MATH 471 - Fall 2019

Hyperbolic Geometry

Schedule : Tuesday 15:40-17:30 (M-102) Thursday 11:40-12:30 (M-103)

Course outline :

Parallel postulate and the need for non-Euclidean geometry, models of the hyperbolic plane, Möbius group, classification of Möbius transformations, classical geometric notions such as length, distance, isometry, parallelism, convexity, area, trigonometry in the hyperbolic plane, group acting on the hyperbolic plane, fundamental domains.

Prerequisite: MATH 252.

Suggested Textbook :

J.W. Anderson, Hyperbolic Geometry, Springer UMS (1999).

Grading :

Midterm 1	Oct. 28 , 2019	30~%
Midterm 2	Nov. 25, 2019	30~%
Final		40 %