PHIL 199DR: Philosophy of Mathematics

Meeting: W 4:30-6:00, PR 209 Email: john.dougherty@pomona.edu

Course description

This course of reading is an introduction to classical texts and contemporary issues in the philosophy of mathematics. The course begins with Gottlob Frege's *Grundlagen der Arithmetik*, which initiated the analytic approach to these questions. It proceeds with an overview of the major schools of thought during the foundational crisis of mathematics in the early twentieth century and their respective downfalls, culminating in Gödel's incompleteness proofs. The second half of the course deals with current concerns in the philosophy of mathematics, including the metaphysical status of mathematical objects and the rise of structuralism and naturalism. We conclude with a reflection on what we should want from a foundation for mathematics and whether we can have it.

Evaluation

There will be two midterm papers of 1500–2000 words each and a final paper of 2000–2500 words.

References

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