AS Physics Syllabus

Mrs. Jerika McKeon

B.S. in Applied Physics, emphasis in Secondary Education
Minor in Mathematics
jmckeon2@asu.edu
(480) 727-5769
http://jmckeonasuprep.weebly.com

Teaching Philosophy

It is my belief that each student has the ability to grow and improve. It is my job to provide each student with the environment and resources they need to succeed in this class and to encourage each student to reach their full potential. ***Students learn best when they construct their own understanding from hands-on experiences and through group discussion.*** As such, students will only be successful in this class if they put forth their full effort and participate actively in all classroom activities.

Course Outline

Semester 1

Motion
Length and time
Velocity
Acceleration

Forces
Mass vs weight
Forces

Energy
Energy
Work
Power

Momentum
Momentum
Collisions

Semester 2

Deformation of Solids
Hooke's Law
Elastic energy
Stress, strain, Young's Modulus

Waves
General wave properties
Sound
Light
Superposition

Electricity
Electric fields
Current of electricity
D. C. circuits

Particle and Nuclear Physics
The nuclear atom
Radioactivity

Grading Information

Students enrolled at ASU Preparatory Academy will receive two letter grades in each of their courses. One of the letter grades is an academic grade that demonstrates if the student mastered the course objectives. The second grade is an effort grade that could reflect attendance, participation, discussions, or completion of practice assignments. Both of the letter grades will adhere to the following grading scale, but only the academic grade will be reflected on the student's final transcript and included in the grade point average.

Letter Grades

A	Exemplary	90 - 100
B	Highly Proficient	80 - 89
C	Proficient	70 - 79
D	Partially Proficient	60 - 69
F	Minimally Proficient	50 - 59

Effort Grades

Opportunities to practice

Warm-ups

Homework

Printed on report cards, but does NOT count towards transcript grades

Academic Grades

Opportunities to demonstrate mastery

Some homework problems and assignments

Projects/Labs/Quizzes/Tests

Printed on report cards, and DOES count towards transcript grades

Homework

In an effort to "go green," students will be required to participate in online homework and submit typed assignments (such as lab reports).

The online homework website can be found via the class weebly page. To log in, students need their student ID number (found on PowerSchool).

Students will earn two scores for each homework assignment: one for written work and one for accuracy. All written work should follow the "GPS" format (discussed in class) and should be written in their notebook.

Attendance

This class is fast-paced and every lesson is important. It is crucial that you attend class and that you arrive on time and ready to work.

5 tardies in 1 class = 1 absence + Lunch Detention
Further Violation = Lunch Detention + Community Service

Labs

Labs will last between one and three days. Lab equipment is expensive; you are expected to behave professionally and if you do not, you may not be able to participate.

To participate in a lab, students must wear long pants and tennis shoes.
Long hair will be required to be pulled back during the lab.
Arriving without proper lab attire will result in loss of academic points.

Grades will come from answering Cambridge-style questions or from professionally written lab reports (rubrics will be given out for each lab and are also posted on the class planbook). If you are absent on the day of a lab, you must come in on your own time (either during lunch or after school) to complete it. You may instead be assigned to complete an alternative lab.

Experiments done in lab will be used both to explore new concepts and to reinforce material already learned. Lab concepts will be tested on exams.

Late Work & Retakes

Late work will be placed at the bottom of the grading queue to assure timely grading of "on time" work.

% Academic late work will be accepted for up to 80% credit. Academic assignments may be retaken** for up to 90% credit.

Effort assignments cannot be retaken.
Effort assignments should be turned in late to meet the retake requirement for academic retakes, but will not receive credit.

5 You have 5 school days (1 week) to turn in academic late work or retake assignments. Check grade book for exact dates.

For test retakes, fill out the test retake form and turn it into the folder.

Write the assignment title at the top

Get it stamped (x2) by Mrs. McKeon

Turn it into the make-up basket

**In order to retake academic assignments, students must submit a full attempt on time. Students must also complete all associated practice assignments (including all effort assignments).

Materials Needed

Pencils (mechanical preferred) and pens (red and blue or black)

Designated physics notebook or binder (we will have a lot of handouts, so if you use a notebook, I suggest taping them in your notebook after we review them)

Calculator (scientific or graphing)

1 package of colored whiteboard markers

$25 Lab Fee

Daily Expectations

Get a drink, throw away trash, etc. before class begins.

Enter the room in "learning mode" and start the warm-up.

Sit in your assigned seat.

Passes from class are limited to 3 per student per quarter.

Plagiarism

It is the responsibility of the student to follow the ASU Prep Way with honesty in regard to the authorship of the work that he/she presents as his/her own. Consequences for plagiarism will be in accordance with the ASU Preparatory Student Code of Conduct / Handbook. Consequences may include the student receiving a zero on the assignment, and students may not be able to retake the assignment for credit.

For more information on plagiarism visit:

- https://provost.asu.edu/academic-integrity
- https://provost.asu.edu/academic-integrity/resources/students#avoiding-plagiarism