



# Physics 122

## Course Outline 2012 - 2013

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### **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:**

Tests	50%
Labs	20%
Final Exam	30%

### **Materials:**

Binder & paper

USB Memory Stick

Scientific Calculator

Pen/Pencil

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