

Syllabus

MAT 375 - M003

Fall, 2015

Time: Tuesday and Thursday 11-12:20

Place: Room 120, Carnegie

Instructor: Will Wylie

Office: 206C Carnegie

Office hours: M 1-2, W 11-12, Th 10-11, or by appointment.

Campus Phone: 315-443-1469.

Email: wwylie@syr.edu.

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

Prerequisites: MAT 295

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

Description: The main goal of this course is to introduce the students to some of the fundamental principles underlying abstract mathematics including logic, set theory, mathematical induction, functions, and concepts of infinity.

You will probably find this class quite different from other lower-division math classes. The main activity of this course will be reading and writing proofs as opposed to calculation. When doing homework, it will be more important to understand the underlying ideas than to master techniques. Building an understanding of the basics of abstract mathematics is the most important learning outcome of this course.

It will also be very hard to catch up if you miss class. The homework will not consist of repetitive calculations that you can find youtube videos of hundreds of people doing. I will not always follow the book or cover all of the material in the book. *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 homework sets collected weekly and weekly quizzes usually given on Thursday at the beginning of class. The lowest quiz score will be dropped. 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 examples that were similar to the homework.” This is actually by design as a primary goal of this course is building abstract reasoning skills. Writing proofs is hard and you will get “stuck” sometimes. You will be expected to demonstrate original, creative thinking in the homework.

Exams: There will be two midterm exams and a comprehensive final exam. The midterm exams are tentatively scheduled for

Exam 1 Thursday, October 8
Exam 2 Thursday, November 12

There are no calculators or electronic devices of any kind allowed during the exam. 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.

The Final Exam: Thursday, December 17th from 3-5pm.

All students must take the final exam at this time to pass the course.

Grading: Your grade will be calculated as follows:

Homework	10%
Quizzes	20%
2 Exams (20% each)	40%
Final Exam*	30%

*The final exam may be given more weight if it demonstrates improved understanding.

Blackboard: Course materials and 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 accommodations for a disability, please contact the Office of Disability Services(ODS), <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented Disabilities Accommodation Authorization Letters, as appropriate.

Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. Related link: <http://disabilityservices.syr.edu/faculty-staff/syllabus-statement/>

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. For fall and spring semesters, 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. Related link: http://supolicies.syr.edu/studs/religious_observance.htm

Academic Integrity. Syracuse University sets high standards for academic integrity. Those standards are supported and enforced by students, including those who serve as academic integrity hearing panel members and hearing officers. The presumptive sanction for a first offense is course failure, accompanied by the transcript notation Violation of the Academic Integrity Policy. The standard sanction for a first offense by graduate students is suspension or expulsion. Students should review the Office of Academic Integrity online resource *Twenty Questions and Answers About the Syracuse University Academic Integrity Policy* and confer with instructors about course-specific citation methods, permitted collaboration (if any), and rules for examinations. The Policy also governs the veracity of signatures on attendance sheets and other verification of participation in class activities. Additional guidance for students can be found in the Office of Academic Integrity resource: *What does academic integrity mean?*

Related links:

The Academic Integrity Policy:

<http://academicintegrity.syr.edu/academic-integrity-policy/>

Twenty Questions and Answers about the Academic Integrity Policy:

<http://academicintegrity.syr.edu/faculty-resources/>

What does academic integrity mean?:

<http://academicintegrity.syr.edu/what-does-academic-integrity-mean/>