

# BARNEGAT TOWNSHIP SCHOOL DISTRICT

# Barnegat High School AP Physics 1 - Syllabus

Course Information	Teacher Information
AP Physics 1	Name: William Campagnolo
Semester 1	Phone: ext. 72210
Class Location: Room B210	Email: wcampagnolo@barnegatschools.com
	Teacher Website:

# Course Description:

Physics is a laboratory based physics course covering the topics of kinematics, dynamics, energy, power, heat, light, electricity, and magnetism.

Instruction emphasizes hands-on laboratory exercises, organization of class notes and assignments, development of good study habits, inquiry-based learning, practical application of scientific concepts, and development of problem-solving skills. Topics are present in depth and at a pace that accommodates the needs of diverse learners.

Skills in writing, comprehension, and mathematics will also be developed as integral components of the overall physics curriculum

#### **Course Competencies/ Learning Objectives**

Students who successfully complete AP Physics will be competent in the following areas:

- Students will be able to Use evidence to develop a model in which they identify and describe the relevant components of a phenomena
- Students will be able to Define a system of the interacting objects that is mathematically represented.
- Students will be able to analyze data using tools, technologies, and/or models to support a claim
- Students will be able to describe the fundamental forces

#### **Course Texts / Online Resources**

Openstax textbook: https://openstax.org/books/physics/pages/1-introduction The Physics Classroom: thephysicsclassroom.com Online Physics Simulations: https://phet.colorado.edu/en/simulations/filter?subjects=physics&type=html&sort=alpha&view=grid Google Classroom ID: https://meet.google.com/lookup/dobaxb5q2u

#### **Required Materials**

- Laptop AND charger
- Pen/Pencil
- Notebook
- Spiral Bound Notebook (for labs)
- Calculator

# **Attendance Policy**

Regular and prompt class attendance is an essential part of the educational experience. The Barnegat Township School District expects students to be responsible and exercise good judgment regarding attendance and absences. Students accept full responsibility for ensuring that they complete any/all work missed due to absences.

# **Course Topic Outline**

Content Area: Science				
Course Title: AP Physics	Grade Level: 11/12			
Unit 1: Kinematics	25 Days			
Unit 2: Dynamics	20 Days			
Unit 3: Circular Motion and Gravitation	15 Days			
Unit 4: Energy	45 Days			
Unit 5: Momentum	15 Days			
Unit 6: Simple Harmonic Motion	20 Days			
Unit 7: Torque and Rotational Motion	30 Days			

#### **Student Grades**

The grading system for this course is based on the category weights listed in each department's policy. For this course, those weights are listed below.

# Math/Science/English/Social Studies

Each marking period, students will have a minimum of three (3) Major Assessments and seven (7) Minor Assessments (explained below). Course Participation is assessed twice (2x) per marking period using the district rubric. Benchmark assessments will be recorded in Genesis for marking periods 1, 2 and 3.

Major Assessments	-	30% of marking period grade
Minor Assessments	-	40% of marking period grade
Course Participation	-	10% of marking period grade
Benchmark Assessments		20% of marking period grade

Please note: the above areas are used as the basis for 80% of your grade for the course; the Midterm and Final exam will constitute the remaining 20% of your grade.

- Examples of Major Assessments include items that are summative in nature, such as: tests, projects, research papers, formal presentations, or Scientific Lab Reports
- Examples of Minor Assessments include items that are formative in nature, such as: quizzes, exit tickets, small-scale research activities, in class worksheets, or any other type of assessment that is diagnostic in nature and used to guide instruction and provide ongoing feedback to students.
- Note: grades for individual assignments are entered into Genesis for the marking period in which the assignment is collected, and not a subsequent marking period.
- Extra Credit will only be available for assignments that have been approved ahead of time by the teacher and department supervisor.
- In this course, it is expected that students will submit only their best work, and teachers reserve the right not to accept work that is substantially below what a student is capable of producing.
- Please speak to your teacher about the opportunity for earned Second Chances on certain Major Assessments.

	Academic Social Skills Readiness to Learn / Study Skills		Class Discussions	Classwork	21st Century College and Career Readiness
	20 points	20 points	20 points	20 points	20 points
-	<ul> <li>Takes initiative in completing tasks in the online classroom.</li> <li>Communicates needs to the teacher in an appropriate manner.</li> <li>A role model for others in the online classroom.</li> <li>Appropriately seeks support and/or assistance from the teacher.</li> </ul>	<ul> <li>Produces notes and other materials that demonstrate effort and insight.</li> <li>Is motivated and takes ownership of his/her learning.</li> <li>Takes steps to better himself/herself through Google Meets, emailing, etc.</li> </ul>	<ul> <li>Consistently completes the assigned discussion questions and rarely misses a question, if at all.</li> <li>Responses consistently reflect high levels of care and pride in work.</li> <li>Replies and interacts with peers in a meaningful manner.</li> </ul>	<ul> <li>Consistently completes assigned tasks in a timely manner.</li> <li>Actively participates in classroom activities on a daily basis.</li> <li>Contributes to class discussions in a meaningful way (asking questions or adding to class discussion).</li> </ul>	<ul> <li>Student <u>consistently</u></li> <li>shows the following: <ul> <li>Responsible and contributes to our online community.</li> <li>Clearly and appropriately communicates with the teacher via email.</li> <li>Understands the consequences of actions.</li> <li>Responsibly uses technology.</li> </ul> </li> </ul>

