South Gibson County High School

Honors Physics

Instructor Contact Information:

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Course Description:

• The goal of physics is to use a small number of basic concepts, equations and assumptions to describe the physical world. This course is designed to prepare college-bound and technological oriented students for a science and/or engineering based curriculum. In this course, students will understand basic physics principles in one and two dimensional motion, electricity, and thermodynamics.

Supplemental Texts and Other Supplies:

- Supplemental text: <u>www.ck12.org</u> Flexbook Basic Physics Second Edition
- Students should be prepared to take notes in class as well as notes during labs and major projects (discussed below). We will be putting together an interactive notebook. A dedicated notebook is required and it is helpful that the pages are grid lines. The notebook should have at least 100 pages.
- Lab Fees are \$20

Assignments and Grading Scale:

- 80% Formal Assessments This is an honors course and will include differentiated projects and assignments to assess and demonstrate mastery of the material covered in class. There will be required outside reading and research assignments. These outside assignments may not be the same material for every student.
 - o There will be a test over each unit which will be worth 100 points.
 - O Projects must be of high quality and assess learning. In addition, excerpts from the book "Physics for Future Presidents" by Richard Muller will be discussed. I highly recommend that the student purchase this book for these discussions. This book can be ordered from Amazon at a very reasonable price, especially for the used books. I do have a classroom set of these books for students' use.
 - o To understand the physical world, students must learn in the physical world. This requires extensive hands-on demonstrations and projects.
- 20% Informal Assessments
 - These assessments include daily bell-ringer activities, lab activities, standardized test preparation questions, and weekly quizzes over material covered in class.
- Homework (refer to School Board Policy 4.6011)
 - Physics cannot be mastered solely in the classroom. Each student must invest some time in mastering the material outside the classroom. Problems will be sent home several times a week for additional practice. Outside reading assignments will complement the material covered in class.

Clarifying the "I" as incomplete on progress reports and report cards:

- All students at South Gibson County High School are expected to complete all assignments that support the learning of the state standards and completing those assignments to an acceptable level of mastery.
- In the event that an assignment is not submitted to the teacher on time and to a satisfactory level of proficiency, the student will be placed on the intervention list and will be supported academically beginning the next school day through the ICU framework. <u>Support includes immediate</u> <u>parent/guardian contact</u> along with additional instruction on a skill or concept, or re-teaching the skill or concept during the designated ICU/On-Call time.
- In the event that a student has missing assignments at the time that progress reports or report cards are issued, the student will receive an "I" which indicates that the student continues to be responsible for learning and completing the tasks that will lead them to mastery and an acceptable level of understanding of the standards for the course.
- At SGC, zeros are not acceptable as this indicates that the opportunity for learning is over. Zeros, failing grades, and performance that is less than a student's best effort stand in direct contrast to our belief that failure to learn is not an option.

Class Participation:

- Class participation is vital to learning! Meaningful participation includes the following:
 - Daily in-class comments/input/dialogue these comments should be relevant to the material being taught and discussed. Comments should also be respectful of other students.
 - Preparation for class each student is expected to have all materials required for class. If students are not prepared, this disrupts the learning process for all other students.
 - o On task behaviors students should stay focused on topics being discussed in class.
 - Compliance and respect for class norms and procedures students are to respect the procedures and norms for the class.

Academic Support:

- Focus targeted academic support provided during the school day
- **Edmentum** a supplemental software program aligned to state standards used within the 90-minute instructional block. Edmentum is appropriate for whole group instruction, remediation, reteaching, preview learning, and enrichment.
- ACT Prep
- Before and after school tutoring