MATHEMATICS 3345: FOUNDATIONS OF HIGHER MATHEMATICS

AUTUMN 2017, MWF 1:50 & 3:00 (358 & 211 ENARSON CLASSROOM BLDG)

Professor: Dr. Kenneth Koenig, 526 Mathematics Tower, 292-5925, koenig.271@osu.edu
Office hours: Mondays 4:45–6:45 p.m.


This course emphasizes the process of discovery and proof techniques in mathematics. Topics include propositional calculus and quantifiers, induction, set theory, and basic number theory.

Homework: Homework will be assigned each week, with the list of problems and due date announced on Carmen. Late homework will be downgraded by 50% of the total available points and will not be accepted more than two days late. You are permitted to work with other students on the assignments, but you must write up your solutions independently. Learning how to write mathematics clearly and precisely is one of the main objectives of this course, so your homework should adhere to the following guidelines:

▶ The presentation should be “polished” — ideally, recopied from a first draft — and easy to follow by your classmates (in addition to your homework grader). In particular, when writing your proofs, be sure that the reasoning is clear and explicit.

▶ Please staple your homework, and do not use spiral bound paper.

▶ Do not forget to write your name on your homework!

▶ As noted above, you may discuss the problems with other students, but you must write up and submit your own work.

Exam dates and grading policy: There will be two in-class midterm exams, the first on Friday, October 6 and the second on Friday, November 17. The final exam (also in the usual classroom) will be held on Friday, December 8, 12:00–1:45p.m. for the 3:00 class and Wednesday, December 13, 2:00–3:45p.m. for the 1:50 class. Please note these dates when making any travel arrangements; make-up exams will not be offered except in extraordinary circumstances, such as illness certified by a physician or an approved University function. Calculators will NOT be permitted during exams.

Your course grade will be based on homework (25%), the two midterm exams (each 20%), and the final exam (35%).

Attendance is not required, but it is strongly encouraged. You are responsible for all material that is covered in class (including supplemental material not in the textbook). If you miss a class, you should get a copy of another student’s notes and review them as soon as possible.

Academic Misconduct Statement: “It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term ‘academic misconduct’ includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-48.7). For additional information, see the Code of Student Conduct at http://studentlife.osu.edu/csc/.”

Disability Services Statement: “Students with disabilities (including mental health, chronic or temporary medical conditions) that have been certified by the Office of Student Life Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office of Student Life Disability Services is located in 098 Baker Hall, 113 W. 12th Avenue; telephone 614- 292-3307, slds@osu.edu; http://slds.osu.edu”