Physics

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At Huron High School, the community of sciences promotes a culture of exploration through the development of inquiry, critical thinking, and a sustainable global perspective.

The Course: *The goal of this physics course is to model physical phenomena. These models, both qualitative and quantitative, will describe what happens and why it happens. Since we will rely heavily on our quantitative models, mathematics is a very important tool. We will use algebra, geometry and basic trigonometry in this course.*
Some of the topics we will model include:
Kinematics: Motion of objects
Dynamics: Causes of motion
Energy Concepts: A different approach to motion and interactions
Electromagnetism: Motion of charged particles and the results of that motion
Wave Theory: Sound and light

Notebooks: *Students are expected to complete and correct all of the assignments for the course. To demonstrate this work, the students will turn in a notebook for each unit that contains:*

Homework- completed with work shown.

In-Class Worksheets – completed with work shown

Mini-Labs- data and analysis shown with questions answered

Points will be accumulated for each unit. Intermediate checks may occur for partial points. Assume that the notebook will be turned in approximately weekly. Points will be subtracted for lateness.

Textbook: *There is a class set of textbooks that are to be used only in the classroom. Take advantage of this to keep your book in good condition.*

Quizzes: *Quizzes will be given at the end of each unit. These quizzes will mostly include problems similar to those from class and the homework. These will make up a major portion of your grade.*

Laboratory Work: *Labs are done in order to develop the topics of the course. They are also used to develop some of the skills of an experimental physicist. Therefore, there will be different levels of labs depending on the topic.*

Final Exam: *There will be a final exam at the end of the semester that will count approximately 20% of the semester grade.*

Grading Scale:
A's 90 → 100% (90 → 92 A- 93 → 100 A)
B's 80 → 89%(80 → 82 B-,83→ 86 B, 87→ 89 B+)
C's 70 → 79%(70 → 72 C-,73→ 76 C,77→79C+)
D's 60 → 69%(60 → 62 D-,63→ 66 D, 67 →69D+)
Below 60 % is not passing

Attendance: *Your success in this course is dependent on your being present for the in-class work.*

Make-Up Work: *It is the student's responsibility to get all missed work and meet with the instructor to arrange deadlines.*

Retakes: *Retakes will be available on most of the evaluations. There will be a maximum score for each retest as determined by the instructor. Retakes must be completed two weeks prior to the end of the marking period. Homework and labwork must be completed prior to all retakes.*

Expectations

In this classroom, learning is the number one priority. All behavior in the classroom should contribute to your learning as well as the entire learning community. Asking questions is critical to the success of the community. Please take advantage of the opportunities for extra help during lunch or after school.

***Academic integrity** is an absolute requirement. Remember that you are building your name and reputation. If you take unfair advantage on an assignment, you will receive a permanent zero on that assignment and will not be allowed to make it up. There will also be disciplinary consequences.*

Please use appropriate language in the classroom. The language you use with your friends may not be classroom-appropriate. Racial slurs, hate speech, and bullying are not acceptable.

Electronic Devices

Cell phones and other electronic devices can be powerful tools if used properly. If your phone is distracting you from classwork, I will confiscate it and take it to the office at the end of the day. Phones can then be picked up from the office at the end of the day.

Physics Units 2017-2018

First Semester

Unit 1: Introduction to Motion
Unit 2: 1-D Motion
Unit 3: Projectile Motion and Vectors
Unit 4: Forces 1
Unit 5: Forces 2
Unit 6: Work and Energy
Unit 7: Momentum
Semester Exam - January 23-26

Second Semester

Unit 8: Electrostatics
Unit 9: Circuits
Unit 10: Waves
Unit 11: Circular Motion and Roller Coasters
Cedar Point - Monday, May 21
Senior Culminating Activities - May 29 - June 1