

## MATH 221: GEOMETRIES & HISTORY OF MATH (Q)

This course examines the development of mathematics using a blend of chronological, cultural and historical great theorems approach. Topics include the conceptual and axiomatic development of numeracy, geometry, algebra and calculus, as well as the development of reasoning and proof throughout history. The first half of course is the axiomatic development of Euclid's geometry as expounded in the thirteen books of the Elements. We end the semester with focus given to differences between Euclidean and Non-Euclidean geometries. Throughout the course, students will explore and gain insight into the contributions made by various cultures and significant individuals, including women mathematicians, in the global history of mathematics. Alternate years.

**Credits:** 3

**Prerequisites:**

MATH 211

or permission of instructor.

**Department:** [Mathematics & Applied Mathematics](#)