45021 Euclidean Geometry (3)

Knowledge

The students should learn the geometry of Euclid extended to advanced topics of the triangle, quadrilaterals and circles: cross-ratio, groups, constructions, geometric generalizations; inversion.

Comprehension

Students should gain understanding of key aspect of formulation and analysis of the Euclidean Geometry.

Application

The main and most important application is to solve many different problems related to the subject.

Analysis

Should develop the ability to connect the geometric problems with number theory, analysis, and algebra.

Synthesis

Should continue developing abstract thinking.

Evaluation

Should complete homeworks, pass midterm tests and a final exam.

Class Activities

To solve problems in class and discuss theorems.

Out of class Activities

To submit homework assignments.