DEPARTMENT OF MATHEMATICS "GIUSEPPE PEANO"

TEACHING COMMITMENT: 48 hours

COURSE TITLE
Set Theory

TEACHING PERIOD
2nd term

SCIENTIFIC AREA
Mathematical logic

LANGUAGE USED TO TEACH
English

COURSE SUMMARY
The course usually covers the fundamentals of infinite combinatorics, constructibility, and forcing. In particular in this course the instructor is expected to cover topics such as: Martin's Axiom, stationary sets and diamond principles, consistency results. If time permits, one could explore the interactions between set theory and other areas of mathematical logic, such as model theory and recursion theory.

LEARNING OBJECTIVES
The objectives of this course is to give students a solid background in set theory, preparing them for more advanced topics.

TUTORSHIP ACTIVITIES (IF APPLICABLE)

LAB ACTIVITIES (IF APPLICABLE)
OTHER ACTIVITIES (IF APPLICABLE)
Seminars aimed to advanced undergraduates and PhD students and other researchers on the interactions between set theory and model theory, including abstract elementary classes, large cardinals, and abstract logics.

VISITING PROFESSOR PROFILE DESCRIPTION
The visiting professor should have an outstanding track record in research in set theory and model theory, including large cardinals and abstract elementary classes.

CONTACT PERSON AT THE DEPARTMENT
Prof. Alessandro Andretta
alessandro.andretta@unito.it