

CURRICULUM ALIGNMENT – Fission vs. Fusion

Ontario

Grade	Course Name and Number	Strand	Expectations
11	Physics, Grade 11 (SPH3U)	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).
11	Physics, Grade 11 (SPH3U)	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.
11	Physics, Grade 11 (SPH3U)	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.
11	Physics, Grade 11 (SPH3U)	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).
11	Physics, Grade 11 (SPH3U)	D. Energy and Society	Overall Expectation D1: Analyze technologies that apply principles of and concepts related to energy transformations and assess the technologies' social and environmental impact.
11	Physics, Grade 11 (SPH3U)	D. Energy and Society	Specific Expectation D1.2: Assess, on the basis of research, how technologies related to nuclear, thermal or geothermal energy affect society and the environment (e.g. thermal regulating units, radiopharmaceuticals, dry-steam power plants, ground-source heat pumps).
11	Physics, Grade 11 (SPH3U)	D. Energy and Society	Specific Expectation D2.1: Use appropriate terminology related to energy transformations, including, but not limited to: mechanical energy, gravitational potential energy, kinetic energy, work, power, fission, fusion, heat, heat capacity, temperature and latent heat.
11	Physics, Grade 11 (SPH3U)	D. Energy and Society	Specific Expectation D2.7: Compare and contrast the input energy, useful output energy and per cent efficiency of selected energy generation methods (e.g. hydroelectric, thermal, geothermal, nuclear fission, nuclear fusion, wind, solar).
11	Physics, Grade 11 (SPH3U)	D. Energy and Society	Specific Expectation D3.6: Describe and compare nuclear fission and nuclear fusion.