

**MANITOBA CALL FOR PHYSICS 40S  
SENIOR 4 (GRADE 12)**

**CURRICULUM CORRELATION FORM**

**Title:** \_\_\_\_\_

**Series Title** (if applicable): \_\_\_\_\_

**Format:** \_\_\_\_\_ **Copyright Date:** \_\_\_\_\_ **ISBN:** \_\_\_\_\_

**Student Resource**  **Teacher Resource**

Indicate in the boxes (4) below the Topic(s) to which the resource applies.

**Topic 1**  **Topic 2**  **Topic 3**  **Topic 4**  **Skills and Attitudes**   
**Mechanics** **Fields** **Work / Energy Relations** **Electric Circuits**

**Contains potentially sensitive content?** **Yes**  **No**

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**Instructions:** In the boxes (4) the degree of curriculum fit and provide specific unit, chapter, or page references for each Topic that applies using the following form. *Note: Skills and Attitudes must also be completed for each resource.*

**Rating Scale for Degree of Curriculum Fit**

- **Extensive** – The learning resource details content, multiple learning activities, and differentiated teaching strategies that address the required General Learning Outcome(s) and Specified Learning Outcome(s) of the curriculum framework.
- **Moderate** – The learning resource details some content, some learning activities, and some teaching strategies that address the required General Learning Outcome(s) and Specified Learning Outcome(s) of the curriculum framework.
- **Slight** – The learning resource content, learning activities, and teaching strategies address less than the required General Learning Outcome(s) and Specified Learning Outcome(s) of the curriculum framework.
- **None** – The learning resource contains insufficient content, learning activities or teaching strategies to address the required General Learning Outcome(s) and Specified Learning Outcome(s) of the curriculum framework.

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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## Thematic Cluster Outcomes

### Senior 4 (Grade 12)

#### Topic 1 - Mechanics

##### Outcome PHY-1-1

	none	slight	moderate	extensive	
Derive the special equations for constant acceleration using the slope and area of a velocity-time graph for an object in constant acceleration.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

##### Outcome PHY-1-2

	none	slight	moderate	extensive	
Solve problems using various combinations of kinematic equations and situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

##### Outcome PHY-1-3

	none	slight	moderate	extensive	
Solve simple free fall problems using kinematic equations for constant acceleration.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

##### Outcome PHY-1-4

	none	slight	moderate	extensive	
Identify that the curved path of a projectile is due to the combination of constant accelerated vertical motion and constant horizontal motion (or similar combination).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

##### Outcome PHY-1-5

	none	slight	moderate	extensive	
Draw free body diagrams for projectiles at various points along its path.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

##### Outcome PHY-1-6

	none	slight	moderate	extensive	
Calculate the horizontal and vertical components of a projectile at various points along its path.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

##### Outcome PHY-1-7

	none	slight	moderate	extensive	
Solve problems for projectiles which are launched horizontally and at various angles to the horizontal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

##### Outcome PHY-1-8

	none	slight	moderate	extensive	
Solve problems to calculate how high a projectile rises, how long it stays in the air, and how far it travels.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### Comments


Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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## Thematic Cluster Outcomes

### Senior 4 (Grade 12)

#### Topic 1 – Mechanics (*Continued*)

<i>Outcome PHY-1-9</i>	none	slight	moderate	extensive
Define and outline the terms period and frequency for periodic motion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome PHY-1-10</i>	none	slight	moderate	extensive
Experimentally determine the inverse square relationship between centripetal force and period. $v = (2\pi R)/T$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome PHY-1-11</i>	none	slight	moderate	extensive
Derive an equation for the constant speed of an object moving in a circle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome PHY-1-12</i>	none	slight	moderate	extensive
Derive the equations for the centripetal acceleration of an object moving with a constant speed in a circle. $a = (4\pi^2 R^2) / T^2$ $a = v^2 / R$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome PHY-1-13</i>	none	slight	moderate	extensive
Relate the centripetal force to Newton's laws and derive an equation to describe the force on an object moving in uniform circular motion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome PHY-1-14</i>	none	slight	moderate	extensive
Qualitatively discuss the centripetal force on an object to examine the preconception of an outward force (centrifugal effects).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome PHY-1-15</i>	none	slight	moderate	extensive
Identify that the curved path of a projectile is due to the combination of constant accelerated vertical motion and constant horizontal motion (or similar combination).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Topic Rating</i>	none	slight	moderate	extensive
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments**


Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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## Thematic Cluster Outcomes

### Senior 4 (Grade 12)

#### Topic 2 - Fields

<i>Outcome PHY-2-1</i>	none	slight	moderate	extensive	
State and describe Kepler's three laws of planetary motion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Outcome PHY-2-2</i>	none	slight	moderate	extensive	
Outline Newton's law of universal gravitation ( $Gm_1m_2/R^2$ )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Outcome PHY-2-3</i>	none	slight	moderate	extensive	
Compare the Law of Universal Gravitation with the weight (mg) of an object near the surface of the earth, and describe the field near the surface as a CONSTANT field.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Outcome PHY-2-4</i>	none	slight	moderate	extensive	
Compare the law of universal gravitation to the centripetal force of the planets (circular motion).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Outcome PHY-2-5</i>	none	slight	moderate	extensive	
Solve problems to find the mass of an object that is experiencing a gravitational field	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Outcome PHY-2-6</i>	none	slight	moderate	extensive	
Outline the inverse square nature of the electrical field and state Coulomb's law.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Outcome PHY-2-7</i>	none	slight	moderate	extensive	
Solve vector problems for more than one electric force acting on a charge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Outcome PHY-2-8</i>	none	slight	moderate	extensive	
State the electric field as a force per unit charge ( $E = F_e/q$ ).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Outcome PHY-2-9</i>	none	slight	moderate	extensive	
Derive an expression for the electric field around a point charge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### Comments


Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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## Thematic Cluster Outcomes

### Senior 4 (Grade 12)

#### Topic 2 – Fields (Continued)

Outcome	none	slight	moderate	extensive	
Outcome <i>PHY-2-10</i> Diagram the electric field between two point charges and two parallel plates.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Outcome <i>PHY-2-11</i> Solve problems for charges moving in electric fields using conservation of energy principles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Outcome <i>PHY-2-12</i> Describe the work done accelerating a charge in an electric field as the product of charge and voltage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Outcome <i>PHY-2-13</i> Derive an expression for the electric field of parallel plates.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Outcome <i>PHY-2-14</i> Solve problems for charges moving between/through parallel plates.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Outcome <i>PHY-2-15</i> Review the nature of a magnetic field as a force per unit current element	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Outcome <i>PHY-2-16</i> Derive an expression for the force on a charge moving perpendicular to a magnetic field ( $F = qvB$ ).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Outcome <i>PHY-2-17</i> Solve problems for the circular motion of a charge in a magnetic field.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Outcome <i>PHY-2-18</i> Use hand rules to describe the directional relationship between force, motion, and field.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### Comments


Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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## Thematic Cluster Outcomes

### Senior 4 (Grade 12)

#### Topic 2 – Fields (*Continued*)

##### Outcome PHY-2-19

	none	slight	moderate	extensive
Describe the cathode ray tube and derive Thomson's e/m ratio.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

##### Outcome PHY-2-20

	none	slight	moderate	extensive
Describe the operation of a mass spectrometer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

##### Outcome PHY-2-21

	none	slight	moderate	extensive
Describe the production of electromagnetic waves.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

##### Topic Rating

	none	slight	moderate	extensive
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Comments


Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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## Thematic Cluster Outcomes

### Senior 4 (Grade 12)

#### Topic 3 – Work / Energy Relations

##### Outcome PHY-3-1

Operationally define momentum.

