**Course Description:**

Physics is one of the oldest academic disciplines. It is a physical science that involves the study of matter and its motion, along with related concepts such as force, energy, matter, light, optics, sound, oscillations, electromagnetism, nuclear and quantum. More broadly, it is the general analysis of the physical environment in order to understand how the universe works and behaves.

This course is an introduction to physics based on the concepts of how the universe behaves. It is designed for students who are interested in how things work or going to college and might not have the mathematical skills to handle academic physics. The study of physics will help sharpen a person’s problem solving and critical thinking skills, which is beneficial for everyday applications found throughout life. Regardless of the major a student plans on taking in college or they plan on entering the work force right out of high school, it is important to develop the skills required in physics. Pre-requisite course requirements are according to the course selection manual.

**Class Rules:**

Students are expected to act like civilized adults as they are approaching the end of their high school career and going on to pursue their dreams. All students must follow the rules listed below:

1. Students should come to class prepared and on time. They should have all necessary material at all times which include their textbook, physics notebook, calculator, pencil, and any assigned work. Failure to do so may result in losing class points.
2. All submitted work such as homework, quizzes, test, labs, projects and other graded assignments must be written in pencil or typed on the computer.
3. The use of cell phones, Ipods, or any other electronic device in class is ***not*** permitted in the class unless directed by the teacher to do so for educational purposes. Not following the rules will result in disciplinary action.
4. Chromebooks will be utilized in the classroom for assignments, labs and assessments. The Chromebook must be brought to every class and should only be used for educational purposes. Playing games on the Chromebook is not allowed and will not be tolerated in the classroom. Playing games will result in the loss of the Chromebook for the period and receiving zeros for any assigned work during that time.
5. Students must arrive to class on time. Two warnings will be given to the student after which a teacher detention will be assigned. Students arriving late to class multiple times can result in losing class points and office detentions as stated in the handbook. Each student gets a one minute grace period **if** they are coming from the other side of the school.
6. All homework and other assigned work is due before entering the classroom or immediately after entering the classroom. This includes Google Classroom assignments as well.
7. As long as students are responsible, I am okay with food and drinks in the classroom. The food should not cause a mess or make lots of noise.
8. Treat others as you wish to be treated. Therefore, courteous behavior is expected at all times towards your fellow classmates and your teacher. Bad language, disruptive behavior, and talking while the teacher is instructing is not permitted and will not be tolerated. Calls home to parents, detentions and other disciplinary action will be a result of such behavior.
9. Signing out for the bathroom and water fountain will be limited to the first and last **five minutes** of the class. This privilege is limited to emergency situations only, so plan accordingly.
10. Cheating will not be tolerated. If a student is cheating, plagiarizing, or copying another student’s work including homework, classwork, papers and labs, both students will receive a grade of zero on the assignment with the possible of disciplinary action. Cheating multiple times can lead to receiving a zero for the marking period and even the year for the class.
11. The final and most important rule is that there will be no “senioritis” permitted in the classroom. You must give your full effort throughout the whole year!!!

**Textbook:**

*Conceptual Physics* by Paul G. Hewitt

**Necessary Materials:**

Below is a list of materials that must be brought to class everyday, regardless of the class objectives for that particular day.

* Physics Notebook
* Scientific calculator
* Pencil (No Pens!)
* Any assigned work
* Chromebook

**Physics Notebook:**

Students are not required to submit a notebook for grading, but are required to have a binder or notebook designated for physics only to organize papers distributed in class.

**Homework:**

Students can expect 1-3 hours of homework per week. Homework will be posted on the side whiteboard during every class. All work is to be complete and on time to earn full credit. If the student is absent on the day the work is due, the assignment is to be shown to the teacher on the day the student returns. If the student is absent on the day the assignment is assigned, the student must make up the work once they return and will be given two days to show their completed work. The teacher will not ask students for the work, as it is the responsibility of the student to make sure it gets completed and turned in. **No late work will be accepted, except for excused absences**.