#### **Course Participation Rubric**

<ul> <li>15 Points</li> <li>Completes tasks in the online classroom.</li> <li>Sometimes communicates needs to the teacher.</li> <li>Frequently on-task, but may need some redirection from the teacher.</li> </ul>	<ul> <li>15 Points</li> <li>Often produces notes and other materials that demonstrate effort, but may also require direction.</li> <li>Is mostly motivated and takes ownership of his/her learning.</li> <li>Often takes steps to better himself/herself through Google Meets, emailing, etc.</li> </ul>	<ul> <li>15 Points</li> <li>Frequently completes the assigned discussion questions, but may have missed a few.</li> <li>Responses sometimes reflect high levels of care and pride in work, but not always.</li> <li>Replies and interacts with peers.</li> </ul>	<ul> <li>15 Points</li> <li>Usually completes assigned classwork tasks.</li> <li>Frequently participates in classroom activities but sometimes requires re-direction.</li> <li>Usually contributes by responding, and/or asking questions.</li> </ul>	<ul> <li>15 Points</li> <li>Student <u>frequently</u></li> <li>demonstrates the following: <ul> <li>Responsible and contributes to our online</li> <li>community.</li> </ul> </li> <li>Clearly and appropriately communicates with the teacher via email.</li> <li>Understands the consequences of actions.</li> <li>Responsibly uses technology.</li> </ul>
<ul> <li>10 Points</li> <li>Rarely completes tasks in the online classroom.</li> <li>Does not communicate needs to the teacher.</li> <li>Frequently needs re-direction from the teacher.</li> </ul>	<ul> <li>10 Points</li> <li>Produces notes and other materials that lack effort to learn.</li> <li>Unmotivated and does not take ownership of his/her learning.</li> <li>Does not take appropriate steps to better himself/herself.</li> </ul>	<ul> <li>10 Points</li> <li>Rarely completes the assigned discussion questions.</li> <li>Responses do not reflect care and pride in work.</li> <li>Little to no replies and interactions with peers.</li> </ul>	<ul> <li>10 Points</li> <li>Rarely completes assigned tasks and does not produce his/her best work.</li> <li>Usually does not participate in classroom activities and often requires teacher re-direction</li> <li>Usually does not contribute by responding and/or asking questions.</li> </ul>	<ul> <li>10 Points</li> <li>Student rarely demonstrates the following: <ul> <li>Responsible and contributes to our online community.</li> <li>Clearly and appropriately communicates with the teacher via email.</li> <li>Understands the consequences of actions.</li> <li>Responsibly uses technology.</li> </ul> </li> </ul>

# Plagiarism, Cheating, and Academic Integrity

The Barnegat Township School District places a strong emphasis on students' integrity, and the district will not tolerate instances of academic dishonesty. Plagiarism is the practice of copying words, sentences, images, or

ideas for use in written or oral assessments without giving proper credit to the source. Cheating is defined as the giving or receiving of illegal help on anything that has been determined by the teacher to be an individual effort. Both are considered serious offenses and are subject to consequences described in the Student Handbook and Board Policy #5701.

### Honor Code

The purpose of this Honor Code is to communicate the meaning and importance of academic integrity to all members of the school community and to articulate and support the interest of the community in maintaining the highest standards of conduct in student learning. Barnegat High School embodies a spirit of mutual trust and intellectual honesty that is central to the very nature of learning, and represents the highest possible expression of shared values among the members of the school community. The core values underlying and reflected in the Honor Code are:

**Academic honesty** is demonstrated by students when the ideas and the writing of others are properly cited; *students submit their own work for tests and assignments without unauthorized assistance; students do not provide unauthorized assistance to others; and students report their research or accomplishments accurately.* 

**Respect** for others and the learning process to demonstrate academic honesty.

**Trust** in others to act with academic honesty as a positive community-building force in the school,

**Responsibility** is recognized by all to demonstrate their best effort to prepare and complete academic tasks.

**Fairness and equity** are demonstrated so that every student can experience an academic environment that is free from the injustices caused by any form of intellectual dishonesty.

**Integrity** of all members of the school community as demonstrated by a commitment to academic honesty and support of our quest for authentic learning.

This Honor Code summarizes the Honor Policy, which defines the expected standards of conduct in academic affairs. The student body and faculty at Barnegat High School will not tolerate any violation of the Honor Code.

Any violation of the Honor Code will result in Administrative Consequences and be detrimental to student grade.

#### **Student Expectations**

- 1. All school rules and policies apply to this class.
- 2. The teacher and students will work together for a respectful, safe classroom.
- 3. Communication Policy; if you do not tell me then I will not know, so talk to me if you need help
- 4. Bring chromebook to class CHARGED and with your charger.
- 5. Students will come to class on time, prepared, and ready to learn.
- 6. Students will complete all assignments, including homework, by all deadlines. Make-up work is only accepted after an excused absence. It is your responsibility to see me for your work before or after school or via email (most assignments should be on Google Classroom, but I am forgetful. The assignment not being on Google Classroom will not excuse you from any work.)
- 7. Students will actively participate in class discussions and other activities in order to enhance their learning experiences.
- 8. Cell phones, iPods, or any other personal electronic devices are accepted in class at any time; I retain

the right to revoke this.

9. Do not be a jerk

# Extra Help and Support

Occasionally, students will require additional help to master the content and skills in this course. If you need additional help, there are a variety of options for you, including:

- I will be available for "office hours" Block 1 on A days, first half of Block 4 on B days, or immediately after school on A days (please let me know if you plan on staying after school beforehand, so I make sure I will be there)
- Before/after school help sessions with your teacher
- Free online tutoring with Brainfuse (available from the Barnegat Library website)

As your teacher, I am committed to your success. If you need help, please ask!

I have read and understand the syllabus for AP Physics.

Student Signature

Print Name

Parent/Guardian Signature

Print Name