Course: Foundations of Mathematics, MHF 4203/5207, sections 3216 and 128D

Meeting time and place: LIT 0127, MWF 6th period

Instructor: Jindrich Zapletal

Office: 456 Little Hall, office hours MWF 9th period

Contact: zapletal@math.ufl.edu, 352-294-2343

Textbook: We will use a preliminary version of a Foundation textbook written by University of Florida faculty (this part mostly by Chris Porter), available here

A note on categoricity and definability is here

Brief description: We will cover chapters 1 through 6. This includes propositional and predicate calculus (also known as sentential or first order logic, respectively), model theory including Goedel’s completeness theorem, computability, and finally decidability of mathematical theories, with Goedel’s incompleteness theorem.

Grading system: There will be four take-home exams covering the corresponding topics. The first will cover propositional and predicate logic, with preliminary due date of Feb. 7. The second covers model theory, due Mar. 14. The third covers automata and computability, due April 4. The last one covers decidability, due date May 2=Wednesday of the final week. The total grade will be determined using a straight scale (i.e. A=94-100, A-=90–93 etc. )

Exams:

Further administrative matters: Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code.” On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.