

MAT 375 - Section 3 Introduction to Abstract Mathematics Spring 2018

Instructor: Claudia Miller, clamille@syr.edu, Carnegie 300A, 443-1493

Web Page: <http://clamille.mysite.syr.edu/375.html>

Lecture: TH 11:00–12:20, Carnegie 114

Office Hours:

- Tue 12:30–1:30
- Wed 9:30–10:30
- Thu 12:30–1:30
- and by appointment.

Text: *Passage to Abstract Mathematics*, by Watkins and Meyer, Addison-Wesley.

This will be on reserve in the library.

Prerequisite: MAT 295

Restrictions: Credit can not be given for both CIS 375 and MAT 375.

Course Description: The main goal of this course is for students to learn how to read and write proofs. In addition, we introduce some of the fundamental principles underlying abstract mathematics including logic, set theory, mathematical induction, functions, and cardinality. *The main activity of this course will be reading and writing proofs as opposed to calculation.* Thus, you will probably find this class quite different from other lower-division math classes.

It will also be very hard to catch up if you miss class. I will cover at least some parts of Chapters 1–7 in the text. However, I will not always follow the book or cover all of the material in the book, and I may cover additional topics. If you miss class, you must get the notes from another student - I will not provide notes for missed lectures.

Homework and Quizzes: There will be weekly homework sets and weekly quizzes. The lowest quiz score and lowest homework score will be dropped. *There will be no makeup quizzes. Late homework will not be accepted.* You may collaborate on homework but you must write up and hand in your own solutions. You may give each other hints, but collaboration does not include letting someone else copy your solution. If you get stuck on a problem, you should seek out help from me or from other students in the class.

A common comment of teaching evaluations of this course is “The homework was difficult because the lecture didn’t provide similar examples.” However, the main learning outcome of this course is to develop proof-writing skills, and the only way to do this is to encounter many different kinds of proofs. Since proof-writing will be a new skill for many students, this will sometimes be difficult. It will also involve more creative thought than in other lower division math courses. You will be graded on mathematical correctness and also on clarity and completeness of your writeup.

Exams: There will be two midterm exams and a comprehensive final exam. The midterm exams dates will be announced in class. No calculators or electronic devices of any kind are allowed during the exams and quizzes. There will be no makeup exams. Any exam missed with a legitimate written excuse will be made up by giving extra weight to the final exam and the other midterm.

Final Exam: The final exam covers the entire course. It is a two-hour exam and will be given on **Friday May 4 at 5:15–7:15 pm**. The final exam is given only at this time. If a student has a conflict with another final exam, the student must contact the instructor at least two weeks in advance in order to have it resolved.

Grading: Your grade will be calculated as follows:

Midterms	25% each
Quizzes	15%
Homework	5%
Final Exam	30%

I will replace half of your lower midterm exam score by your final exam score if it improves your grade.

Blackboard and Web Page: Course materials will be posted on my web page. Grades will be posted on Blackboard. Please check your grades on Blackboard regularly to ensure they have been recorded correctly.

Students with disabilities: If you believe that you need academic adjustments (accommodations) for a disability, please contact the Office of Disability Services (ODS), visit the ODS website <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call (315) 443-4498 or TDD: (315) 443-1371 for an appointment to discuss your needs and the process for requesting academic adjustments. ODS is responsible for coordinating disability-related academic adjustments and will issue students with documented Disabilities Accommodation Authorization Letters, as appropriate. Since academic adjustments may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

Religious Observances Policy: SU religious observances policy recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to are religious observance provided they notify their instructors before the end of the second week of classes. An online notification process is available through MySlice (Student Services|Enrollment|My Religious Observances) from the first day of class until the end of the second week of class.

Academic integrity: Syracuse Universitys Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same work in more than one class without receiving written authorization in advance from both instructors. Under the policy, students found in violation are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered as described in the Violation and Sanction Classification Rubric. SU students are required to read an online summary of the Universitys academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice.

The Violation and Sanction Classification Rubric establishes recommended guidelines for the determination of grade penalties by faculty and instructors, while also giving them discretion to select the grade penalty they believe most suitable, including course failure, regardless of violation level. Any established violation in this course may result in course failure regardless of violation level. For more information and the complete policy, see <http://class.syr.edu/academic-integrity/>.