

MATH 0401 – DISCRETE MATHEMATICAL STRUCTURES

Fall 2021 Syllabus

INSTRUCTOR: Dr. Stephan Ohl

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OFFICE HOURS: via Zoom with Appointment

COVID-19 PANDEMIC

In this still ongoing pandemic, it is extremely important that you abide by public health regulations and University of Pittsburgh health standards and guidelines. While in class, at a minimum this means that you must wear a face covering and comply with physical distancing requirements; other requirements may be added by the University during the semester. These rules have been developed to protect the health and safety of all community members. Failure to comply with these requirements will result in you not being permitted to attend class in person and could result in a Student Conduct violation. For the most up-to-date information and guidance, please visit coronavirus.pitt.edu and check your Pitt email for updates before each class.

COURSE DESCRIPTION

This course is intended for students contemplating a major in Mathematics or Computer Science. Topics include the basic concepts of set theory, logic, combinatorics, Boolean algebra, and graph theory with an emphasis on applications.

OBJECTIVES

This course provides the student with the opportunity to develop a productive attitude towards mathematical modeling in the solution to problems. Students have the opportunity to learn the vocabulary, tools, and techniques of discrete mathematics used in Computer Science so that they are able to follow most published articles in important professional journals.

LEVEL

Math 0401 is a freshman-level course designed for Computer Science majors. Successful completion (C- or better) of Math 0401 is one of several requirements for further study in the Computer Science curriculum at UPJ. It serves as a prerequisite for CS0411 INTRODUCTION TO COMPUTER SCIENCE as well as other courses in the curriculum.

PREREQUISITES

MATH 0001

TEXT

We are using an online textbook from zybooks. Please follow these instructions:

1. Sign in or create an account at learn.zybooks.com
2. Enter zyBook code: **PITTMATH0401ohlFall2021**
3. Subscribe

Please **use your @pitt.edu email address** when signing up and **choose your section**.

A subscription is **\$58**. Students may begin subscribing on Aug 05, 2021 and the cutoff to subscribe is Dec 13, 2021. Subscriptions will last until Jan 14, 2022.

CANVAS

Information about the class including syllabus, announcements, assignments, and class notes is available through Canvas via the my.pitt.edu portal.

COURSE REQUIREMENTS

The requirements for MATH 0401 include regular class attendance, reading of text assignments, completion of assigned problems in the text or handouts, quizzes, hourly exams and a comprehensive final exam.

There will be no make-up privileges on exams or quizzes unless there are extenuating circumstances. You must notify your instructor if you must miss an exam or quiz before the scheduled exam or quiz or within two days after the exam or quiz is given.

PLAGIARISM

Any form of plagiarism which include copying or imitating the language, ideas, thoughts, or work of another person and passing off the same as one's own work discovered by the instructor will result in a zero for the first offense and an F for the course for any subsequent offense.

GRADING REQUIREMENTS

Scores in this class are weighted as follows:

Exam 1: 20%
Exam 2: 20%
Exam 3: 30%
Homeworks, Quizzes: 30%

Final course grades will be determined as follows:

92% - 100% A
82% - 88% B
72% - 78% C
62% - 68% D
Below 60% F

Plus and minus grades will be awarded to scores on the borderline based on actual score, attendance, overall work, attitude.

WITHDRAWING FROM CLASS

There are several dates to keep in mind regarding dropping a class from your schedule.

- September 10, 2021 marks the end of the Add/Drop period for classes.
- October 28, 2021 is the last date that you can withdraw from an individual class, with a grade of W on your transcript. After that date, you must obtain a "Late Withdrawal" form the Office of Academic Affairs to receive permission. Permission for "Late Withdrawal" is allowed only under extreme circumstances outside of the student's control.
- November 19, 2021 is the last day to withdraw from all of your classes.

DISABILITIES

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of Health and Counseling Services, G4 Student Union, 814-269-7119 as early as possible in the term. The Office of Health and Counseling Services will verify your disability and determine reasonable accommodations for this course.

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Fall 2021 Schedule

WEEK	SECTION	TOPICS
1, 2	Chapter 1	Logic
3, 4, 5	Chapter 2	Proofs
	EXAM 1	
6, 7	Chapter 3	Sets
8, 9	Chapter 4	Functions
10, 11	Chapter 5	Relations
	EXAM 2	
12, 13	Chapter 6	Counting
14, 15	Chapter 7	Advanced Counting
	COMPREHENSIVE FINAL EXAM	

Notes:

1. This schedule is provisional and subject to change.
2. No class on Monday, September 6 (Labor Day).
3. No class on Friday, October 16 (Fall Break).
4. No classes from Monday 22 to Friday 26 of November (Thanksgiving).
5. Last day of class is Friday December 10.

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