

Direzione Ricerca, Innovazione e Internazionalizzazione

ID

**VP 151 MAT** 

# **Visiting Professor Program Academic Year 2025/2026**

**TEACHING COMMITMENT: 48 hours** 

# **COURSE TITLE**

# **Foundations and Philosophy of Mathematics**

### **TEACHING PERIOD**

II semester

### **SCIENTIFIC AREA**

**Mathematics Education** 

# LANGUAGE USED TO TEACH

**English** 

# **COURSE SUMMARY**

The course will focus on foundational principles of mathematics thinking, especially in relation to the concept of number and to the field of geometry. Methodological and philosophical aspects of mathematical concepts will be introduced, discussed and object of activities in which the students will be directly involved. Principles and theories will also be exploited in relation to teaching and learning mathematics within the classroom. The students will also be engaged in reading both articles and classic texts.

# **LEARNING OBJECTIVES**

The learning objectives of the course are the following:

- 1) to gain knowledge about the foundations of mathematics;
- 2) to frame and discuss concepts through theoretical and philosophical perspectives and implications;
- 3) to understand connections among different views of mathematical concepts;

4) to design classroom activities and tasks that stimulate interests towards the foundations and philosophy of mathematics.

### OTHER ACTIVITIES BESIDE THE COURSE

The students will be involved in some laboratory activities, in the methodological sense, through group work during the lessons and the use of physical or technological materials.

#### **VISITING PROFESSOR PROFILE**

The Visiting Professor should be an internationally recognized researcher in the field of Mathematics Education. He/she should be making research aimed at changing images of mathematics and of mathematics teaching that are prevalent in our culture.

He/she should have directed educational projects in local, national and international contexts. He/she should be an expert in research and theory development on the interplay between embodied cognition, affects, and mathematics learning. He/she should possess the ability to work with other realities that care about the role of science and mathematics in general in and for the society. He/she should be author of articles and chapters in international journals and volumes recognized in the field.

# **CONTACT REFERENT**

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