

Course Outline: Physics 11

Ms. Johnston (Rm. 106N)

Students will demonstrate an understanding and appreciation of the role of physics in society and develop knowledge, skills and methods employed by physicists. Emphasis will be placed on the applications of physics to everyday living and the skills needed in the workplace. Students will be engaged in the investigation of scientific questions and the development of plausible solutions.

Course Content

Section 1 - Introduction to Physics

Measurements of Science

Degree of Uncertainty

Displaying Data

Manipulating Equations

Section 2 - Kinematics and Dynamics

Describing Motion: Velocity

Acceleration

Forces

Vectors

Motion in Two Directions

Universal Gravitation

Momentum and Its Conservation

Section 3 - Mechanical and Heat Energy

Work, Energy and Power

Energy

Thermal Energy

Section 4 - Wave Motion and Geometric Optics

Waves and Energy Transfer

Light

Reflection and Refraction

Mirrors and Lenses

Diffraction and Interference of Light

Section 5/6 - Nuclear Physics/Special Relativity

Supplies

3 ring binder

graph paper (4mm)

ruler

pencil and pen

calculator

protractor

Grading and Evaluation

A	86 -100	C	60 - 66
B	73 - 85	C-	50 - 59 (Pass)
C+	67 - 72	F	40 - 49 (Fail)

First Term Mark

a) Tests (70%)

Includes quizzes and chapter/section exams. Students are responsible for completing exams missed. Expect to write exams after school or at lunch upon the day of your return.

b) Labs and Assignments (30%)

Formal labs and informal labs will be collected and graded. Homework assignments will also be collected occasionally. Any labs or assignments missed due to legitimate absences are the responsibility of the student and should be completed and handed in upon your return. Assignments or labs not handed in will result in zero.

Final Grade

a) Final Exam (20% of the final grade)

All students are required to write the final exam in Physics. The final will be comprehensive and worth 25 % of the final grade.

b) End of term mark (80%)

The end of term mark of tests and labs will consist of 75% of the final grade.

Tests (56% of the overall marks)

Labs and Assignments (24% of the overall marks)

Office Hours

Students requesting additional assistance or time to make up labs or tests may see me at lunch of after school, by appointment.

Website Information

Ms. Johnston maintains a website containing course outlines, assigned homework, notes, and links to other useful websites. If you are absent from school or unsure of the required work for the next day, please visit the website so that you can start catching up. The website address is:

<http://johnstonsd36.weebly.com>