



Physics of Music

Fairfield Ludlowe High School - Fairfield Warde High School

Insert Teacher Name

Insert Room Number

Insert Full Year/Semester

Insert Period

Insert Email Address

COURSE DESCRIPTION

This course explores the science behind sound and music, from wave generation, to acoustics, to harmonies and instrumentations. As a final project, students will be tasked with creating their own instruments and composing music, then interpreting the sounds heard by an audience due to the acoustics of an area. Digital and analog recording and hearing will also be investigated.

COURSE OBJECTIVES

Students will understand:

- Sound is a mechanical wave that occurs due to energy passing through mediums as vibrations, the frequency and amount of energy in the wave determine the pitch and loudness.
- Waves can interfere or complement one another to create dissonance and harmony, and the acoustics of a space can cause waves to dissipate or reflect.
- Recordings can be digital or analog, which vary in sound quality.

UNITS OF STUDY

Unit 1: *Introduction to Mechanical Waves & Sound*

Unit 2: *Instrumental Structure*

Unit 3: *Recording, Hearing, and Acoustics*

Unit 4: *Culminating Experience & Final Project*

COURSE POLICIES AND REQUIREMENTS

GRADING

Cumulative/In-Progress Grade:

- 10% of the grade will be based on formative assessments, homework completion, or behavior (see FPS BOE [Policy 6154AR](#))
- 90% will be based on summative assessments based on a minimum of four assessments (see FPS BOE Policy 6146AR)
Individual Tests, Projects, Performance Tasks, Mid-Chapter Tests, Summative Quizzes, Written Papers, Labs, etc.

End-of-the-Year Grade:

- 90% 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 Final Assessment.

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.

Guidelines for Late Work (see FPS BOE Policy 6146AR):

- 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

MATERIALS:

Insert Course Materials Here (ie. Textbook, Binder, Calculator, Highlighters)

EXPECTATIONS OF STUDENTS:

EXTRA HELP:

Insert Course Expectations Here