

Course Description

Physics is an on-level course which deals with the interactions of physical objects as well as the concept of energy. The development of higher order thinking skills is encouraged in the course as it is throughout Hillgrove's science program. It is also stressed that science is an experiential subject and must be experienced firsthand to truly be understood. With this in mind most of the class time is spent with hands on activities as well as minds on discussions based on student experiences and assigned homework. Individual exploration and organization is encouraged within the framework of small groups. Each Unit provides each student with materials and opportunities designed to help the student understand the concepts as well as appreciate the application of the content in her/his life outside of the science classroom. This classroom is intended to be a place where the student can safely think about and explore the world we live in. Every student's opinion is respected, with the understanding that science is a subject with little room for opinion that cannot be supported by observation, experimentation, and mathematical calculation. All of this requires individual student accountability and open communication in regards to his/her behavior, work, and grades.

Knowing what, how, and when to do in this course is clearly laid out in these pages. You are not expected to memorize all of this, but rather, to refer to this information when you have questions about what is expected. Please read through all of this information during the first week. Later in the course, before you ask your teacher, look for the answer here first.

Daily materials you need to bring with you on a daily basis:

pencil	calculator	notebook paper	3-ring binder (1" +)
--------	------------	----------------	----------------------

The following is the recommended notebook organization for this course:

- (1) this Syllabus
- (2) all materials for each Chunk should be kept in order starting with the guide/review sheet followed by key terms, worksheets, etc.

Textbook: Physics: Principles and Problems. Glencoe. 2009.

Teacher Contact and Availability

Hillgrove Physics Team

Mr. Buckert -
Matthew.Buckert@cobbk12.org
Room 1221
M-F: 3:30-4:00pm

Ms. Lunaburg –
Diane.Lunaburg@cobbk12.org
Room 1209
Th:7:45; W:3:30-4:00pm

Mr. Dine – John.Dine@cobbk12.org
Room 1219
TTh: 7:45am; W: 3:30-4:00pm

Mr. Teters - Michael.Teters@cobbk12.org
Student after hours –
theteterszone@gmail.com
Room 1215
MWThF: 7:45am and 3:35-4:00pm

Mrs. Steed - Leigh.Steed@cobbk12.org

Teacher websites/blogs can be found at:
<http://www.cobbk12.org/hillgrove/departments/science/science.aspx>

The following are the **Standard Units** of study in Physics broken down into Chunks (#)

<u>TOPIC</u>	<u>STANDARD</u>		<u>TOPIC</u>	<u>STANDARD</u>
Analyzing Motion	SP 1	SP 2	Analyzing Electricity & Magnetism	SP 5
Speed & velocity (1)	a, b, c		Electrostatics (8)	a, b, c
Acceleration (2)	a, b, c		Current & Circuits (9)	d
Projectiles (3)	d		Magnetism & Motors (10)	e
Newton's Laws (4)		a, b, c		
Application of Newton's Laws (5)		c, d, e		
Evaluating Energy	SP 3		Exploring Waves	SP 4
Momentum (6)	a, d		Wave Properties (11)	a, b, c
Mechanical Energy (7)	b, c		Sound (12)	a, b, c
			Light (13)	d, e
			Optics (14)	f, g

Each content "Chunk" will follow the same 5 day pattern:

Day 1: Introduction

- Return and review the previous chunk's summative assessment.
- Receive the Objectives/Review Sheet for the chunk.
- Introduction to the new chunk of material to be covered. This may be teacher lecture, demonstrations, a short inquiry activity, etc.

Day 2 and 3: Lab/activity based instruction

- These days will allow for one big content based lab or multiple content focused activities to be performed along with instruction based on your results and observations.
- All of your work from the labs and activities will be due before the 20Q on Day 5.

Day 4: Final content instruction

- Focused according to the overall progress/needs of the class during the first three days of the chunk.
- Formative Assessment (12Q) - consists of 12 questions which are representative of the concepts covered and to be assessed on the Summative Assessment (20Q) on Day 5. Graded in class. The key will also be available on the course website for reference.
- Homework - complete the Chunk review sheet and other online review materials, if you have not done so already.

Day 5: Remediation and assessment

- Remediation/enrichment - you will be assigned either remediation or extension, individually based on your performance on the 12Q. This work and the review sheet will be turned in prior to the Summative Assessment (20Q)
- Summative Assessment (20Q) - it's basically a test.
- Begin working on the next topics...mainly the Key Terms online quiz at schoology.com which is due the next day.

Chunks #1-7, 9, 10 are actually 6 days, there will be an extra day 3.1

On-level Physics Grading Guidelines

All grades for the course will be organized as follows:

- **Formative - 50% total**
broken into the following (see below)
(Labs, key terms, daily)
- **Summative– 40%**
(Tests)
- **Final Exam – 10%**

The following are the typical assignments that occur each chunk. Others may be used within these categories as well.

