

Mr. Putnam's Syllabus
Physics I Honors

Website: <http://pompanobeachhigh.com/teachers/putnam/home.asp>

Help Sessions: Monday & Wednesday 3:05-3:45

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Course Information:

Textbook/CD Holt Physics Serway & Faughn 2006

Required Materials:

- Composition style notebook
- Scientific calculator (graphing calculator not required)
- Graph paper
- Pen/Pencil
- Loose leaf paper

Topics:

The Science of Physics -
Chapter 1

Section 1: What is

Physics? p. 4-9

Section 2:

Measurements in

Experiments p. 10-20

Section 3: The Language
of Physics p. 21-26

Motion in one Dimension
-Chapter 2

Section 1: Displacement
& Velocity p. 38-47

Section 2: Acceleration
p. 48- 59

Section 3: Falling Objects
p. 60-66

Two-Dimensional Motion
and Vectors - Chapter 3

Section 1: Introduction
to Vectors p. 80-85

Section 2: Vector
Operations p. 86-94

Section 3: Projectile
Motion p. 95-101

Section 4: Relative
Motion p. 102-106

Forces and the Laws of
Motion - Chapter 4

Section 1: Changes in
Motion p. 118-124

Section 2: Newton's
First Law p. 125-129

Section 3: Newton's
Second & Third Law p.
130-134

Section 4: Everyday
Forces p. 135-143

Work and Energy-
Chapter 5

Section 1: Work p. 158-
163

Section 2: Energy p.
164-172

Section 3: Conservation
of Energy p. 173-178

Section 4: Power p. 179-
182

Momentum & Collisions
- Chapter 6

Section 1: Momentum &
Impulse p. 196-204

Section 2: Conservation
of Momentum p. 205-
211

Circular Motion and
Gravitation -

Chapter 7

Section 1: Circular
Motion p. 232-239

Section 2: Newton's Law
of Universal Gravitation
p. 240-248

Section 4: Torque &
Simple Machines p. 254-
262

Appendix J: Rotational
dynamics p. 898-905

Heat -Chapter 9

Section 1: Temperature
and Thermal

Equilibrium p. 296-304
Section 2: Defining Heat
p. 305-312

Section 3: Changes in
Temperature & Phase p.
313-320

Thermodynamics -
Chapter 10

Section 1: Relationship
Between Heat and Work
p. 334-342

Section 2: The First Law
of Thermodynamics p.
342-351

Section 3: The Second
Law of Thermodynamics
p. 352-359

Vibrations and Waves -
Chapter 11

Section 1: Simple
Harmonic Motion p. 366-
375

Section 2: Measuring
Simple Harmonic motion
p. 376-381

Section 3: Properties of
Waves p. 382-387

Sound - Chapter 12

Section 1: Sound Waves
p. 408-413

Section 2: Sound
Intensity & Resonance p.
414-421

Section 3: Harmonics p.
422-433

Light –Chapter 13
Section 1:
Characteristics of Light
p. 444-451
Section 2: Flat Mirrors

Refraction–Chapter 14
Section 1: Refraction p.
486-494

Electric Force & Fields–
Chapter 16
Section 1: Electric
Charge p. 556-563
Section 2: Electric Force
p. 564-571

Magnetism – Chapter 19
Section 1: Magnets &
Magnetic Fields p. 676-
673

Section 2: Magnetism
from Electricity p. 684-
686

Section 3: Magnetic
Force p. 687-694

Quantum Theory –
Chapter 21
Section 1: Quantization
of Energy p. 751-761
Section 2: Models of
Atom
p. 762-770

Section 3: Quantum
Mechanics p.771-777

Subatomic Physics –
Chapter 22

Section 1: The Nucleus p.
788-797

Section 2: Nuclear
Decay p. 797-806

Section 3: Nuclear
Reaction p. 807-810

Class Rules:

All rules set forth in the student code of conduct will be strictly followed. All students will be respectful of each other and no forms of bullying or sexual harassment will be tolerated.

Additional Class Guidelines:

- Be prepared with required materials at the start of class.
- Unless otherwise instructed, complete all work in the composition notebook.
- All work is due on the assigned date and no late work will be accepted. Any work not turned in at the start of class will be marked as a zero in the grade book. Absent students will have two days for every day that they are absent to complete required work.
- Pompano Beach High School prides itself on preparing students for the rigors of college. It is therefore imperative that students do their own work so that they learn content accurately. The faculty expects academic integrity; therefore, students must abide by the PBHS Honor Code when they complete assignments, tests, quizzes, projects, and all other work, both in class and out. Every violation of the Honor Code will result in an immediate referral to administration.
- The first occurrence of cheating will result in the student receiving a zero for the assignment. Subsequent occurrences will result in two zeros entered for the assignment.
- In order for everyone to be heard, raise your hand to ask questions and answer teacher directed questions.

Class Distribution:

- Homework and Class Assignments: 25%
- Tests, Quizzes, Lab Reports: 75%

Point values: (Approximate)

- Homework/In class assignments: 25 pts
- Lab reports 25 pts
- Quiz 10 points
- Tests 100 pts
- Major projects: 100 pts

Keep up with the reading and homework and you will have a successful term.