



SPRING VALLEY
HIGH SCHOOL
Palmetto's Finest School

120 Sparkleberry Lane
Columbia, SC 29229
<http://www.richland2.org/svh>

Explorations/CP Physics 2024-2025

Teacher Information:

Name: Jonathan Lawler

Planning Period: 7th/8th

Email Address: jlawler@richland2.org

Phone Number Extension/HW Hotline: 699-3500 ext:69108

Course Description:

State/National Standards URL Address:

http://ed.sc.gov/scdoe/assets/file/agency/ccr/Standards-Learning/documents/South_Carolina_Academic_Standards_and_Performance_Indicators_for_Science_2014.pdf

Textbook Name: Experience Physics

Material Supply List: Bring these supplies, along with your textbook, to class everyday:

- Calculator- This does not have to be a graphing calculator but it must be a scientific calculator with sin, cos, tan
- Notebook- A 3-ring notebook. This will include notes, paper, bellwork, material handed out in class, lab safety sheet, graph paper, and any returned assignments.
- Chromebook
- Graph Paper
- Pencil/Pen and Paper

General Course Information:

Lab Safety

Most labs performed during Physics will not be dangerous. However students are still expected to act in a safe manner when performing any laboratory test. Each student will receive a list of lab safety rules at the beginning of the year. Breaking any of these rules can result in the students being removed from the lab and potentially may have other consequences.

Grading

Most of the course assignments are designed to assess the student's ability to analyze and solve a problem using physics concepts and laws taught in class. Problems on assignments will usually be graded for more than just the correct answer.

Restroom

Students are allowed to go to the restroom as needed. The students may not go to the restroom in the first or last 15 minutes of class.

Scope and Sequence:

Text: Physics Principles and Problems 10th ed by Glencoe Science

Unit Title, chapters and topics

Unit 1: 1D Motion, Scientific Measurement and Problem Solving - 15 days

Chapters: 1,2,3

Measurement and conversions, Velocity, acceleration and description of motion.

Unit 2: 2D Motion - 10 days

Chapters: 5.1, 6.1, 6.3

Vectors, Systems of equations, Projectile motion, Trigonometry

Unit 3: Force and Motion – 10days

Chapters: 4, 5.2, 5.3

Newton's Laws, Free Body Diagrams, Friction, Universal Law of Gravitation, Lateral ac

Unit 4: Work and Energy – 10days

Chapters: 10,11

Kinetic energy, Power, Gravitational Potential Energy

Unit 5: Momentum – 7days

Chapters: 9

Momentum, Collisions , Rotational Motion

Unit 6" Rotation Motion and the Law of Gravity - 7days

Chapters: 6.2, 7

Angular velocity, speed at a radius, Centripetal acceleration

Unit 7: Rotational Equilibrium and Dynamics - 7days

Chapters: 8

Torque, Moment of inertia

Unit 8: Electric Charge & Potential, Circuits

Chapters: 20-24

Static electricity, Fields, Current, Circuits

Unit 9: Vibrations, Waves, Sound and Light (Time permitting)

Chapters: 14-16

Energy, Sound, Doppler effect

Unit 10 Heat (Time permitting)

Chapters: 12

Grading Procedures:

Grading Scale

- A = 100-90
- B = 89-80
- C = 79-70
- D = 69 - 60
- F = 59-0

Overall

- First nine weeks: 40%
- Second nine weeks: 40%
- Final Exam: 20%

Assignments

- Tests: 100 points
- Quizzes: 10-40 points
- Class Assignments: 10-30 points
- Bellwork: 5 points a week (1 point for each day)
- Labs: 15-40 points
- Homework: 5-10 points (May be collected or checked depending on the assignment. In general, collected assignments are worth more.)

The grade for a nine weeks will use the formula below:

Grade = (total points earned/total points possible) x 100%

Homework Policy:

Homework is due the day after it is assigned and should be ready to be checked as soon as you enter class. Homework is not accepted late, unless a class was missed due to an absence.

You can find the policies for content recovery, late work, and makeup work for Spring Valley High School by following [this link](#).

Classroom Procedures:

*All school rules will be enforced. Please see the student agenda book for full details.

Class rules to follow:

- You will not be allowed to retrieve forgotten items after the tardy bell rings. Make sure you bring everything that you need to class.
- Be ready to begin class when the tardy bell rings.
- Do not eat, drink or chew gum in the classroom. Bottled water is okay, but your container must have a screw-on cap.
- Do not do anything that disrupts that classroom environment. This includes misusing technology, passing notes, interrupting class etc.
- Treat others with respect. This includes anything that might be taken as insulting (including if you are "just joking"), any use of foul language or use of your hands. You have been in school for years now, you know what is considered inappropriate for a classroom.
- Raise your hand if you need to interrupt the teacher.

- Keep your voices low, there are classrooms on either side of ours that we do not need to disturb.

Consequences can vary based on the severity of the situation but will usually follow the order below:

1. Warning
2. After class or lunchtime meeting
3. Call home or meeting with parents
4. Administrative Referral

Technology Use:

Per State Proviso 1.103 of the South Carolina Bill H.5100 via the South Carolina Department of Education, students may not use unapproved electronic devices between 8:50am - 3:53pm (9:50am - 3:53pm on Wednesdays) while at school. In accordance with this state proviso & Richland Two policy, these devices should not be seen or heard. This policy includes cell phones, any brand of headphones/earbuds, tablets, gaming devices, & smartwatches.

Failure to adhere to this proviso/policy will result in disciplinary consequences shown below.

- 1) Redirection and request to put away the device (this is only for the first time during the semester.
- 2) Confiscate the device and return to the student at the end of the day.
- 3) Confiscate the device and return to the parent.
- 4) Counts as a refusal to obey/defiance, punishment to match this new offence.

Cheating and Plagiarism

Cheating or plagiarism is considered a serious offense in my classroom. Any instance of cheating or plagiarism will result in an automatic zero on the assignment, a call home to parents and an administrative referral. When working on a test or a quiz keep your eyes where they should be. Working together on class assignments and homework is expected, but make sure that you understand the material covered. Only copying work will not help you learn.

Consent: I have read, understood and I am willing to comply with the principles and procedures established by Mr Lawler and Spring Valley High School. I will accept the consequences stated if I should refuse to abide by them. I sign under no undue compulsion, but by my own free will. I acknowledge my responsibilities in undertaking such a rigorous and challenging course.

Student Signature _____ Date _____

Parents,

Please sign that you have read the information from this class syllabus and the consent including the following topics:

- Teacher Information
- Course Description
- Material Supply List
- Scope and Sequence
- Grading Procedures
- Homework Policy
- Late Work
- Make-Up Policy
- Classroom Procedures

STUDENT AND PARENT COURSE CONSENT

We have read and understand the expectations for Physics and will support Mr. Lawler in his/her effort to provide an effective learning environment. We also understand that this course is a rigorous course that will require a significant amount of effort on the part of the student.

Student's Signature/Date

Parent's Signature/Date

Richland School District Two Honor Pledge

On my honor, I have neither given nor received unauthorized assistance on this assignment. I understand that any violation of the Richland School District Two honor code will result in academic and discipline action.