## MATH 208 Introduction to Discrete Mathematics, 2025 Fall Syllabus

Section 001: MTWF 9:40–10:30 a.m., Mary Gladwin Hall 204

Mr. Jonathan Hafner, CAS 246, jhafner@uakron.edu

Website: https://www.hafner.us/ua/

Office hours: MTWF, 11:50–?, or by appointment

**Prerequisites:** MATH 145/149 with a grade of C– or better, or placement. If you do not meet the prerequisites, you may be withdrawn from the course without refund.

Course Objectives/Learning Outcomes: Students will be expected to be able to

- communicate mathematical results through the proper use of mathematical notation and words:
- use symbolic logic and various proof-writing techniques, including Mathematical Induction;
- describe the basic properties and operations of sets, functions and relations;
- learn the basics of logic circuits, number systems, set theory, sequences, algorithms, and probability.

**Text:** Discrete Mathematics with Applications, 5th Edition, Susanna S. Epp, Cengage Learning. If you are registered for the class, you should have access to a digital version of the textbook through WebAssign, paid for by a course fee; this is provided to you via Brightspace, in the "Content Browser", under "Cengage WebAssign". If you would prefer to source your textbook elsewhere, or if you already have access by some other means, you can opt out of this program for a refund. See my website for more information.

Calculator: No calculators will be permitted on in-class assessments. All electronics must be silenced and stored out of sight during tests and exams.

Some out-of-class assignments and exercises will require the use of a calculator or computer, but there are plenty of free online tools that are sufficient for this purpose. Contact me if you have questions about where to find the necessary resources.

**Homework:** Assigned homework consists of three primary components:

Reading the textbook will be necessary to gain a full picture of the content of this course. The text is packed with more information than it is possible to present in class, so you should read each section before and/or after the corresponding lecture.

A list of recommended exercises from the textbook will be supplied. These exercises will not be collected, but they are important for your learning and mastery of the material. You may find it necessary to do more problems than those suggested. Without adequate practice, you are likely to find the tests and exam to be too long and difficult.

Several homework problems will be assigned to be submitted and graded. Late work will not be accepted; however, a modest number of points will be omitted from the total "possible", so you can miss an assignment or two without it hurting your grade. (If you do

not miss any assignments, that adjustment will essentially convert a portion of your total into bonus points.)

See my website for more information.

**Tests:** We will have approximately six in-class tests (give or take one). If you must miss a test, and you have (or expect to have) documentation of an **excused** absence, contact me as soon as possible to discuss our options. Makeups will not be permitted without a documented valid excuse. Instead, up to two of your lowest test scores will be replaced with your final exam score if the latter is higher. This essentially allows you to miss up to two tests without penalty; if you miss fewer than two tests, this replacement can make up for one or two of your lowest scores.

All tests are equally weighted. Points are used solely as a bookkeeping device for grading within a test; the point total of one test has no relationship with the point total of another.

**Final exam:** A comprehensive final exam will be administered during finals week, as dictated by the University's schedule.

**Grades:** Your course grade will be based on the weighted average of your scores on assignments and assessments, with your homework total worth 15% of your grade, your test average worth 60%, and your final exam score worth 25%. From that, your *minimum* grade in the course is shown in the table below. (I reserve the right to make small upward adjustments at my discretion. Also, I may weight the final exam more heavily if it will help your grade.)

Percent:	<60	60+	63+	67+	70+	73+	77+	80+	83+	87+	90+	93+
Grade:	F	D-	D	D+	C-	С	C+	В–	В	B+	A-	A

Communication: Aside from face-to-face discussion, the best way to contact me is by email. While lengthy or detailed discussion is best handled in person, I encourage you to ask me brief questions about course material—including homework—by email if it is feasible to do so. Aside from the convenience for you, it also makes it easier for me to send hints or clarifications to the entire class if I feel they are of general interest. Email is also the best way to schedule a meeting outside of class time or handle other administrative matters.

I will sometimes send important information or announcements to the class as a whole, or attempt to contact you directly if the need arises, using your UA email address. Make sure you check this account regularly.

My use of Brightspace is very limited; instead, information relevant to the course will be posted to my website, which you should check frequently. **Do not** attempt to contact me via the internal messaging systems of Brightspace or WebAssign, as I do not check those sites frequently—use regular email instead.

"What students need to know": See https://www.uakron.edu/oaa/faculty-affairs/What-Students-Need-To-Know for important information on various topics, including

- The Student Code of Conduct and academic misconduct
- Statement about the ethical use of ChatGPT and other AI tools
- Add, drop, withdrawal and refund policies
- Title IX
- Sexual harassment and sexual violence
- Students with disabilities
- Religious Accommodations for Students
- ZipAssist

All students are responsible for this information.

Additionally, note that free tutoring is available in the University's tutoring centers: https://www.uakron.edu/tutoring/