Physics CP Syllabus

Course Details

Course Code: 324100CW

Subject: Science

Required Prerequisites: None

Suggested Prerequisites: Algebra 2

Recommended Grade Levels: 9-12

Duration: Yearlong

Course Availability: A listing of when this course is offered in the current school year can be found on the VirtualSC Current Course Offerings page (opens in a new window).

Class Times: There are no scheduled class meetings for this course. Instead, students are expected to work on their own to meet the deadlines posted in the course pacing guide. Students should expect to spend 7-9 hours a week working on this course.

Textbook: All course materials are included in the course and no outside textbook is required.

Required Course Materials: None

Outside Websites: A list of links to websites and online textbooks used in this course can be found here: VirtualSC Course Links Document Folder (opens in a new window). Students will need to be able to access all these links to view all course materials.

Final Exam: Students in this course take a VirtualSC final exam. Details on scheduling and taking final exams can be found on the Final Exam Page (opens in a new window) of the VirtualSC webpage.

Course Description

Ever wonder why you had to learn math? Physics uses the language of math to explain the relationships between the natural laws of the universe to better understand the world around us. We interact with physics in our daily lives, whether it's communicating on social media, using the microwave, driving a car, or even walking in your new shoes.

You are going to learn to think like a scientist by acting like a scientist to solve problems. Specifically, you will plan and carry out investigations to collect data, look for patterns, find cause and effect, construct explanations, and design solutions for real-world problems.

The curriculum used in this course is guided by the South Carolina Academic Standards and Performance Indicators for Science.

Scope and Sequence

- Orientation & Introduction
- Unit 1: Collisions, Part 1
- Unit 2: Collisions, Part 2
- Unit 3: Collisions, Part 3
- Unit 4: Collisions, Part 4
- Unit 5: Electromagnetism, Part 1
- Unit 6: Electromagnetism, Part 2
- Unit 7: Electromagnetism, Part 3
- Unit 8: Electromagnetism, Part 4
- Unit 9: Energy and Energy Transformations, Part 1
- Unit 10: Energy and Energy Transformations, Part 2
- Unit 11: Energy and Energy Transformations, Part 3
- Unit 12: Energy and Energy Transformations, Part 4
- Unit 13: Waves, Part 1
- Unit 14: Waves, Part 2
- Unit 15: Waves, Part 3
- Unit 16: Waves, Part 4
- Unit 17: Waves, Part 5
- Unit 18: Waves, Part 6
- Final Exam

Students will be sent a full list of assignments and their due dates at the beginning of the course.

Current pacing guides for this course can be found on the Current Course Offerings page (opens in a new window) on the VirtualSC website.

Course Grades

The final grade in this course results from the following:

- Coursework: 80%
- Final Exam: 20%

Each unit contributes the following percentage to the overall Coursework grade.

- Unit 1: 3.46%
- Unit 2: 3.27%
- Unit 3: 3.27%
- Unit 4: 10%
- Unit 5: 4.53%
- Unit 6: 3.19%
- Unit 7: 2.29%
- Unit 8: 10%
- Unit 9: 2.80%
- Unit 10: 4.60%
- Unit 11: 2.60%
- Unit 12: 10%
- Unit 13: 3.23%
- Unit 14: 2.14%
- Unit 15: 2.14%
- Unit 16: 1.25%
- Unit 17: 1.25%
- Unit 18: 10%

VirtualSC Details

Information on VirtualSC student guidelines, policies and technology requirements can be found in the VirtualSC Student Support Portal (opens in a new window).