Physics Courses offered at Burnaby North
Curriculum Topics

Physics 11 Honours - Topics

Topic	Course(s) with this topic
Mechanical Waves and Sound	BC Physics 11
Vector Kinematics in 1 and 2 dimensions	BC Physics 11; BC Physics 12; Physics AP 1
Vector Dynamics in 1 and 2 dimensions – Newton's Laws	BC Physics 11; BC Physics 12; Physics AP 1
Vector Dynamics in 1 and 2 dimensions – Gravitation	BC Physics 11; BC Physics 12; Physics AP 1
Momentum in 1 and 2 dimensions (collisions)	BC Physics 11; BC Physics 12; Physics AP 1
Work, Energy, Power, efficiency	BC Physics 11; BC Physics 12; Physics AP 1
Simple machines	BC Physics 11; Physics AP 1
Thermal Energy	BC Physics 11
Electric circuits (Ohm's Law, and Kirchhoff's Laws; electric power); series and parallel circuits	BC Physics 11; Physics AP 1

Physics AP-1/Physics 12 Honours - Topics

Topic	Course(s) with this topic
Special Relativity	BC Physics 12
Simple Harmonic Motion	Physics AP 1
Static Equilibrium and Torque	BC Physics 12; Physics AP 1
Torque – rotational kinematics, angular acceleration, angular momentum	Physics AP 1
Gravitational Potential Energy at Universal Scales	BC Physics 12; Physics AP 1
Circular Motion and Gravitation (orbital motion)	BC Physics 12; Physics AP 1
Electrostatics	BC Physics 12; Physics AP 2
Electromagnetism	BC Physics 12; Physics AP 2

Physics AP-2 - Topics

Topic	Course(s) with this topic
Fluid Dynamics	Physics AP 2
Thermodynamics	Physics AP 2
Geometric and Physical Optics	Physics AP 2
Quantum, Atomic, and Nuclear Physics	Physics AP 2
Electrostatics - Electric Force, Field, and Potential	BC Physics 12; Physics AP 2
Electric Circuits (including capacitance)	BC Physics 12; Physics AP 2
Electromagnetism	BC Physics 12; Physics AP 2

BC Physics 11 Topics

- Mechanical Waves and Sound
- Kinematics in 1 dimension
- Dynamics in 1 dimension
- Gravitation
- Momentum in 1 dimension
- Work, Energy, Power, Efficiency
- Simple machines
- Thermal Energy
- Electric circuits (Ohm's Law, and Kirchhoff's Laws; electric power)

BC Physics 12 Topics

- Vector Kinematics in 1 and 2 dimensions
- Special Relativity
- Vector Dynamics in 1 and 2 dimensions – Newton's Laws
- Vector Dynamics in 1 and 2 dimensions – Gravitation
- Static Equilibrium and Torque
- Work, Energy, and Power
- Gravitational Potential Energy at Universal Scales
- Momentum in 1 and 2 dimensions (collisions)
- Circular Motion and Gravitation (orbital motion)
- Electrostatics
- Electromagnetism

Advanced Placement Physics AP-1 Topics

- Vector Kinematics in 1 and 2 dimensions
- Vector Dynamics in 1 and 2 dimensions – Newton's Laws
- Vector Dynamics in 1 and 2 dimensions – Gravitation
- Circular Motion and Gravitation (orbital motion)
- Work, Energy, and Power
- Momentum in 1 and 2 dimensions (collisions)
- Simple Harmonic Motion
- Torque – rotational kinematics, angular acceleration, angular momentum

Advanced Placement Physics AP-2 Topics

- Fluid Dynamics
- Thermodynamics
- Electric Force, Field, and Potential
- Electric Circuits (including capacitance)
- Electromagnetism
- Geometric and Physical Optics
- Quantum, Atomic, and Nuclear Physics