



Fairfield Ludlowe High School - Fairfield Warde High School

MULTIVARIABLE CALCULUS

Insert Teacher Name

Insert Room Number

Insert Full Year/Semester

Insert Period

Insert Email Address

COURSE DESCRIPTION

Multivariable Calculus is a rigorous second year course in college level calculus. This course provides an in-depth study of vectors and the calculus of several variables for the student who has successfully completed Calculus AB/BC. The successful student will bring to the course a solid understanding of the concepts of first-year calculus as well as the ability to approach complex problems and applications with insight, imagination, and persistence. Major topics will include vector operations and analysis, functions of two or more variables and their partial derivatives, and multiple integration. **The AP/ECE GPA weighting scale applies.**

COURSE OBJECTIVES

Students should:

- understand and describe patterns and functional relationships.
- represent and analyze quantitative relationships in a variety of ways.
- use numbers and their properties to compute flexibly and fluently, and to reasonably estimate measures and quantities.
- use spatial reasoning, location and geometric relationships to solve problems, develop and apply units, systems, formulas and appropriate tools to estimate and measure.

UNITS OF STUDY

- Vectors and the Geometry of Space
- Vector Functions
- Partial Derivatives
- Multiple Integrals

COURSE POLICIES AND REQUIREMENTS

GRADING (see FPS BOE [Policy 6146.1AR](#))

Cumulative/In-Progress Grade:

- 10% of the grade will be based on formative assessments, homework completion, or behavior
- 90% will be based on summative assessments, of which there will be a minimum of eight, with no fewer than 2 per quarter, for this full-year course; these may include Unit Tests, Mid-Unit Tests, Projects, Performance tasks, Summative Quizzes, etc.

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.

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.
- Formative assessment results will be reported back to the student within five school days from the date of submission or the due date, whichever is later and prior to any subsequent assessment..

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 for excused absences..
- The total points may be reduced as a penalty for late work for unexcused absences. Students will earn a zero (0) if the assignment is not submitted or is submitted after the deadline for late work.

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

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

EXPECTATIONS OF STUDENTS

(Insert Course Expectations Here)

EXTRA HELP

(Insert Course Expectations Here)

(Insert Additional Information Here)