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.