade 12 (SNC4M)	C. Pathogens and Disease	Overall Expectation C2: Investigate the nature and growth of pathogens and the effectiveness of measures intended to prevent their spread.
12	Science, Grade 12 (SNC4M)	C. Pathogens and Disease	Overall Expectation C3: Demonstrate an understanding of pathogens, the diseases they cause, and ways of controlling their spread.
12	Science, Grade 12 (SNC4M)	C. Pathogens and Disease	Specific Expectation C1.1: Analyze, on the basis of research, the impact, both positive and negative, of scientific and technological advances intended to prevent the spread of illness and disease.
12	Science, Grade 12 (SNC4M)	C. Pathogens and Disease	Specific Expectation C3.2: Describe the mode of transmission of various diseases, including those that are insect-borne (e.g. malaria, encephalitis), airborne (e.g. influenza, tuberculosis), water-borne (e.g. cholera, poliomyelitis), sexually transmitted (e.g. HIV/AIDS), and food-borne (e.g. mad cow disease, trichinosis, salmonella).

12	Science, Grade 12 (SNC4M)	E. Science and Public Health Issues	Overall Expectation E1: Assess the impact of scientific research, technological advances and government initiatives on public health.
12	Science, Grade 12 (SNC4M)	E. Science and Public Health Issues	Overall Expectation E2: Investigate various strategies related to contemporary public health issues.
12	Science, Grade 12 (SNC4M)	E. Science and Public Health Issues	Overall Expectation E3: Demonstrate an understanding of major public health issues, past and present.
12	Science, Grade 12 (SNC4M)	E. Science and Public Health Issues	Specific Expectation E1.2: Assess, on the basis of research, the effectiveness of a municipal, provincial or federal government initiative intended to protect the public health of Canadians (e.g. immunization programs, smoking bans, Health Canada advisories).
12	Science, Grade 12 (SNC4M)	E. Science and Public Health Issues	Specific Expectation E2.4: Use a research process to locate a media report on a public health issue (e.g. the handling of SARS, the banning of bisphenol-A in plastic bottles), summarize its arguments, and assess them from a scientific perspective.
12	Science, Grade 12 (SNC4M)	E. Science and Public Health Issues	Specific Expectation E3.3: Explain the impact of various threats to public health, including infectious diseases (e.g. hepatitis, HIV/AIDS, tuberculosis, malaria, sexually transmitted diseases), chronic diseases (e.g. cardiovascular disease, diabetes, asthma), and environmental factors (e.g. climate change, air pollution, chemical pollutants, radiation).
12	Science, Grade 12 (SNC4M)	E. Science and Public Health Issues	Specific Expectation E3.5: Describe public health measures, including legislation, that are used for the protection of the public (e.g. quarantines, vaccinations, water chlorination, regulations on what items travellers can bring into a country).
12	Science, Grade 12 (SNC4E)	A. Scientific Investigation Skills and Career Development	Overall Expectation A1: Demonstrate scientific investigation skills (related to both inquiry and research) in the four areas of skills (initiating and planning, performing and recording, analyzing and interpreting, and communicating).
12	Science, Grade 12 (SNC4E)	A. Scientific Investigation Skills and Career Development	Specific Expectation A1.3: Identify and locate a variety of print and electronic sources (e.g. Material Safety Data Sheets, appliance manuals, hydro bills, the Live Safe! Work Smart! website) that enable them to address research topics fully and appropriately.
12	Science, Grade 12 (SNC4E)	A. Scientific Investigation Skills and Career Development	Specific Expectation A1.7: 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	Science, Grade 12 (SNC4E)	A. Scientific Investigation Skills and Career Development	Specific Expectation A1.10: Draw conclusions based on inquiry results and research findings and justify their conclusions with reference to scientific knowledge.

12	Science, Grade 12 (SNC4E)	A. Scientific Investigation Skills and Career Development	Specific Expectation A1.11: 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).
12	Science, Grade 12 (SNC4E)	D. Disease and its Prevention	Overall Expectation D1: Evaluate the impact of public policy initiatives and technological advances intended to control the spread of disease, taking into consideration the failure of some people to follow public health regulations or recommendations.
12	Science, Grade 12 (SNC4E)	D. Disease and its Prevention	Specific Expectation D1.1: Evaluate the effectiveness of a public policy measure or technological advance intended to control the spread of disease (e.g. mandatory immunization, screening for tuberculosis, quarantine).
12	Science, Grade 12 (SNC4E)	D. Disease and its Prevention	Specific Expectation D1.3: Analyze, on the basis of research, the advantages and disadvantages of selected technologies used to try to control disease (e.g. the effectiveness of pharmaceuticals at combating disease; the side effects of a variety of drugs).
12	Science, Grade 12 (SNC4E)	D. Disease and its Prevention	Overall Expectation D3: Demonstrate an understanding of the causes, symptoms and modes of transmission of various diseases, and of strategies to prevent the spread of disease.
12	Science, Grade 12 (SNC4E)	D. Disease and its Prevention	Specific Expectation D3.1: Describe modes of transmission of some communicable diseases, including those that are insect-borne (e.g. malaria, encephalitis), airborne (e.g. influenza, tuberculosis), waterborne (e.g. cholera, poliomyelitis), sexually transmitted (e.g. HIV/AIDS), and food-borne (e.g. mad cow disease, trichinosis, salmonella).
12	Science, Grade 12 (SNC4E)	D. Disease and its Prevention	Specific Expectation D3.4: Describe the use of vaccines, antibiotics, antiseptics and other medical measures, both conventional and alternative, intended to control disease.