Level: bachelor

Course title: Foundations of Geometry 2 (M4-13)

Status: obligatory

ECTS: 5

Requirements: none

Learning objectives

Axioms of continuity and consequences. Introduction and main concepts of Bolyai-Lobachevskian geometry.

Learning outcomes

Students are expected to be able to apply various techniques in proving typical theorems of Bolyai-Lobachevskian geometry.

Syllabus

Theoretical instruction

Axioms of continuity. The sum of angles of a triangle. A line and a cycle. Two cycles. Main concepts and techniques in Bolyai-Lobachevskian plane. Orthogonal trajectories. Poincare model. Practical instruction

Applications of theoretical results in proving other theorems in Bolyai-Lobachevskian plane and Poincare model.

Weekly teaching load

Weekly teaching load				Other: 0
Lectures: 2	Exercises: 2	Other forms of teaching: 0	Student research: 0	