

11 PHYSICS
GRADING POLICY: PHYSICS
Mr. McMillan
2023-24

11 Physics: Course Description:

This is a college prep survey course introducing several physics topics that include motion, forces, momentum, work, energy, circular motion, gravity, simple circuits, magnetism, and waves. Subjects will be discussed from a mathematics and problems solving perspective. Students should have a strong background in Trigonometry and Algebra. Laboratory experiences will include the use of the computer software, data collection sensors, and the mathematical and statistical interpretation of data collected during class activities. Course assignments may include such things as a research project, problem sets, lab experiments, and engineering projects.

Topics may include:

- Kinematics in One & Two Dimensions
- Vectors
- Forces & Newton's Laws of Motion
- Circular Motion
- Work & Energy
- Linear Momentum
- Rotational Motion
- Equilibrium
- The Electric Charge
- Circuits
- Magnetism
- Vibrations & Waves
- Sound
- Light
- Optics

Requirements:

Students must bring the following items to class each day.

Text Book

PHYSICS (6th Ed.) Giancoli

Calculator

Writing Utensil

Notebook

Research Project (3rd & 4th quarter):

- Students will complete a Research Project which includes a written paper and a presentation to their peers.
- In research, the student assumes the role of a "pro-active learner", one who gathers information and data independently of the class.
- Research also requires that individuals that make up a team work in a cooperative manner in order to accomplish research objectives (experimental design, data collection, statistical analysis, review of literature, formal lab report, presentation, etc.).
- All teams will select their own research topic (which must be approved by the Instructor).
- Students are encouraged to select research partners based on whether they can successfully work together rather than on social factors alone.

Grading

Homework (20%)

- Homework consists of book assignments, worksheets and in-class work. Generally, each assignment is worth 5 to 10 pts. Your points are added then divided by the total possible for a percentage.
- Homework is usually turned in via Schoology.
- Chapter Homework turned after due date will be eligible for 80% of the maximum points. Homework not turned in will be given a point value of zero and recorded as *MISSING*.

Assessments:

Labs (40 %)

Lab groups will be assigned randomly.

Points are totaled at the end of every 10 weeks and a percentage is calculated. On the average we have one lab per week, each worth 20-50 pts. Labs may also include projects such as papers or presentations.

All Research is counted toward your lab grade.

Lab groups will be assigned randomly.

All Research is counted toward your lab grade.

Tests (40 %)

Tests are averaged at the end of every 10 weeks.

I do **NOT** drop the lowest grade, but I do *occasionally* curve.

Test are a combination of Multiple Choice and Free Response.

Extra Credit*

Extra Credit is not guaranteed to be assigned each quarter. **DO NOT** expect it will be offered. DO NOT depend on it.

E.C. is *occasionally* assigned, based on the topic, classroom discussion, and school events. Extra Credit points may be added to your **LAB** points total or **HOMEWORK** points total at the end of each grading quarter.

All school rules apply to the classroom.

DO NOT sit on the table or counters, use the lab chairs.

DO NOT touch any lab equipment that may be on the tables.

DO NOT keep notebooks or other belongings in cupboards or drawers in the room.

STAY with your group during lab activities.

DO NOT go into the prep area without permission.

DO NOT go into the teacher's desk looking for equipment without permission.

DO NOT use any computer without permission.

DO NOT wear Ear Buds during class discussion,

PHONES should be put away during class discussion.

DO NOT stick your elbow into your ear.