School: Plymouth Regional High School
Department: Science
Teacher: Ms. Ina Ahern
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Course Syllabus for 2024-2025 (subject to change)

Course Title:	**Introduction to Physics-2**
Credits	0.5 credits
Prerequisite(s):	Foundations in Biology and Foundations in Algebra I
Course Description:	Physics is the study of the interactions of objects, forces, and energy. In this class we will explore phenomena and seek to answer questions about the physical world such as: Why do you need a seatbelt to keep from hitting the dash when you slam on the brakes? How is the shock you get when you touch a doorknob the same or different from the electricity that powers your home? How do scientists and engineers construct explanations of their results? Physics will help you answer these questions and more! In this course you will be introduced to utilizing mathematical reasoning to analyze and interpret physical phenomena.
Text:	Most materials provided via Google Classroom or handouts
Units & Topics Covered	Lab Safety, Electricity, Linear Motion, Non-linear motion, Forces
Skills	Lab safety, describing, analyzing, concluding, observing, organizing and independent and responsible learning skills, math application, critical thinking and problem solving
Writing	Simple lab reports, journal entries, short and long answer questions, summaries, reflections, collaborative group work
Assessments	Tests, quizzes, homework, in-class assignments, lab reports, special projects.
At the end of this course students will be prepared for:	Generally prepared for other science electives

Ms. Ahern's Schedule: (all classes are scheduled in Rm. 122)

Pd	A Day	B Day
1	Instructional Coordinator Team Meet	Chemistry
2	Intro Chem-3/**Prep**	**IC Duty**
	Bobcat Block	
3	Intro Chem-3/Intro Phys-2	Environmental Science
4	**Prep**/Intro Phys-2	**Prep**

PRHS Vision of the Graduate: During the 2019-2020 school year, the school community developed a new Vision of the Graduate for Plymouth Regional High School. Here it is:

PRIDE and Tradition

Pride and tradition, two cornerstones in the foundation of our school culture, are a legacy from our past and a vision for our future. Plymouth Regional High School is committed to preparing students to become productive and engaged citizens in a global community. Therefore, in addition to acquiring a core body of knowledge through local curriculum that reflects state and national standards, all students will develop the following skills and dispositions.

Practical Skills and Personal Growth

- ***Develop viable skills that support success in the workforce***
- ***Become a self - directed and adaptable lifelong learner***
- ***Pursue interests and passions***
- ***Reflect on successes and failures with resilience, tenacity, flexibility and perseverance***

Responsibility and Respect

- ***Demonstrate responsibility for one's own mental, physical and financial wellness***
- ***Take ownership for learning and behavior***
- ***Show reliability for tasks, time and ideas***
- ***Exhibit honesty, integrity, empathy, fairness and respect***

Innovation and Critical Thinking

- ***Explore and design innovative solutions to complex and authentic problems***
- ***Engage in creative expression***
- ***Think creatively to transfer knowledge and apply skills to new situations***
- ***Critically interpret, analyze, synthesize and apply information***

Diversity and Awareness

- ***Value diverse opinions, ideas and abilities***
- ***Recognize and respect other cultural perspectives***
- ***Engage in new experiences to gain awareness***
- ***Demonstrate civic, social, environmental and global responsibility***

Engagement and Communication

- ***Impact the community positively through service and/or leadership***
- ***Collaborate effectively to produce a unified product***
- ***Speak and write for authentic purposes***
- ***Listen actively for understanding***

Grading Criteria: Grading in this course is based on a point system.

Tests, Papers, Projects – Usually 50 (short papers) to 250 (tests & projects) points
Quizzes – Usually 5-50 points
Homework – Usually 20-50 points

Final Average is computed as follows:

Quarter Averages (2 X 45% = 90%)	90 %
Final Exam (10%)	10%
	100%

Grade System: Although major assignments are often assigned a letter grade, many assignments will be graded on the check system. Percentage equivalents are as follows:

√ ++ = 125% (Rarely given, outstanding work)	√ = = 50%
√ + = 100%	√= = 25%
√ = 85%	NHI = Not Handed In
√- = 70%	

Please review the description of the school grading system in the student handbook for the meaning of each letter grade. You'll quickly discover that not every assignment that is given is graded or even checked. That doesn't mean that they are not important. The primary purpose for completing the assignments is so that you learn the material. It also means that those assignments that are graded may be worth a significant portion of the quarter grade. Avoid getting NHI's!

