

# *High School Physics – First Semester Syllabus*

**Instructor:** Mr. Peter Kligmann – Address as “Mr. K.” **e-mail:** chemphysclass@gmail.com

**Prerequisite:** At least 2 semesters algebra and 1 semester trigonometry or pre-calculus (a strong knowledge of trigonometric functions is necessary).

**Text book:** University Physics Sixth Edition, Authors: Sears and Zemansky ISBN:0-201-07195-9  
New or used is acceptable. Try [www.cheapesttextbook.com](http://www.cheapesttextbook.com)

**Length of class:** 16 weeks with a cumulative final.

**Testing:** An exam will be given at the end of each section.

**Assignments:** Homework will be given at the beginning of each week and will be due the following week.

**Policy:** All communications are to be respectful and to the point. There is no such thing as a stupid question; however, the instructor reserves the right to reject any question that arose due to procrastination, laziness, or neglect. You may use any and all resources available for study and assignments. You will be on the honor system for exams. You will do yourself a huge disservice if you cheat, and if you are caught you will fail the course

## **Grading:**

Breakdown: Final = 50%; Exams = 35%; Assignments = 15%.

Letter equivalency: 95% - 100% = A; 90% - 94% = A-; 85% - 89% = B+; 80% - 84% = B;  
78% - 79% = B-; 76% - 77% = C+; 73% - 75% = C; 70% - 72% = C-;  
65% - 69% = D+; 60% - 64% = D; 55% - 59% = D-, < 55% = E

## Scoring:

Example: A student earns the following grades : Average score of all exams is 75%; average score of all assignments is 83%; and the final exam score is 72%.

Calculation:  $(75 \times 0.35) + (83 \times 0.15) + (72 \times 0.50) = 75\%$  Course grade = C

## **Tentative Schedule**

Weeks 1: Units, Physical Quantities and Vectors

Weeks 2 – 4: Equilibrium, Motion, Newton’s Laws

Weeks 5 – 8: Energy, Work, Rotation, Elasticity

Weeks 9 – 12: Heat and the Laws of Thermodynamics

Weeks 12 – 15: Waves, Vibrations, and Sound

Week 16: Study week ending in Final Exam

*Note: This syllabus is subject to change without notice at the instructors discretion.*