COURSE ANNOUNCEMENT $MATHEMATICAL\ LOGIC$

MATH 220B, UCLA, WINTER 2020 MWF 10AM-11AM, MS 5203

Instructor: Artem Chernikov E-mail: chernikov@math.ucla.edu

Office: MS 5372 (Mathematical Sciences Building)

Office phone: (310) 825–1486

Office hours: W 3:30–5pm, or by appointment Final Exam: Tuesday, March 17, 2020, 3:00–6:00

Description. This is the second in a three part series of courses on Mathematical Logic and Set Theory. This part focuses on questions of computability, undecidability and Gödel's incompleteness theorems, and related topics.

Pre-requisites: MATH 220A (please contact me if in doubt).

Text. The main part of the course material will follow:

- "A first journey through logic" by Martin Hils and François Loeser (Chapters 4 and 5),
- "Turing Computability: Theory and Applications" by Robert I. Soare.

Grading. The final grade will be based on homework (50%) and a final exam (50%). Exam questions will typically ask for proofs or parts of proofs that were covered in class or homework assignments, or some variants of these.

Homework assignments. Due by the end of Sunday each week (except for the first week). Weekly assignments will be listed on the CCLE website of the course, and should be there online as well. They will be graded by a reader.