Ms. Knittig janeknittig@lindberghschools.ws

Room 222 314-729-2400 ext. 1222

**AP Physics 1**

**Course Description**

This course is designed as the first course in a two-year sequence of physics that prepares students to take the AP Physics B (Algebra based) or the AP Physics C Mechanics (Calculus based) test. It introduces the main topics of physics and, where possible, relates these topics to society and everyday life. Most students have a strong science background, which includes at least Biology and Chemistry. Classes and the learning process will include laboratory activities, reading, discussion, decision making, audiovisual materials, and writing. Students will work together frequently in cooperative learning activities.

**Topics**

Topics to be covered include measurement, velocity, acceleration, forces, vectors, projectile motion, universal gravitation, momentum, work, wave properties, sound, light, electricity, and magnetic fields. As time and interest allows, we will explore optional material.

**Materials**

* Pencils, pens, and notebook for everyday use
* Calculator (graphing calculator is suggested)
* Protractor (suggested)
* Folder/binder and loose-leaf paper for class notes and handouts
* Textbook: College Physics (note: replacement cost is $80)

**Extra Help/Contact Information**

* 1st hour planning
* 1st lunch (let me know if you plan on coming)
* Before and after school (let me know if you are coming)
* Voice mail extension 1222
* Email: [janeknittig@lindberghschools.ws](mailto:janeknittig@lindberghschools.ws)
* Sign up for Remind 101 for occasional class reminders:
  + Text @knittigap1 to (231)225-0912 or send an email to knittigap1@mail.remind101.com

**Absences and late work**

Make up work is your responsibility (only applies to excused absences). You have as many days to complete assignments as the number of consecutive days you were absent. This includes tests, quizzes, and laboratory assignments. Late assignments will be accepted until the test has been taken. It is the student’s responsibility to find out what he or she missed and get the work completed and turned in accordingly. Assignments one day late will receive 75% of the original grade and anything later than on day will receive 50%.

**Grading**

* Tests: 50%
* Labs, homework, and in-class assignments: 50%
* Semester finals are worth 20% of the total semester grade (with each quarter worth 40%)

**Homework Policy**

Doing and understanding the homework is critical to your grade in this class. It will be assigned on a regular basis and students are expected to have it finished at the beginning of the hour it is assigned. Homework will be collected for a grade. Homework, labs, and in-class assignments will be averaged together for 50% of the term grade.

**Laboratory**

The format of the labs will be dependent of the individual work being performed. Participation in laboratories is extremely important. The laboratory assignments are designed to enhance the learning and depth of understanding of various topics. Active participation is critical. The student’s ability to make up this work is dependent on the lab and the availability of the facilities.

**Tests and Quizzes**

Tests will be given at the end of each unit. Tests will typically be very similar to the homework that has been assigned and will consist of roughly half problem-solving and half qualitative questions. A test will come after each chapter with at least two or three tests per semester. If you miss a test for a legitimate reason, it will be made up after school. It is the student’s responsibility to make the necessary arrangements to take the test. Tests will be worth 100 points and will be counted as 50 percent of the term grade.

**Final Exams**

There will be a final exam at the end of each semester. The exam will cover all topics covered in that semester. The exam will have a format very similar to the tests given throughout the semester. The final exam will count 20% towards the semester grade with each term grade counting 40%.

**Grades**

Grading will be as follows:

* A: above 90%
* B: above 80%
* C: above 70%
* D: above 60%

**Classroom Expectations**

This is a high level junior and senior class and I don’t anticipate any discipline problems in this class. I will treat you with respect as I expect you to treat your classmates and myself. I expect you to be ready to work when the bell rings. Any detentions will be served within two weeks of being issued.

**Rules**

Respect Responsibility Be prepared Follow all school policies

Eating and drinking (other than water) will not be allowed in class

**Six pillars of character education**

Trustworthiness Respect Responsibility Fairness Caring Citizenship