none    slight    moderate    extensive

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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##### Outcome PHY-3-2

Derive impulse-momentum equations from Newton's second law.

none    slight    moderate    extensive

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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##### Outcome PHY-3-3

Operationally define impulse.

none    slight    moderate    extensive

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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##### Outcome PHY-3-4

Apply impulse-momentum equations where force is a constant.

none    slight    moderate    extensive

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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##### Outcome PHY-3-5

Perform a lab to demonstrate the law of conservation of momentum.

none    slight    moderate    extensive

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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##### Outcome PHY-3-6

Apply the principles of conservation of momentum to solve problems in one dimension (e.g., head-on explosions and collisions, elastic and inelastic).

none    slight    moderate    extensive

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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##### Topic Rating

none    slight    moderate    extensive

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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##### Comments


Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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## Thematic Cluster Outcomes

### Senior 4 (Grade 12)

#### Topic 4 – Electric Circuits

##### Outcome PHY-4-1

Define current and solve problems for current, charge, and time.

none    slight    moderate    extensive

          

##### Outcome PHY-4-2

Identify the sources of emf (chemical, photoelectric, piezoelectric, electromagnetic, and thermoelectric).

none    slight    moderate    extensive

          

##### Outcome PHY-4-3

Relate conventional current direction to the electron flow in a conductor.

none    slight    moderate    extensive

          

##### Outcome PHY-4-4

Perform a lab to demonstrate resistance varies with length, resistance varies with area<sup>-1</sup> and current varies with resistance<sup>-1</sup>.

none    slight    moderate    extensive

          

##### Outcome PHY-4-5

Demonstrate the ability to construct simple circuits from schematic diagrams.

none    slight    moderate    extensive

          

##### Outcome PHY-4-6

Demonstrate the correct placement of ammeters and voltmeters in simple circuits.

none    slight    moderate    extensive

          

##### Outcome PHY-4-7

Perform an experiment to investigate Ohm's law.

none    slight    moderate    extensive

          

##### Outcome PHY-4-8

Calculate the total resistance for series, parallel, and combined networks.

none    slight    moderate    extensive

          

##### Outcome PHY-4-9

Define and solve problems for terminal voltage and internal resistance.

none    slight    moderate    extensive

          

#### Comments


Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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## Thematic Cluster Outcomes

### Senior 4 (Grade 12)

#### Topic 4 – Electric Circuits (*Continued*)

##### Outcome PHY-4-10

Derive the relationships  $P = I^2R$  and  $P = V^2/R$  from  $P = VI$  and  $V = IR$  and apply to circuits problems.

none    slight    moderate    extensive

          

##### Outcome PHY-4-11

Describe and calculate the power changes which occur with a current divider (resistance in parallel).

none    slight    moderate    extensive

          

##### Outcome PHY-4-12

Demonstrate the causes of induced emf.

none    slight    moderate    extensive

          

##### Outcome PHY-4-13

Outline Lenz's law.

none    slight    moderate    extensive

          

##### Outcome PHY-4-14

Describe the emf of a rotating loop.

none    slight    moderate    extensive

          

##### Outcome PHY-4-15

Graph voltage vs time for the AC cycle.

none    slight    moderate    extensive

          

##### Outcome PHY-4-16

Describe the operation of transformers.

none    slight    moderate    extensive

          

### Comments


Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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## Thematic Cluster Outcomes

### Senior 4 (Grade 12)

#### Topic 4 – Electric Circuits (*Continued*)

##### *Outcome PHY-4-17*

	none	slight	moderate	extensive	
Solve problems using the transformer ratio of voltage/turns.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

##### *Outcome PHY-4-18*

	none	slight	moderate	extensive	
Describe the generation, transmission and environmental consequences of electricity production in Manitoba.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

##### **Topic Rating**

	none	slight	moderate	extensive	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

##### **Comments**


Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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## Skills and Attitudes Outcomes

