



COURSE NAME: Physics

INTRODUCTION/COURSE DESCRIPTION

This is the advanced class that prepares students to be successful beyond their high school career. The study of physics focuses on understanding the physical world around us in such areas as motion, force, energy, waves, sound, light, electricity and magnetism. The Honors Physics course will include emphasis on learning key physics concepts while applying these concepts in mathematical problem solving. Hands-on lab activities and projects will also be included to provide students with the opportunity to explore and apply these concepts. This course is designed for all college bound students.

ESSENTIAL LEARNING OUTCOMES

Essential Learning Outcomes for First Semester:

- I can relate motion graphs to the actual motion of an object.
- I can describe, model, and solve for motion happening in 1 direction.
- I can describe, model, and solve for motion happening in multiple directions/multiple bodies.
- I can use force diagrams and net force calculations to explain how Newton's Laws are applied in the world around us.
- I can show how momentum and energy are transformed and conserved in different types of collisions.

Essential Learning Outcomes for Second Semester(5-6 selected by needs of students/interests):

- I can show how electromagnetic waves interact in both a particle and wave form.
- I can show that energy transfer takes place between objects and energy changes forms, but is always conserved.
- I can apply geometric principles to the way light interacts with mirrors.
- I can apply geometric principles to the way light interacts with lenses.
- I can use simple harmonic motion to connect vibrational motion to waves.
- I can differentiate between properties of electric fields and magnetic fields.
- I can show how electric and magnetic fields interact to create electromagnetism
- I can show how point charges are a noncontact force and can store energy.
- I can solve for the components of simple series and parallel circuits.



SUPPLIES/TEXTBOOK

Textbook: Discovery Education Techbook is our online text. This will be supplemented with materials posted on the students learning platform. To access Discovery Ed, use the link in CANVAS sign in using your school google account at:

<https://www.discoveryeducation.com/>

Supplies: Bring the following materials to class and have them ready at the bell.

- a. Chromebook
- b. Notebook/paper
- c. Folder
- d. Writing Utensils
- e. Calculator (We have these available for classroom use, too.)

CLASSROOM EXPECTATIONS

1. Be respectful of your fellow classmates and teacher

- a. **LISTEN-** when you should be listening
- b. **SPEAK-** when it is appropriate
- c. **PARTICIPATE-** actively in discussions, activities, and work time

2. Bring the appropriate materials to class and have them ready at the bell.

- a. Computer
- b. Notebook
- c. Folder
- d. Writing Utensils

3. Technology

- a. Phones and related personal items will be put away at the beginning of class. They are not to come out of the case until the bell per school policy.
- b. When Chromebooks are being used for activities students need to remain on sites for that activity

4. Be in your seat at the bell and ready to begin class

GRADING SCALE



[Board Policy 505.5R]: Academic marks are recorded as letter grades, denoting the following quality of work:

"A" is the grade of distinction and represents work of superior quality

"B" represents work of excellent quality

"C" represents work of average quality

"D" represents work regarded as passable, according to the minimum requirements of the course in effort and quality

"F" denotes failure to successfully complete the course and no academic credit is received.

All classes that students are enrolled in are figured into the GPA.

All classes (except for AP) will use the same grading scale. The grading scale is as follows:

A+ = 99-100% ↑	A = 93-98%	A- = 90-92%
B+ = 87-89%	B = 83-86%	B- = 80-82%
C+ = 77-79%	C = 73-76%	C- = 70-72%
D+ = 67-69%	D = 63-66%	D- = 60-62% F = 59% ↓

*AP courses will be weighted and use the following grading scale:

A = 4.5	A- = 4.17	B+ = 3.83
B = 3.5	B- = 3.17	C+ = 2.83
C = 2.5	C- = 2.17	D+ = 1.83
D = 1.5	D- = 1.17	

GRADING

Bondurant-Farrar High School utilizes semester grading building wide. The semester will be worth 85% and the semester test will be worth 15%.

Ungraded Practice/Homework will not be graded. There will be a non-graded category in Infinite Campus to help track your completion of daily tasks. You may not turn in late work for these tasks. You should be completing all homework tasks assigned as this is how you practice to master the material. This work should be completed on time. Watching the teacher solve the problem or explain the solution to a conceptual question is not the same as figuring out how to solve or explain it yourself.



Formative Assessments: Formative assessments may be thought of as ungraded checks for understanding. These will **not** always be announced. Such tasks help the teacher assess how you individually are progressing on the concepts. Individuals who do poorly on these tasks may continue to work to improve their understanding and may need to attend interventions and/or seek out additional help.

Labs and Activities: will be performed in groups. We have six lab benches so the class will be randomly assigned into 6 or less groups for each lab. Listen carefully for which portions of the written work can be done together and which portions need to be done individually. If in doubt, ask! Copied papers will be in violation of the academic dishonesty policy. Consequences can be found in the student handbook.

