



Course Syllabus

| Franklin High School | 2020-2021 |
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| DIRECTIONS: For each course, complete the syllabus and share with your evaluating/supervising administrator as a pdf ("File-download-PDF document"). Syllabi will be posted on the FHS website under your name for the public to view. | |
| Course Overview | |
| NOTE: For core classes, all elements of this section (except for name and contact information) are the same. | |
| Course Title: AP Support — Physical Sciences — AP Physics 1 & 2 | |
| Instructor Name: David Stroup | Contact Info: dstroup@pps.net |
| Grade Level(s): 9-12 | |
| Credit Type: (i.e. "science", "elective") Elective | # of credits per semester: 1 |
| Prerequisites (if applicable): <i>(This course is for students who have taken AP Physics or Chemistry, or who are planning on taking the test)</i> | |
| <p>General Course Description: The AP support course will aim to prepare AP Chemistry and AP Physics students for the AP Exam in May. This section is composed primarily of AP Physics Part 1 and Part 2 students. The course will review units covered in semester 1, and begin test prep through the use of AP exams from previous years.</p> <p>The course will also provide support to other AP physical science students (AP Chemistry), directing them to resources for that course and providing SEL check-ins and a chance to meet with fellow students during CDL.</p> | |
| <p><u>Prioritized National/State Standards:</u></p> <p>AP Physics standards can be found in the AP Physics Course and Exam Description pages.</p> <p>AP Physics 1: https://apcentral.collegeboard.org/pdf/ap-physics-1-course-and-exam-description.pdf?course=ap-physics-1-algebra-based</p> <p>AP Physics 2: https://apcentral.collegeboard.org/pdf/ap-physics-2-course-and-exam-description.pdf</p> | |
| Course Details | |
| <i>Learning Expectations</i> | |
| <p>Materials/Texts <i>Students will be provided with downloadable homework packets and review/summary sheets, as well as access to all notes and videos from Semester 1.</i></p> <p><i>In addition, the course will use OpenStax College Physics for AP Courses (https://openstax.org/details/college-physics-ap-courses), a free online textbook recognized by the College Board.</i></p> | |



Course Content and Schedule:**AP Physics Part 1:**

This is to an extent a moving target. The College Board changed the composition of the course late in 2020, removing the final units. The traditional breakdown is:

| Unit | Exam Weighting (Multiple-Choice Section) |
|--|---|
| Unit 1: Kinematics | 10%–16% |
| Unit 2: Dynamics | 12%–18% |
| Unit 3: Circular Motion and Gravitation | 4%–6% |
| Unit 4: Energy | 16%–24% |
| Unit 5: Momentum | 10%–16% |
| Unit 6: Simple Harmonic Motion | 2%–4% |
| Unit 7: Torque and Rotational Motion | 10%–16% |
| Unit 8: Electric Charge and Electric Force | 4%–6% |
| Unit 9: DC Circuits | 6%–8% |
| Unit 10: Mechanical Waves and Sound | 12%–16% |

However, the “greyed out” units above have been removed and will be moved to Part 2 in the future. The new weighting is unknown, but will presumably be based on the relative weighting of the remaining units.

Part 2:

| Unit | Exam Weighting (Multiple-Choice Section) |
|---|---|
| Unit 1: Fluids | 10%–12% |
| Unit 2: Thermodynamics | 12%–18% |
| Unit 3: Electric Force, Field, and Potential | 18%–22% |
| Unit 4: Electric Circuits | 10%–14% |
| Unit 5: Magnetism and Electromagnetic Induction | 10%–12% |
| Unit 6: Geometric and Physical Optics | 12%–14% |
| Unit 7: Quantum, Atomic, and Nuclear Physics | 10%–12% |

The College Board has averred that that the units removed from Part 1 will *not* be added to Part 2 this year.

Differentiation/accessibility strategies and supports (TAG, ELL, SpEd, other):

Students with accommodations and/or modifications will receive assignments in accordance with their IEP or 504. Additional time will be given on all assignments, including reviews, are broken down into individual tasks.

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| Safety issues and requirements (if applicable): |
| <p>Classroom norms and expectations: <i>Synchronous (live) class meetings will take place on Google Meet. When logging into Meet, make sure you log in with Google and use your PPS login info. All class sections, individual appointments, and tutorials will use the same link to enter. All links can also be found on the course home page. Expected course etiquette can be found in the link and resources page of canvas</i></p> |
| Evidence of Course Completion |
| <p>Assessment of Progress and Achievement: <i>Students will complete weekly unit review assignments and weekly self assessments of areas of improvement based on practice AP Exam performance.</i></p> |
| <p>Progress Reports/Report Cards (what a grade means): <i>Students will be graded based on completion of review tasks given on a weekly basis.</i></p> |
| Career Related Learning Experience (CRLEs) and Essential Skills: |
| Communication with Parent/Guardian |
| <p>What methods are used to communicate curriculum, successes, concerns, etc.?</p> <p>Parents have access to act as an observer on Canvas by setting up their own account. They can see the assignments for the week and their child’s progress. In case of concerns, parents will be contacted via their chosen method as indicated in a survey from the beginning of the year. If they did not provide a contact method, parents will be contacted via Synergy email. Please contact me at dstroup@pps.net if you need help pairing with your child’s canvas account.</p> <p>In addition, Remind will be used for announcements of upcoming classes and deadlines. Parents are included in the Remind list. Most messages (“class is about to start”) will be sent to students only, but parents will be included in important conversations, and are invited to use Remind to communicate with the instructor.</p> |
| Personal Statement and other needed info |
| <p>David Stroup is an experienced teacher with a BS in physics and a career history that include journalism and the corporate world. As a journalist and sometimes science writer, he learned communications skills and the importance of writing, something he brings to his classes in the form of written projects and high expectations for college-level writing. The wide range of his professional experience — from radio to local newspapers to the construction industry — has given him a unique perspective on career activities. As a professional editor in the grant-writing industry, he keeps up with trends in STEM, education, and college opportunities. Mr. Stroup has an M.Ed. in secondary education and has published several books.</p> |

