

COURSE DETAIL

MATHEMATICS FOR POETS

Country

Netherlands

Host Institution

Utrecht University - University College Utrecht

Program(s)

University College Utrecht

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

100

UCEAP Course Suffix**UCEAP Official Title**

MATHEMATICS FOR POETS

UCEAP Transcript Title

MATH FOR POETS

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course takes a big-picture look at the nature of mathematics and its role in human thought, emphasizing its interactions with society, history, philosophy, science, and culture. The course involves studying key mathematical arguments in some detail, but the goal is not to develop a repertoire of technical skills. Instead, accessible mathematical topics are specifically selected for their rich interconnections with cultural context, and mathematical work is integrated with reflections on its broader meaning and implications. Instead of the drill and practice problems of a traditional mathematics class, mathematics is approached through seminar discussions, hands-on activities, and readings connecting it to broader issues. Thus, a selection of emblematic and important mathematical proofs are analyzed and used as a platform for reflecting on the nature of mathematics. In parallel, excerpts from seminal historical texts across the ages are read as well as modern scholarship from a wide range of academic disciplines that shed light on the interplay between mathematics and its societal and intellectual context. The focus is especially on geometry, from the origins of mathematical reasoning in early civilizations, to Euclid's Elements that was the gold standard of exact reasoning for millennia and the model for countless philosophical systems, to the projective geometry of Renaissance art, to the more modern non-Euclidean geometry that overturned conventional wisdom about the nature of human spatial perception and the shape of space.

Language(s) of Instruction

English

Host Institution Course Number

UCSCIMAT01

Host Institution Course Title

MATHEMATICS FOR POETS

Host Institution Campus

Science

Host Institution Faculty

Host Institution Degree

Host Institution Department

Mathematics

[Print](#)