Attendance/Make Up Work (see student handbook)

- Attendance is a critical component of your success. There is, in most cases, a very clear positive relationship between attendance and grades. You are responsible for all content covered in the course—even if you are tardy, absent, dismissed, or sign out. When you miss class time, you miss content and experiences that can never be fully made up, particularly in a science class as what happens cannot often be replicated in a homework assignment. Also realize that if you miss a 90 minute class, it will usually take you 60-90 minutes to make up what you missed and this will most likely have to be done either during my prep period or after school. It is important to attend class so you learn the "soft" skills that are so important in life such as working well with others, effective communication, and so on.
- If you are absent, you are responsible for getting any work missed. It is expected that you get the work you missed from someone in your class and see me the first day you are back—even if you do not have class that day. You will be expected to have your assignments completed and be prepared for whatever is planned for the next class, including tests or quizzes
- If you arrive at school late and miss class, then your assignment(s) must be turned in as soon as you enter the building. If a quiz or test is missed due to a late arrival to school, then you are expected to take the test that same day.
- If, in extenuating circumstances, you have been permitted to make up work (such as a lab or project) after it is due and has been collected, the work should be turned in either the day it is made up or the very next day if there are follow-up questions that can be completed as homework. Do not wait until the next class to turn the assignment in.
- If class will be missed due to a field trip or early dismissal (including co-curricular activities) arrangements should be made ahead of time to turn in the assignment before leaving and to take the test/quiz that day.
- If you are absent on the day that a group assignment is due, send in your portion with someone you can trust
- If you arrive late with a pass, place the pass on the keyboard of the teacher computer.
- If you require a variance to any of these procedures due to extenuating circumstances, then you should set up a time with the teacher to have a private discussion about the variance.

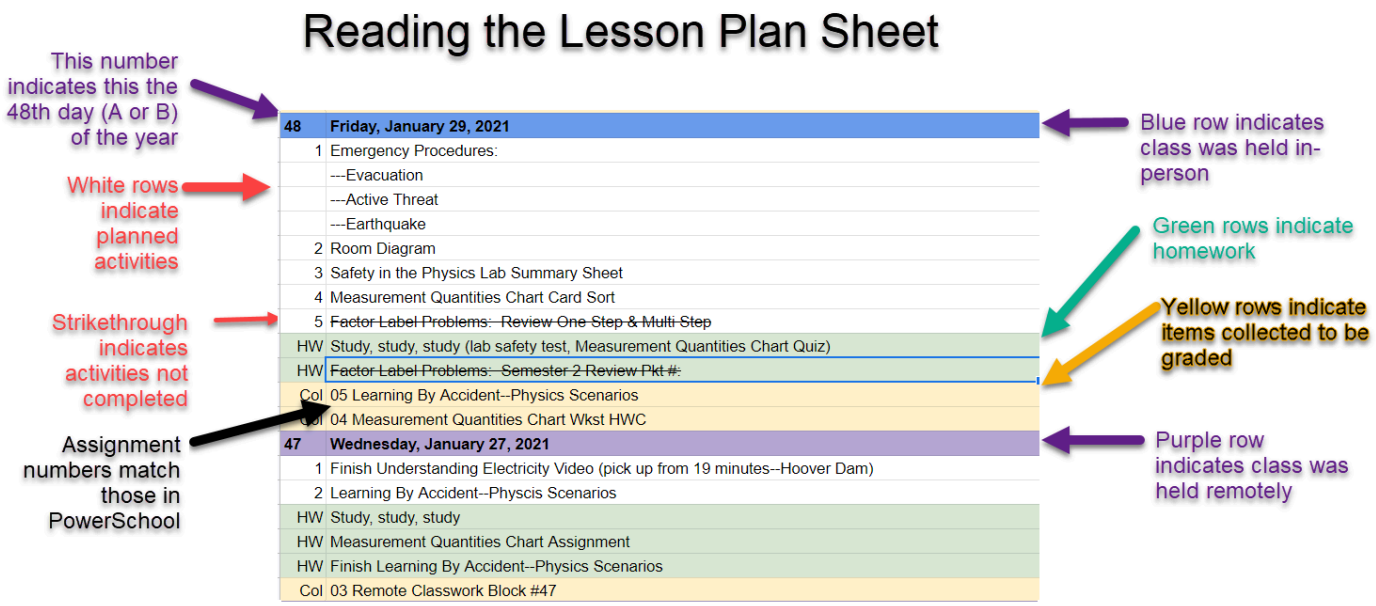
Behavior: see handbook and lab safety contract. In addition,

- It is expected that you will come to class every day prepared to learn
- It is expected that you will give your best effort…in class, on homework, on tests and quizzes, on projects, etc.
- It is expected that you will complete your own work and appropriately document thoughts and ideas that are not your own
- It is expected that you will contribute to a classroom climate that is respectful, honest, and polite.

