



**Barrington High School**  
**Physics**  
**Course Requirements and Expectations**  
**Mr. Levesque**  
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**Course Description:**

This laboratory physics course is designed for college preparatory students who are interested in the workings of the physical world. Topics include mechanics, thermodynamics, vibrations/wave phenomena, optics, electromagnetism, relativity, and quantum mechanics. The mathematical skills and techniques related to analyzing data within these topics are reinforced throughout the course.

Text: Holt Physics by Serway and Faughn  
2009 edition published by Holt, Rinehart, and Winston

**Grading:**

The grades for each quarter are based on your performance on tests, quizzes, homework, and laboratory work. During a typical quarter, students would complete three tests, and a weekly quiz. No grades will be dropped.

The breakdown is as follows:

Tests, Quizzes, Labs, & other Assessments	90%
Homework and Class work	10%

Tests, quizzes, and labs all have different point values. Typically, tests are out of 100 points, quizzes are usually between 20 to 30 points, and labs are usually between 20 to 30 points.

A two hour, closed notes, closed book exam will be given at the end of each semester accounting for 20% of the semester grade.

**Homework:**

During the school week students are expected to complete homework assignments regularly. Students enrolled in first year physics vary widely in interest and ability. However, the text and content of the course is rigorous for high school physics and is strongly focused on the use of algebra and the development of problem solving skills. Of course, some students will have a "knack" for the subject and will grasp the material very quickly. Other may struggle in one topic but find a later topic quite easy.

### **Missed Work and Extra Credit:**

Much of the material we examine in the course relies on an understanding of the preceding topics. Key concepts reappear throughout a wide range of topics. It is very important for students not to fall behind in their studies. I will be available to students for extra help during my planning periods and after school. I will also be available in the morning through an appointment. I also **strongly** encourage students to communicate with me through the use of email.

If a student has been absent due to illness, or is simply struggling with the material, PLEASE COME SEE ME!! I am more than happy to assist students one on one or in small groups. However, if you have fallen seriously behind it will be difficult to catch back up no matter how much time we spend together.

**Students who are absent on the day of a test or quiz will be required to make up the assignment the next time they report to class.** Any work missed while taking the test or quiz will have to be made up during study or after school. Students who have missed material due to an extended absence should meet with me to develop a plan to make up any missed work and to schedule a time to take the test or quiz.

Sample data will be provided to any student that is absent during a laboratory experiment. Students can elect to schedule a time to perform the experiment within 48 hours of returning to school. Because both the laboratory equipment and space is shared among several teachers it is not practical to keep experiments set up for much longer than this.

Homework will **NOT** be accepted late. It is the responsibility of a student who is absent the day a homework assignment is due to show me their work once they return to school. If the student returns on a day that the class does not meet, the assignment should be placed in my mailbox in the office.

### **Computers:**

The use of the computer is becoming ever-present in education from the elementary school level through college. A weekly schedule will be posted on the course webpage along with copies of course assignments and handouts. As the semester goes on, there will be a growing list of web resources that should be useful to you. The course website can be found at <http://www.barringtonhigh.org/C11/Mr%20Levesque/default.aspx>

### **Electronics Policy:**

No electronics (cell phones, iPods, Nintendo DS's, etc.) are allowed in class. Electronics will be taken away when it is taken out to use for any reason at all in class (text messaging, calculator, music, checking the time, etc.). Please see the BHS Student Handbook if you have any questions regarding the new electronics policy.

## Daily Expectations

### Materials Needed:

- I strongly recommend a three ring binder to keep all handouts, notes, returned assignments, etc.
- Writing Utensil & Covered Textbook
- Calculator

### General Expectations:

- Students must be in their seats and ready to work when the bell rings.
- Students will not be disrespectful or disruptive to classmates or teachers.
- There will be absolutely **NO EATING** in class.
- Cell phones, iPods, & other similar electronic devices will **NOT** be tolerated in class. Once you arrive in class they must be put away until you leave class. If a student is caught with his/her cell phone or similar device during class it will be taken until the end of the day. You may pick it up in the Main office at the end of the day.
- Three tardies to class count as one unexcused absence. Expect disciplinary action.
- Textbooks must be covered.
- Students must raise their hands to be recognized. (Calling out will not be tolerated.)
- Students will not be permitted to go to lockers during class time. Use the passing time between periods to get everything you need for class.
- All homework, quizzes, tests, etc must show all your work.

### Projected Year Schedule:

I have listed the tentative schedule of the topics covered in the course during the first semester. All dates should be considered approximate. Modifications to the schedule will be made when necessary and appropriate.

<i>Topic</i>	<i>Dates</i>	<i>Text Chapter: Sections</i>
Math and Measurement	8/11 - 9/10	1: 1-2, 1-3
1-D Motion	9/13 - 9/18	2: 2-1, 2-2, 2-3
Vectors and 2-D motion	9/20 - 9/29	3: 3-1, 3-2, 3-3, 3-4
Forces and Newton's Laws	9/30- 10/17	4: 4-1 through 4-4
Work and Energy	10/20 - 11/7	5: 5-1 through 5-4
Momentum and Collisions	11/10 - 11/19	6: 6-1, 6-2, 6-3
Rotation and Gravitation	11/20 - 12/12	7: 7-1, 7-2, 7-3
Vibrations and Waves	December	11: 11-1 through 11-4
Sound	January	12: 12-1, 12-2, 12-3
Semester Review		
Light and Reflection	January	13: 13-1 through 13-4
Refraction and Lenses	February	14:14-1, 14-2, 14-3
Electrostatics	February/March	16: 16-1, 16-2, 16-3 17: 17-1, 17-2
Electric Current and Circuits	March/April	17: 17-3 18: 18-1, 18-2, 18-3
Magnetism and Induction	April/May	19: 19-1, 19-2, 19-3 20: 20-1, 20-2
Subatomic Physics	May/June	21: 21-1, 21-2, 21-3 22: 22-1, 22-2, 22-3, 22-4