COURSE DETAIL

PHILOSOPHY OF MATHEMATICS

Country

Germany

Host Institution

Technical University Berlin

Program(s)

Technical University Berlin

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Philosophy Mathematics

UCEAP Course Number

108

UCEAP Course Suffix

UCEAP Official Title

PHILOSOPHY OF MATHEMATICS

UCEAP Transcript Title

PHILOSOPHY OF MATH

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

In this course, students learn about a number of key topics in the philosophy of mathematics. It ensure students are familiar with the main views such as Platonism, nominalism, logicism, formalism, intuitionism, and structuralism, as well as the main criticisms of each. Students learn about the philosophical significance of Russell's paradox and Gödel's incompleteness theorems. From here, they consider topics in the philosophy of mathematical practice, such as the nature of mathematical proofs, the use of diagrams in mathematical reasoning, explanation and understanding in mathematics, mathematical knowledge, and the ethics of mathematics.

Language(s) of Instruction

English

Host Institution Course Number

3130 L 018

Host Institution Course Title

PHILOSOPHY OF MATHEMATICS

Host Institution Campus

Technische Universität Berlin

Host Institution Faculty

Host Institution Degree

Host Institution Department

Institut für Philosophie, Literatur-, Wissenschafts- und Technikgeschichte

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