

SYLLABUS FOR MATH 347: FUNDAMENTAL MATHEMATICS SECTION D2, SPRING 2021

1. INSTRUCTOR INFORMATION

- Instructor: Jesse Thorner
- Office: All personal interactions will be conducted via Zoom
- Email: jat9@illinois.edu
- Office hours: To be determined
- All times given in this course are for **Central Time Zone** (where UIUC is located)

2. COURSE CONTENT

- This is an introduction to mathematical language, rigorous mathematical thinking, fundamental mathematical structures, and methods of proof.
- Topics include logic, set theory, induction, equivalence relations, functions, number theory, cardinality, convergence, and other select topics
- **Official Course Text:** *An introduction to Abstract Mathematics* by Donaldson and Pantano. Available for purchase online.
- You will be expected to write complete and coherent mathematical proofs in full sentences with proper grammar. This is **writing-intensive**.

3. TECHNOLOGY

You will need:

- A computer or tablet to watch videos and to participate in class meetings on Zoom.
- The ability to scan homework and exams to a pdf file (a smartphone will suffice).

If you do not have access to this technology, please contact me immediately.

All course content will be posted on Moodle.

4. CLASS MEETINGS

- Official class times: 11:00am–11:50am on Monday, Wednesday, and Friday **in Zoom**
- First Day: January 25 (Monday)
- Last Day: May 5 (Wednesday)
- The class will meet in Zoom on the First Day at the official time

5. GRADING

- Grading scheme: Homework (20%), Participation (10%), three Midterms (35%), final exam (35%). The participation component will be finalized once class size is settled.
- Final grade cutoffs will not be stricter than 90% for an A- grade, 80% for a B-, and so on. The precise function which assigns a letter grade to each percentage will be determined at the end of the course.
- Your writing must be easily readable. Work that is not legible will not be graded. I should not need to struggle to read your work. If there is a problem concerning this, let me know as soon as possible.

6. HOMEWORK

- You will have two small assignments each week. One will be due on Tuesday, and one will be due on Thursday.
- Your lowest four homework scores will be dropped. **Late HW will not be accepted.**
- You are allowed and **encouraged to work in groups online**. However, **you must prepare the write-up on your own**.
- Homework must be uploaded to Moodle on the due date. Please write your name, homework number, and section number on each homework. Homework will be graded on mathematical content, quality of exposition, and completeness.

7. MIDTERMS

- **Tentative** dates for the midterm exams: February 24, March 24, April 21.
- There will be **no make-up exams** for missed midterms. Rather, in the event of a valid illness, accident, or family crisis you can be excused from an exam so that it does not count toward your overall average. Such situations must be documented and I reserve final judgment as to whether an exam will be excused.

8. FINAL EXAM

The final exam is determined by the university and posted on the registrar website. Once they post the time and date for our class, I will make that available on Moodle.

9. OTHER INFORMATION

- Academic integrity: Violations of academic integrity will be taken seriously, and will be handled under the procedures of Article I, Part 4 of the student code.
- Resources for students with disabilities: To obtain disability-related academic adjustments or auxiliary aids, students with disabilities should contact the course instructor and Disability Resources and Educational Services (DRES). For more information, go to the DRES website.
- Emergency information: For those of you who are on campus, here is some emergency information courtesy of the University of Illinois Police: <https://police.illinois.edu/emergency-preparedness/>.
- Support resources and supporting fellow students in distress: As members of the Illinois community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether in regards to their well-being or yours, we encourage you to refer this behavior to the Student Assistance Center (217-333-0050) or online (<https://odos.illinois.edu/community-of-care/referral>). Based upon your report, staff in the Student Assistance Center reach out to students to make sure they have the support they need to be healthy and safe.

Further, we understand the impact that struggles with mental health can have on your experience at Illinois; significant stress, strained relationships, anxiety, excessive worry, alcohol/drug problems, a loss of motivation, or problems with eating and/or sleeping can all interfere with optimal academic performance. We encourage all students to reach out to talk with someone, and want to make sure you are aware that you can access mental health support at the Counseling Center (counselingcenter.illinois.edu) or McKinley Health Center (mckinley.illinois.edu). For mental health emergencies, you can call 911 or walk-in to the Counseling Center, no appointment needed.