



Fairfield Ludlowe High School - Fairfield Warde High School

AP Physics C/ UConn PHYS 1401Q/PHYS 1402Q

Insert Teacher Name

Insert Room Number

Insert Full Year/Semester

Insert Period

Insert Email Address

COURSE DESCRIPTION

AP Physics C is a two-semester, calculus-based, college-level physics course that addresses both Mechanics and Electricity and Magnetism. The Mechanics portion of the course will cover kinematics, Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; oscillations; and gravitation. The Electricity and Magnetism topics covered include electrostatics; conductors, capacitors, and dielectrics; electrical circuits; magnetic fields; and electromagnetism. Introductory differential and integral calculus is used throughout the course.

This course is articulated with the University of Connecticut (UConn) ECE/Dual Enrollment Program. Students can apply for up to 8 college credits for the following UConn courses:

- **PHYS 1401Q: General Physics w/ Calculus I**
- **PHYS 1402Q: General Physics w/ Calculus II**

COURSE ENDURING UNDERSTANDINGS

BIG IDEA 1: CHANGE Interactions produce changes in motion.

BIG IDEA 2: FORCE INTERACTIONS Forces characterize interactions between objects or systems.

BIG IDEA 3: FIELDS Fields predict and describe interactions.

BIG IDEA 4: CONSERVATION Conservation laws constrain interactions

UNITS OF STUDY

- Unit 1: Kinematics
- Unit 2: Newton's Laws of Motion
- Unit 3: Work, Energy, and Power
- Unit 4: Systems of Particles and Linear Momentum
- Unit 5: Rotation
- Unit 6: Oscillations
- Unit 7: Gravitation
- Unit 8: Electrostatics
- Unit 9: Conductors, Capacitors, and Dielectrics
- Unit 10: Electric Circuits

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- Unit 11: Magnetic Fields
 - Unit 12: Electromagnetism

COURSE POLICIES AND REQUIREMENTS

GRADING (see [FPS BOE Policy 6154.1AR](#))

o Cumulative/In-Progress Grade:

10% of the grade will be based on formative assessments, homework completion, and/or behavior

90% will be based on summative assessments, of which there will be a minimum of eight for this full-year course; these may include Unit Tests, Mid-Unit Tests, Projects, Performance Tasks, Summative Quizzes, etc.

o End-of-the-Year Grade:

80% of the overall course grade will reflect the student's mastery of course content and skills during the school year through the Cumulative/In-Progress Grade

10% of the End-of-the-Year course grade will be based on the Mid-Year Assessment

10% of the End-of-the-Year course grade will be based on the Final Assessment

o Grade Reporting:

All grades will be communicated through Infinite Campus

Summative assessment results will be reported back to the student within ten school days from the date of submission or the due date

o Guidelines for Late Work:

Late work will be accepted for both summative and formative tasks within a defined timeline agreed upon between the student and the teacher

The total points may be reduced as a penalty for late work.

o Reassessments:

- Any extenuating circumstances may be discussed with administration to allow alternative reassessment opportunities with administrative approval.

- Reassessment opportunities are defined as twice per year (with a maximum of one per quarter) for assignments that students met the original required deadlines and do not violate the academic integrity policy. Reassessment does not apply to midyear assessments or final assessments.

- Gradebook impact of Reassessment: original and reassessment scores will be averaged in the gradebook.

MATERIALS:

Course Text: Knight, Physics for Scientists and Engineers

EXPECTATIONS OF STUDENTS:

Insert Course Expectations Here

EXTRA HELP:

Insert Course Expectations Here