Key Terms (2%)

- This is an online assignment at schoology.com. A link to the terms at the course website and schoology.com. Students will create a schoology account at the start of the semester.
- Assigned every Chunk Day 5; must be completed by the start of class on Chunk Day 1 for full credit. You may receive 80% credit through Day 3 of the chunk. A zero will be recorded in the gradebook after Day 3. There will be no opportunity to make these up after Day 3.
- Print out (or hand copy) the key terms and place in your notebook, then use the print out and take the quiz. Retake as many times as you wish before the end of Day 3 when the quiz expires.

Labs (25%)

- Minimum grade is 40% if student participated but nothing turned in, no less than 60% if student participated and turned something in.
- If absent, a lab must be made up on own time before the end of the following chunk, otherwise a zero will be assigned.
- Some labs can be made up online, but we recommend you come in and actually experience the lab.

Daily (23%)

- Various class/home activities and summarizers throughout the chunk.
- Online assignments at schoology.com

Summative Assessment (tests) - (40%)

- 20 question test for each chunk, taken after the remediation on Chunk Day 5.
- You will be given an opportunity to explain questions that you miss for partial credit (up to 40% of what you missed). This is called the 20Q analysis and must be turned in by Day 4 of the following Chunk.
- If you are absent, a zero will be recorded in the gradebook until it is made up. You should make every effort to take the 20Q by end of the following Chunk; make up times are before or after school only, please communicate with your teacher get this done.
- County Student learning Objectives (SLO) will count the same as a test.

The Final Exam (10%)

- Multiple choice (1 pt each) approximately 80 questions.
- Detailed cumulative of entire semester.
- You should keep all Objective/Review sheets Formative assessments, summative assessments, and materials from each chunk to help you prepare for the final. You will also be provided access to an additional Final Exam Review Sheet

Absences/Make-up work

- You are responsible for completing all work missed when you are absent. All materials are available at theteterszone.net and on your Schoology account. Speak with your teacher for specific expectations regarding make-up deadlines.

Behavioral Expectations

- ❖ You need to be present in class in order to participate, excessive absences will reflect in your grade.
- ❖ This room is my home. Please clean up after yourself before you leave. This includes any food wrappers, school supplies and lab equipment you may have been using. Failure to do so may result in loss of privileges.
- ❖ Tardiness is unacceptable and will result in detentions. Anyone outside the classroom when the tardy bell rings is considered tardy. Be sure to give the teacher your note for the tardy and quietly get to work.
- ❖ The first and last 15 minutes of class are considered dead time where no one will be allowed out of the classroom for any reason. Please be aware of the time when asking to leave.
- ❖ I expect you to be awake and alert during class. You are expected to have your head up during class.
- ❖ With technology becoming accessible, you do not have to keep your phone put away but be aware of when it is appropriate to be on it or not. With this freedom comes responsibility. If your phone is effecting your grade, we may have to make changes.
- ❖ Classroom conduct is very important. Poor classroom behavior prevents me from teaching and/or students from learning; it will be dealt with by a detention or referral.
- ❖ Laboratory participation is important. Please respect the lab equipment and follow the procedures outlined in the labs. Failing to follow the rules will cause you to be removed from the lab and receive a zero on the lab.
- ❖ Cheating will not be tolerated and will result in a zero on the assignment, no questions asked. I encourage you to work together and help each other whenever possible. This does not mean copy from each other, **nothing is learned when you copy and the practice of copying will be evident in test scores.**
- ❖ You are ultimately responsible for your grade. If you find yourself falling behind or not understanding the material, I expect you to make arrangements to come in for tutoring sessions which are offered throughout the week or come to me and make arrangements for other times.
- ❖ You will not be allowed to leave the room without the permission of the teacher. If you leave the room without permission you will be considered AWOL and appropriate disciplinary action will be taken, this includes but is not limited to blowing your nose or fixing clothing.

Test taking conditions:

1. There will be no talking during the test. Raise your hand if you have a question.
2. No sharing of calculators or other test materials. If you have not brought your materials to class you will not be able to use them on the test. You may not have cellphones out during exam. If they are out, it will be considered cheating and you will risk receiving a zero on the exam.
3. You may not look at another classmates test or materials during the test.

Violation of any of these conditions will result in a zero on the test.

4. Please remember to look over your test carefully before you turn it in to make sure you have completed all of the sections on the test and have answered all the questions to the best of your ability.

Accessing the Blog: (2 options)

1. <http://dinesciencespot.weebly.com/>

2. You can find a link to the blog from the Hillgrove website. Along with the blog there are resources that can be accessed in case you are absent and power points that will need to be printed prior to coming to class.

- Logon to the Hillgrove school site
- Click **Academics** on the top bar
- Click **Science** and scroll to **Teters**
- Click **visit blog** and click **view**
- Choose **DINE**

Remind 101: Please sign up Text @bf7bch to 81010

If you are absent: Check the blog to see what was done during the week you were absent. If the blog is not updated in time, come to me as soon as you return to find out what was missed, so we can make a plan to have it made up. If you know you will be out, it would be better to get assignments before you leave.