Extra Help: Come see me during Bobcat Block! I am also available for brief consultations before school, and generally for longer help sessions or lab make up after school. Sometimes I may also be able to provide some assistance during my prep period but please check with me ahead of time. Depending on the class activity, it is sometimes possible to make up labs or quizzes during another class, but again you should check with me first to see if that is an option.

Assignments:

- In general, you should plan to complete homework assignments the day you receive them. By doing this, if you can't find the assignment or have questions, you will have an opportunity to contact me so that it can be complete by the time it is due.
- Unless otherwise assigned, **all assignments are to be completed by the individual** in an effort to demonstrate the student's level of understanding. If you "get help" from anyone, you will be expected to be able to explain and justify how you got the answer, if you do not have that level of understanding, do not simply copy their answer as it will result in a zero on the assignment and processing as an incident of cheating.
- Heading for assignments should be placed in the upper right hand corner of the paper and must include name (first & last), date, class, period, and a title/description of the assignment. Standard size white lined paper and pencil or blue/black ink should be used for handwritten work unless otherwise specified. Word processing is encouraged for longer writing assignments.
- Assignments are due at the beginning of class.
- Assignments collected non-electronically are usually turned in by placing them in the red basket at the front of the classroom.
- Google Classroom will be utilized as one of the primary technological tools for accessing course material. It will include a link to the daily lesson plans for the course and to assignments. Utilize these resources each class
    - The lesson plan spreadsheet, at the top of the Google Classroom Stream is a critical reference for the course. Here's how to interpret it:



    - Some assignments are given electronically in Google Classroom and can be completed on the document provided.
    - Some assignments are on paper handouts and will generally be turned in during class
    - You may be asked to submit some handouts by photographing the assignment and submitting the photos by inserting them into a Google Doc in Classroom. If turning in an assignment that way, please be sure the images are well lit, right side up, clear and readable, cropped of extraneous material, and large. I should be able to open the electronic document and read it without difficulty. (Mr. Frasier has provided video instructions for doing this with your Chromebook and it is located on the Google Classroom Stream) **Do not attach the individual images to the assignment. Be sure to insert them into the provided Google Doc.**
    - Even though Google Classroom may show a grade it is not accurate for this class. Your official grades are on PowerSchool

Notebook: A 3 ring binder is required for this course and must be kept organized. Students are expected to be able to find the papers and other work in their notebook. Lined paper should also be available for classwork. Instead of providing handouts each day, I will generally provide you with one or several units at a time. This makes accessing work easier if you are absent, but also makes it imperative that you keep the notebook organized so that you can find things.

Computers: It is exciting that all students will have access to Chromebooks! As much of the course content will be delivered via Google Classroom it is really important that you **bring your school issued Chromebook to class every day and that it is fully charged**. This year the district has access to "GoGuardian" which allows teachers to assist students in utilizing the chromebooks more efficiently. I will make use of this software in a variety of ways, so you need to be sure you are using the school issued Chromebook.

Other:

- In addition to assigned homework, students are expected to study after every class and come back prepared to ask questions on the material
- Although I will attempt to let you know in advance, there is always a possibility that we will doing a "quick lab" on any given day. For this reason, it is expected that you will come to all classes with appropriate attire for lab, including closed toe shoes.
- Please keep all your possessions that you are not using and are not required for class in your backpack. Your backpack, coat, etc. must be kept at **your** desk station and must not block the aisles
- Emails (either sent directly or notifications via Google Classroom) is an important communication tool in this class. You are expected to check your school email at least once a day, and are expected to read (and respond if appropriate) to emails that are sent.

Responsibilities: (see handbook)

Rules: (see handbook and lab safety agreement)

Supplies/Materials:

- Organized 3 Ring Binder with paper and handouts
- Assignment Book (if you use one)
- Writing utensil
- School Issued fully charged Chromebook