

Institute for Science and Mathematics

Physics 2010/2011

Instructor: Dr. M.E. Donaldson

Syllabus

Fall 2010: Mechanics

1. Algebra review
2. Algebra applied
 - Mechanics
 - Forces and Energy
 - Statics
 - Kinematics
 - 1-D Motion
 - 2-D Motion
 - Newton's First Law
 - Newton's Second Law
 - Newton's Third Law
 - Momentum
 - Periodic motion

Spring 2011

1. More Algebra applied!
 - Periodic Motion
 - Vibrations and Waves
 - Sound
 - Electromagnetism
 - Electricity
 - Magnetism
 - Light/Optics
 - Reflection and Refraction
 - Light Quanta
 - Light Emission
 - Thermodynamics

Grading:

Homework 40%

- Typed lecture notes
- Worksheets and study questions
- Lab write-ups

Notebooks 10%

- Notes
- Lab/Science Fair project Notes

Participation 10%

- Class discussions
- Lab exercises

Tests 40%

Textbook (optional) Holt Physics by Holt Rinehart & Winston, Jerry S. Fauhgn, Harcourt College Publishers

Cost \$190/semester; \$380/full year