

# **Problems and Methods in Mathematics Education Research**

## **(Problemi e metodi della ricerca in didattica della matematica)**

2023/24

(Second semester)

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The course is addressed to students interested in delving deeper into research topics concerning mathematics education as a discipline. The aim is to promote the acquisition of knowledge related to the characteristics of problems, theoretical frameworks and qualitative research methodologies in mathematics education. Starting from the discussion of various research studies, the course will prompt reflections on the nature of *problématiques*, theories and hypotheses, research questions and methodologies in mathematics education and the relationships between them. The focus will be on qualitative research approaches and methods in mathematics education for data collection and their interpretation.

### **Prerequisites**

Students are expected to have acquired basic mathematical knowledge and competencies targeted in the bachelor's degree program in mathematics, as well as basic knowledge and competencies in mathematics education as a discipline. They are also expected to be sensitive to issues concerning mathematics teaching and learning and to show interest in research issues.

### **Practical information**

The course will last 42 hours, and it will take place in the second semester. At least half of the lessons will be devoted to collective discussions of research papers assigned to students in advance. The final examination will consist of an oral assessment: students will be assigned a research report to analyse, and the examination will start with a discussion based on their analysis.

Whoever is interested in more information about this course can contact me via e-mail:  
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