



COURSE DESCRIPTION: Students will use physics concepts to bring meaning to what they experience in the world around them. To this end, this course aims to teach students how to analyze, interpret, and understand their environment by studying the major disciplines of physics and learning how they interact. Physics is a two semester course that focuses on an introduction to the basic concepts listed below. Major components of this course include frequent inquiry based lab work, problem solving computation, projects, and tests.

Semester 1:

Unit 1 – Kinematics, Newton’s First Law
Unit 2 – Newton’s Second and Third Laws
Unit 3 – Nonlinear Motion
Unit 4 – Energy

Semester 2:

Unit 1 – Magnetism and Electricity
Unit 2 – Sound, Waves, Electromagnetic Spectrum
Unit 3 – Light and Color
Unit 4 – Thermodynamics

CLASS Mission Statement: *Our science class is a place where exploration, creativity and imagination make learning exciting and we inspire each other to do our best, be ready for a global community and reach our dreams! Give and Earn Respect! Be Organized! Be Creative! Be Inspired! Have Integrity! WORK HARD! BE NICE!*

Methods, Procedures and Class Format:

Reading is a crucial component to understanding the themes addressed in this Physics class. Developing writing skills is also a major focus. Math and graphing skills are also regularly emphasized and practiced. Additionally, students will use lab activities and projects to understand each of the themes addressed in this Physics class. Because students will regularly conduct lab activities, the process of science will connect the themes covered in this course. A binder and **science notebook** will be used to practice organizational skills that are necessary for success in college and careers. On most 5 day weeks the class will proceed as follows: Each class begins with a 5 minute warm-up, so the students may transition from the passing period into science mode. We will then move on to the lesson for the day.

Tests/Quizzes: Retention quizzes will be given periodically as the need arises. The quizzes will cover the concepts covered in previous weeks. Tests will be given at the end of each unit. All tests will be cumulative. Students will receive at least two days notice before a test. However, students are usually given several weeks notice and it is posted on the class website. If the student misses a test due to an absence, the student needs to make up the test as soon as they return to school.

ATTENDANCE AND MAKEUP WORK POLICY:

Each day in science builds upon the day before. **Good attendance is the key to success in this class!** Ultimately, the student is responsible for getting caught up on any work missed due to an absence. If a student has an excused absence and work was due the day they were absent, they must turn homework into the teacher the next time they have the class.

Students should always check Schoology and our classroom website if they are absent!

Students have the number of days they were absent, plus one day to complete make-up work (DPS Policy). If the absence is unexcused the work may be accepted but for a 50% grade reduction. I will accept late up to 5 days, after which point I will not accept work for credit. If the student missed the class, but was at school that day, all assignments due that day are still required to be turned in. If the assignments are turned in the next day, the work is considered late at a 50% grade reduction. When a student misses class due to school business or a field trip, work is to be picked up and turned in according to the regular schedule – no extensions will be given. **In all cases, it is the student’s responsibility to get all assignments from the teacher and to turn them in according to the expectations.**

IMPORTANT: 3 PRODUCTIVE WEEKS AT THE END OF A SEMESTER CANNOT MAKE UP FOR 15 NON-PRODUCTIVE WEEKS AT THE BEGINNING OF A SEMESTER. It is important that if you fall behind, you come and see me right away so I can help get you back on track before it’s mathematically impossible to pass the class. I do not give large amounts of extra credit, so you should not rely on this strategy to pass my class.

HOMEWORK POLICY: Physics is not a spectator sport. Mastering the subject matter requires a lot of practice solving physics problems – the more the better. While there will be no regular homework given in this class, students should be practicing the concepts we learn in class as much as possible. Any work not finished in class is expected to be completed as homework and is due the next day unless stated otherwise. Late homework is accepted for a 50% grade reduction up to 5 days.

MATERIALS AND SUPPLIES REQUIRED:

Textbook: Conceptual Physics: 12th Edition Paul G. Hewitt (students will also have digital access). All students are required to have a school Planner and 3-ring binder and **the Hayden-McNeil Science Notebook**. The binder should contain: loose-leaf and graph paper, divider sections and a zipper pouch with pens (colored pens are useful) and pencils, highlighters. *A scientific calculator is also highly recommended.* **Students will write in class EVERYDAY!** Notebooks will be checked and graded periodically.

GRADING SCALE: Grades are based on a combination of **(40%)** class participation, homework, class assignments and labs. **(60%)** quizzes, tests and projects. All grades will be calculated as a percent of the total points possible. **Final Exam:** At the end of each semester students will take a comprehensive final exam that assesses all of the material covered throughout the semester. The final exam is weighted as 15% of the student's overall average.

A	90% to 100%
B	80% to 89%
C	70% to 79%
D	60% to 69%
F	All other grades less than 60%

A minimum average of 60% is required to earn credit for each semester (5 credits per semester 10 credits total). 30 credits of science are required to graduate from a DPS high school. Each semester grade will be on your official high school transcript. Additionally, these grades are also factored into your grade point average. College admissions officials review this type of information as they consider a student's candidacy for acceptance into a college and university.

Infinite Campus: Infinite Campus (IC) is the Denver Public Schools Internet based gradebook and information system. Teachers post student grades on IC. **I post grades every week.** Students are expected to use IC to stay informed about their academic progress. Because IC is an internet based system you can access your grade from any computer or smartphone with an Internet connection.

ACADEMIC HONESTY: Copying another student's work (**plagiarism**) is not acceptable. When the teacher encounters work that has obviously been copied from another student, it will not be graded and a zero will be entered into the gradebook for the assignment, for both students. Additionally, copying and pasting from the internet is plagiarism, and is unacceptable. When the teacher encounters work that has obviously been copied from the internet, it will not be graded and a zero will be entered into the gradebook. For academic writing assignments—such as research papers—when writing information and ideas that are not your own, you must give credit to the author(s) by citing sources.

CELL PHONE POLICY: Unfortunately, cell phones and earbuds/airpods have become a *severe* distraction in class. Please review this section carefully. **A reduction in participation points for the day will result for any of the following offenses.**

1st Offense: Items confiscated by teacher and held for the remainder of class **2nd Offense:** Items confiscated by teacher and is held by an administrator until the end of the day. **3rd Offense:** Items confiscated by teacher and is held by an administrator until a parent conference is scheduled, items are released to the parent.

TUTORING AVAILABILITY: Office Hours every Wednesday 2:15-3:00. Tutoring is also available after school and during lunch. Please contact me to set up an appointment.

CONTACT INFORMATION: E-mail: angela_jacobson@dpsk12.org or angela_jacobson@dpsk12.net

Website: <http://ajacobsonscience.com> or <http://ajacobson.tjspartans.org>

Voicemail: (720) 423-7063

Remind app

Our class website is updated daily and is a very useful tool for students and parents.

Parents/Guardians and Students, please sign the line showing that you read and understand the course policies and are aware that failure to comply with the policies, and procedures as stated herein will result in a loss of class privileges and may result in a decrease in student's grade. Additionally, parents/guardians, if you have an email, please take a moment to **email me (put your student's name in the subject line)** with a short note with any information you would like me to know about your student (If you don't have email, please attach a note onto this next page). I would like to keep you up to date with what is going on in our science class each week through email. **Please know that your involvement in this course is an important part of your student's success. I am looking forward to a wonderful year together!**

Student (Print)

Signature

Date

Parent (Print)

Signature

Date