### Senior 4 (Grade 12)

NAT = Nature of Science    INQ = Student Inquiry    STS = Science, Technology, Society    ATT = Scientific Attitudes

<i>Outcome-NAT-1</i>	none	slight	moderate	extensive
Explain the roles of theory, evidence, and models in the development of scientific knowledge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome-NAT-2</i>	none	slight	moderate	extensive
Describe the importance of peer review in the evaluation and acceptance of scientific theories, evidence, and knowledge claims.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome-NAT-3</i>	none	slight	moderate	extensive
Relate the historical development of scientific ideas and technology to the form and function of scientific knowledge today.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome-NAT-4</i>	none	slight	moderate	extensive
Explain how scientific knowledge changes as new evidence emerges and/or new ideas and interpretations are advanced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome-NAT-5</i>	none	slight	moderate	extensive
Differentiate between how scientific theories explain natural phenomena and how scientific laws identify regularities and patterns in nature.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome-INQ-1</i>	none	slight	moderate	extensive
Summarize and record information in a variety of forms. Include: paraphrasing, quoting relevant facts and opinions, proper referencing of sources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome-INQ-2</i>	none	slight	moderate	extensive
Identify the theoretical basis of an investigation and implement, adapt, or extend procedures to carry out an investigation where required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Outcome-INQ-3</i>	none	slight	moderate	extensive
Formulate operational definitions of major variables or concepts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Comments


Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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## Skills and Attitudes Outcomes (Continued)

### Senior 4 (Grade 12)

<i>Outcome-INQ-4</i>	none	slight	moderate	extensive	
Estimate and measure accurately using SI units and evaluate the relevance, reliability, adequacy of data and data collection methods. Include: discrepancies in data and sources of error	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome-INQ-5</i>	none	slight	moderate	extensive	
Record, organize, and display data using an appropriate format. Include: labeled diagrams, tables, graphs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome-INQ-6</i>	none	slight	moderate	extensive	
Interpret patterns and trends in data, and infer or calculate linear relationships among variables.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome-INQ-7</i>	none	slight	moderate	extensive	
Add and subtract vectors to analyze force, motion or fields problems. Include: vectors in straight lines, vectors at right angles, vector components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome-STS-1</i>	none	slight	moderate	extensive	
Analyze, from a variety of perspectives, the risks and benefits to society and the environment when applying scientific knowledge or introducing technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome-STS-2</i>	none	slight	moderate	extensive	
Illustrate examples of how technology has evolved in response to scientific advances, and how scientific knowledge has evolved as the result of new innovations in technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome-STS-3</i>	none	slight	moderate	extensive	
Identify social issues related to science and technology, taking into account human and environmental needs and ethical considerations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome-STS-4</i>	none	slight	moderate	extensive	
Use the decision making process to address an STSE issue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### Comments


Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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## Skills and Attitudes Outcomes (Continued)

### Senior 4 (Grade 12)

#### Outcome-STS-5

	none	slight	moderate	extensive	
Identify a social issue, initiate research, and design a technological or other solution to address the issue.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### Outcome-ATT-1

	none	slight	moderate	extensive	
Demonstrate work habits that ensure personal safety, the safety of others, and consideration of the environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### Outcome-ATT-2

	none	slight	moderate	extensive	
Work co-operatively with a group to identify prior knowledge, initiate and exchange ideas, propose problems and their solution, and carry out investigations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### Outcome-ATT-3

	none	slight	moderate	extensive	
Demonstrate confidence carrying out investigations, evaluating evidence, and developing rational conclusions from a scientific perspective to address STSE issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### Outcome-ATT-4

	none	slight	moderate	extensive	
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### Outcome-ATT-5

	none	slight	moderate	extensive	
Demonstrate a continuing, and more informed interest, in science and science-related issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### Topic Rating

	none	slight	moderate	extensive	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### Comments
