



# Physics 122

## Course Outline 2012 - 2013

Teacher: Mr. Peter MacDonald

Room 522

[peter.macdonald3@nbed.nb.ca](mailto:peter.macdonald3@nbed.nb.ca)

<http://jmh.nbed.nb.ca/teacher/mr-macdonald>

### Chapter 7: Dynamic in 2D

- Vectors and their Applications
  - Forces
  - Impulse & Momentum
  - Torque
  - Projectile Motion
- (Chapters 5 – 7, 10, & 11 of MHR)

### Chapter 8: Circular Motion & Gravitation

- Uniform Circular Motion
  - Angular Speed
  - Centripetal Acceleration
  - Centripetal Force
  - Universal Law of Gravity
- (Chapters 11, 12, & 14 of MHR)

### Chapter 9: Work, Energy, & Power

- Springs
  - Kinetic Energy
  - Potential Energy
  - Work
  - Power & Efficiency
  - Conservation of Mechanical Energy
- (Chapters 10, & 13 of MHR)

### Chapter 10: Electrostatics and Electric Currents

- Electrostatics
  - Electric Fields
  - Voltage, Current, & Resistance
  - Ohm's Law
  - Resistor Circuits
  - Capacitors
  - Energy Efficiency
- (Chapters 14 & 15 of MHR)

### Evaluation:

Midterm (November)	10%
Tests	40%
Labs	20%
Final Exam	30%

### Materials:

Binder & paper

Lab Book

Scientific Calculator

Ruler/Protractor

Pen/Pencil

Textbooks: Total Physics Flexbook & Physics (McGraw-Hill-Ryerson)