

Syllabus: Physics I

Course Description

All foundational Physics concepts of motion, force, work and energy, electricity and magnetism, optics, and waves (including light) are covered in this comprehensive course. Since measurement and calculation are of significant importance to proper experimentation and interpretation, students in this course will gain understanding of and proficiency in units of measure, conversion of related units and the metric system, as well as significant figures and scientific notation. Homework will average 3 - 5 hours per week.

Attendance and Participation

Both attendance and participation are vital parts of this course; therefore, students are required to attend class sessions and participate actively in discussions. Students are expected to view archives of any missed classes, and are responsible for obtaining any notes or assignments.

Students will be given quarterly grades for both participation and attendance:

- Fifteen percent of the final grade will be attributed to *relevant class participation*. This includes raising one's hand, commenting regularly via microphone/webcam, and using the chat box regularly to contribute to the academic conversation.
- Five percent of the final grade will be attributed to *class attendance*. Being present, being on time, and readiness for class are all factors to be considered in the class attendance grade. *Excused* absences will not detrimentally impact attendance grades.

Grading rubrics are located in the Course Documents folder in each course page.

Assignments & Exams

There are weekly reading assignments, practice problems, and laboratory activities. Students will need to keep up with reading and assigned practice problems so that they can be active participants during class discussion. Most reading assignments will have practice problems or questions associated with them. Students will maintain a laboratory notebook throughout the course.

There will be tests for each Module during the year. Students should also expect a number of pop-quizzes. Students will take a midterm and final exam. The exams at the end of each semester are cumulative for that semester only.

Physics is considered one of the most challenging sciences. It involves the knowledge and application of many equations. Students will learn how to use the equations rather than memorizing the equations themselves. For this reason, students will be provided with an equation sheet to use during tests and exams, but they may not use their textbook, their notes, the Solutions Guide, the Internet or any other published materials or notes from another student.

All exams should be taken in one sitting and proctored by an adult. Unless directed by the teacher, students are not permitted to use any helps, books, notes or the Internet on any portion of exams. All exams are due at 11:55 PM ET on the date shown. Specific instructions will be provided by the instructor.

Evaluation

The final grade is determined on the following basis:

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|--------------------------------|-----|
| ● Attendance | 5% |
| ● Relevant Class Participation | 15% |
| ● Homework | 15% |
| ● Labs | 20% |
| ● Presentations | 5% |
| ● Exams | 20% |
| ● Midterm/Final Assessment | 20% |

Grading Scale

The following grading scale will apply for all assignments and final grades. 100% – 90% = A; 89% - 80% = B; 79% - 70% = C; 69% - 60% = D; 59% - 50% = E; 49% - 40% = F. All grades are rounded to the nearest whole number.

Late Work

If a student fails to submit any assessment by the due date, it is considered "late."

- Assignments submitted 0-24 hours late will result in a 10 point reduction off earned grade.
- Assignments submitted 24-48 hours late will result in a 20 point reduction off earned grade.
- Assignments submitted 48-72 hours late will result in a 30 point reduction off earned grade.
- Assignments over 72 hours late will not be accepted and the student will receive a zero.
- Parent may request an extension from their child's teacher *prior to the due date* or in the case of an emergency.

While we love grace and the opportunity to exercise it, we also desire to instill a sound sense of responsibility in our students, hence these expectations pertaining to late work.

Exam/Test Retakes

Any student may retake a failed assessment (except quizzes), but can score no higher than 70% on the retake. Retakes must be submitted within one week of the returned, failed test. If the retake is not submitted within one week, the original failing grade will stand.

Academic Dishonesty

Cheating on any assignment is considered academic dishonesty. This includes plagiarism in any form. Cheating will be dealt with in the following manner:

- If a student is caught cheating, he will receive a zero on the assignment and will be placed on academic probation for the remainder of the school year.
- If the same student is caught cheating again, he will likely be expelled.
- No refunds will be granted for students who are expelled due to cheating.
- A Disciplinary Action Form will be submitted by the student's teacher for any instance of academic dishonesty.

Textbooks

The books needed for the class can be purchased through Veritas Press. It is extremely important that the student has the correct version/edition of these materials.

Physics Course Kit (003560)

- Exploring Creation with Physics Student (044610)
- Exploring Creation with Physics Solutions/Tests (044605)

The following item is also required, but unfortunately, are not available through Veritas Press:

- Graphic Calculator

Course Calendar

See Course Assignment Sheet, located on course page, for class dates, breaks and all assignments and assessments. Class dates and breaks can also be found on the current academic year calendar.