Inquiry based tasks have HARD deadlines. Once the teacher has instructed on the concept it is no longer inquiry. Have these tasks done on time or they will be zeros.

Grade Post Dates

Semester 1: September 24, October 24, November 25, and January 10

Semester 2: February 13, March 26, April 29, and May 30

LATE WORK

Late work will be accepted up until the end of the essential learning outcome summative assessment (end of unit), and then no late work will be accepted for credit. There will be no penalty for late work until the essential learning outcome summative has been completed, indicating the end of the unit.

When a student is absent from school (whether the absence is excused or unexcused) he/she will be required to make up all work that was missed during the absence. Students shall receive full credit earned for school work made up due to absences and are expected to do so in a timely manner in order to not fall behind. Similar to the late work policy, students will have until the essential learning outcome summative (end of unit) to turn in the work with no grade penalty.

RETAKE POLICY

Students are expected to aim to perform well the first time on assessments. There are times when mastery hasn't been demonstrated due to a variety of reasons. Students choosing to retake must complete the process within one week (5 school days) of receiving back the graded assessment.



If a student wishes to retake, the student must initiate communication with the teacher, complete a retake form (*a form will be created for the building*), and schedule a time to do so. This can be completed during a study hall, a time arranged with the teacher, or before/after school with a teacher of that subject area. In order to qualify for a retake, all necessary work must be turned in prior to the original assessment (i.e. homework, study guides).

Students can retake an individual assessment only one time and are allowed four (4) retakes during the semester per class. Those students enrolled in DMACC and/or AP classes will follow the course syllabus. There will not be retakes allowed on semester exams for any class.

Note: There are some projects/assignments/assessments that may not qualify for a retake. This will be at the teacher's discretion.

W.I.N.

The purpose of W.I.N. is to provide students with an opportunity for reteaching of specific concepts/skills, retaking assessments, and providing supplemental materials for the essential learning standard(s). Teachers will request students as needed, but students may also elect to go to a specific teacher during this time. Sign-up for W.I.N. takes place every day Tuesday through Friday from the beginning of 2nd period until 9:15 a.m.

ACADEMIC INTEGRITY

All student learning is based on the understanding that everyone is thoughtfully engaged in academic tasks and respectful of the work of others. Academic integrity applies to all aspects of teaching and learning. Class assignments and assessments are tools to help students learn; grades show to what degree students achieve learning goals. Therefore, all assignments and assessments for which students receive grades should result from the student's own effort and understanding.

Behaviors that violate Bondurant-Farrar's standards for academic integrity include but are not limited to:

- **Plagiarizing work:** Whether the source material is from another student, the web or any other medium, students will not appropriate source material and pass it off as their own.
- **Sharing work or unauthorized collaboration:** Students will not aid or assist other students in any way on individually assigned tasks.



- **Cheating:** All traditional forms of cheating are also unacceptable. This includes behaviors such as capturing images of tests, communicating during exams, etc.
- **Falsifying Information:** Students will not change a grade assigned by a teacher electronically or in the teacher's grade book.

First offense:

- Student will be asked to complete an alternative assignment/assessment potentially under adult supervision
- Appropriate disciplinary actions will be assigned, including but not limited to detention, in-school suspension, parent communication/meeting, or other additional measures

Second offense:

- Student will receive no credit for the assignment/assessment
- Appropriate and potentially more serious disciplinary actions will be assigned, including but not limited to detention, in-school suspension, parent communication/meeting, or other additional measures

ELECTRONIC DEVICE POLICY

Electronic devices such as cell phones, smart watches, headphones, and earbuds, not provided by the school, can cause disruption to the school environment and interfere with student learning. All electronic devices must be concealed during instructional time unless authorized by the classroom teacher for instructional purposes. Students are expected to refrain from using their devices for non-academic purposes. Misuse of devices include but are not limited to taking photos/video in the locker room or restroom, using a device to cheat, using a device to incite violence, using a device to bully, harass, threaten, or intimidate another person including a student or staff member, to disseminate inappropriate photos/videos or other restricted materia, etc.

Bondurant-Farrar High School assumes **NO RESPONSIBILITY** for the loss or theft of any electronic devices nor is it obligated to investigate any loss or theft. If you are concerned about loss or theft, leave the device at home.

Violation of this rule can result in the following, including but not limited to: loss of school privileges, detention, in-school suspension, out-of-school suspension, application of the Good Conduct Rule penalties, or in severe cases, taken before the Board for purposes of expulsion. Depending on the severity of the misuse, local law enforcement may also be contacted.



1st Offense: Verbal warning and request to conceal device

2nd Offense: Minor referral, student places phone on teacher's desk and student will retrieve it at the end of class.

3rd Offense: Major referral (Insubordination), student will be asked to retrieve at the end of the day from the office.

4th Offense: Major referral (Insubordination), parent/guardian will be asked to pick up at the end of day from the office.

Consequences for additional offenses will be determined by building administration.