

Physics

Syllabus 2017-2018

TK - mr.kyale@comlinkshs.org

Course Description:

Physics uses scientifically tested ideas that reliably model nature as a system that follows simple rules. Learning physics is part of realizing your greatest possible contribution to society. Like nature, society is a system. Learning to see nature as a system and apply its rules to accomplish engineering goals gives insight into how to understand and influence more complicated systems such as your family, business, community and society. Throughout this course, we will use technology and engineering principles to build functional projects. And you will apply mathematical models to understand the rules of nature demonstrated by your projects.

Course Objectives:

Students will:

- Practice professionalism.
- Use math to model nature.
- Test knowledge with science.
- Apply design and engineering principles to make functional projects.
- Learn to maintain a safe environment for people, equipment and projects.
- Transform a mathematical model of nature and recognize the same model in different arrangements.
- Prepare for success on the SAT.

Materials required: You must have these materials by Monday, September 11

- at least one writing utensil, preferably a pencil
- A letter sized sheet of paper dedicated to your most useful notes and equations.
- A notebook for this class only
- A folder for this class only
- A calculator with trig functions

Units:

- 1) Units, measurements and hypothesis testing
- 2) Force and motion
- 3) Energy conversion and “renewable” energy
- 4) Circuits
- 5) Waves and light

Ideas for if you need help:

- 1) Check your notes for similar examples or helpful formulas.
- 2) Ask a friend to help you get started, but don't copy their work!
- 3) Go to <http://www.physicsclassroom.com/> or <http://hyperphysics.phy-astr.gsu.edu/hphys.html> or <https://www.khanacademy.org/science/physics>
- 4) Post your question in a discussion on our google classroom or email TK with your specific question.
- 5) Come in the morning for help. TK is almost always there at 7:30 on Tuesdays, Thursdays and Fridays.
- 6) Arrange a time to stay after school.

Academic Integrity:

- Students who have exactly the same work will both receive 0s.
- Students who are cheating on quizzes, tests, and exams will also receive a 0.
- Plagiarism will also result in a 0 on that assignment.
- If you are helping your friend, make sure that you don't tell them the answer. You can show them where they made a mistake, you can say that you got a different answer, you can ask questions, you can talk through examples together. If you don't know how to help without letting them copy your work, have them go ask TK for help.

Grading:

Grades will be determined using the following percentage breakdown:

Participation: 15%	A = 100% to 90% and a Curriculum Vitae that shows excellence
Homework: 15%	B = 89% to 80%
Mastery: 50%	C = 79% to 70%
Growth: 10%	D = 69% to 60%
Final Exam: 10%	F = 59% and below

Curriculum Vitae (course of life or resume):

To practice professionalism you will keep track of accomplishments in class. To earn an A grade or honor's credit, this document must show a record of your excellence.

Participation:

This part of your grade includes modeling growth mindset, do nows, being on task, honoring CLHS contract, maintaining equipment, safety, meeting in class deadlines, honesty, and excellence.

Homework:

Homework assignments will be given frequently. Your homework must be ready to turn in at the beginning of the class period.

Mastery:

Your mastery grade will include equation transformation objectives, professional objectives, engineering objectives, communication objectives, art objectives and physics content objectives. These grades will come from quizzes, tests, projects, presentations, conferences, and other opportunities for you to show that you have mastered the content. Some standards will continue across units.

Growth

This category refers to how much improvement a student demonstrates on a set of college- readiness related-standards, as measured by periodic "interim exams" and recorded in the Curriculum Vitae.

Final exam

The final exam will be a cumulative assessment at the end of the semester based on standards assessed throughout the semester. There will be no retakes on the final exam.

Absences:

- If you are absent, you must copy the notes from someone on your own time- NOT during class. You also need to get the work you missed from TK.
- Students with **unexcused** absences will receive a zero for any assignments due the day of your absence as well as any participation or homework given the day you missed.
- Students with **excused** absences must turn in assignments due the first day of your absence the day you return, or they will be considered late. You will have one day for every day missed to complete all assignments given during your absence.

Late Work:

- Write TK a note if there were exceptional circumstances. Give advance notice by email if possible.
- Late homework will receive half credit within one day of the due date with no credit after one day.
- Major assignments will be accepted late with a **10% penalty each day** up to 10 days (two school weeks) after the due date.

DUE THURSDAY, SEPTEMBER 7

Physics Syllabus Agreement

Please read the entire physics syllabus and ask questions if you do not understand something. Then have your parent/guardian fill out this information and sign below.

Parent/guardian name: _____

Relation to student: _____

Phone number: _____ Is this a cell phone? (circle) Yes No

Email address: _____

Language spoken by guardian contact:

How much English do you speak?	(circle) None	Some	A lot
¿Cuánto inglés hablas?	(circulo) Nada	Poquito	Mucho

How much Spanish do you speak?	(circle) None	Some	A lot
¿Cuánto español hablas?	(circulo) Nada	Poquito	Mucho

What is the best time of day to reach you? _____

Do you prefer to be contacted via phone or email? _____

I have read this syllabus and I understand its contents. I agree to adhere to the policies and expectations of this class.

Student name

Student signature

Parent/guardian name

Parent/guardian signature