**Labs:**

Even though this class has no lab period, labs may still be performed throughout the year. Students are required to read and complete any pre-lab and post-lab work that is assigned in order to receive full credit for lab reports. Students must abide by lab safety rules and are responsible for the care and maintenance of lab computers and equipment. If students are absent when a lab is performed, the student must make up the lab after school and before the next lab day or within 6 school days of the assigned lab. Making up the lab during class will not be permitted. **If a student fails to follow lab rules, they will be excused from the lab and receive a zero on that lab.**

**Projects:**

There will be multiple small projects and 3-4 major projects assigned throughout the year for students to complete based on the topic of discussion in class. More information on the projects will be handed out prior to the project. Some projects may require the student to spend a few dollars on supplies and materials to complete the project. If this is a problem, please see the teacher before or after class to see what accommodations can be made to assist you.

**Quizzes & Test:**

Test and quizzes will be given on the material from the textbook, lectures, audio-visual material, homework and labs. It is imperative that students focus on all these areas as a question on an exam might come directly form the textbook, which may not have been covered in class through direct lecture. Tests will be given at the end of each unit/topic/or chapter and will be announced in advanced. Quizzes may be announced or unannounced. You are encouraged to use calculators, but the memory section of your calculator may be cleared if the teacher feels that you are using this unfairly. Format of the exams will vary but may include definitions, multiple choice, true/false, math problems, and essay questions. Test may be given in the form of paper test or done online through Google Classroom. Reading quizzes will be given on reading assignments to determine prior knowledge of the material before lecture through Google Classroom. All exams, tests and quizzes are open notes. If you are absent on the day of a test you may be expected to take the test when you return or to schedule a make up before or after school. If you are absent the day before a test you may still be required to take the test regardless if you missed the review or not, so be prepared. Cheating will not be tolerated. You will receive a “0” for the test or quiz, and on the second offense an F for the marking quarter.

**Midterm and Final:**

The midterm will cover all material from the beginning of the year till mid year. The final exam will cover all material in the class from the beginning to the end, so don’t throw out papers!

**Grading:**

Each student is encouraged to track his/her progress on Parent Portal to check their grades. Grades will be based off a total point system by taking the total earned points and dividing it by the total possible points for the marking period. There may be opportunities for students to earn extra credit throughout the year and are encouraged to complete it. Class participation is not specifically graded, but is expected and can positively influence a borderline grade.

**Website:**

Classroom materials, calendars, due dates, worksheets, reviews, answer keys, homework assignments and other resources can be found at the teacher’s website located on the Methacton School District website. It is encouraged that the student uses the website regularly to check due dates and homework assignments. There are no excuses for students not to complete assigned work. Google Classroom may also be used to push out assignments and homework to the students as well.

**Make-up Policy:**

If a student is absent from class, it is their responsibility to obtain missed notes, and assignments from other classmates. The teacher’s website can also be used to access this material and check for up coming assignments. Students have 2 days to make up homework, labs, and classwork for each excused absence.

When students miss labs, they must be made up before or after school. You must make an appointment with the teacher prior to making up the lab. If students are absent when a lab is performed, the student must make up the lab after school and before the next lab day or within 6 school days of the assigned lab.

Students absent the day of a quiz or test will make up the quiz or test the day they return during class. No exceptions! Students absent the day before a test or quiz will be required to take the test with the class.

If students are absent for an extended amount of time, they will need to meet with the teacher to set up a schedule of when missed material will be due. Failure to make up work in the appropriate time will result in a grade of zero for that assignment and may be required to serve a teacher detention to make-up missing assignments.

**Extra Help:**

Physics can be difficult at times. It is important to come for help if you do not understand any of the material. Make sure to see me in advance before quizzes and test, the day before a big test will not be much help. We can arrange a meeting during free mods, lunch, or after school. Please come to me before or after class to arrange these meetings. If you have a general question you may see me before or after class or e-mail me.

Mr. Robert Helm

Methacton High School

1005 Kriebel Mill Road

Eagleville, PA19403

rhelm[@methacton.org](mailto:cbrown@methacton.org)

Room A233

Teacher’s Website:

https://www.methacton.org/site/Default.aspx?PageID=1938