

# Physics

**Instructor:**  
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**Phone:**  
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**Extra Help Time**  
**Room 35**  
7:45-8:15 AM  
3:15-3:50 PM

**Webpage:**  
<http://www.fort-dodge.k12.ia.us/index.cfm?nodeID=31880&audienceID=1>

**Text:** Modeling Instruction in High School Physics – Principal Investigator - Dr. David Hestenes, Arizona State University

**Prerequisite:** Algebra 2

## Supplemental Materials:

- Calculator with trigonometric functions – minimum
- Programmable graphing calculator (Ti-83 or higher) – recommended

## Topics:

- Scientific Thinking
- Constant velocity
- Uniform acceleration
- Inertia
- Constant Force
- 2D motion
- Energy
- Uniform circular motion
- Momentum

## Grading:

### Grade Breakdown

30% Daily Work  
25% Labs  
35% Chapter Tests  
10% Semester Final

### Grading Scale

100-90 A  
89-80 B  
79-70 C  
69-60 D

**Expectations:**

Students are to be in their desks, with their notebook and calculator out when the bell rings. Personal electronic devices (phones, mp3 players, etc) are not to be used in class. Food and drink (including gum) are not allowed in the classroom with the exception of bottled water. Students are to participate in their lab groups, and be attentive and respectful when other groups are presenting

**Daily Work:**

Daily work will be graded on in class activities and take home worksheets.

**Labs:**

Each lab will be graded in one of two ways. Some labs will require a formal lab report by each student. Some labs will have an informal group Presentation as part of a class discussion of the lab, followed by a lab quiz a few days later.

**Tests:**

Each unit will conclude with a written test over the material and/or a practicum test problems, where the students will demonstrate their mastery of the model.