



MTH 220 - Fall 2023

Introduction to Discrete Mathematics

Course Syllabus

Course information

Room: BH 440

Time: MWF 11:20 am - 12:10 pm

Credits: 3.0

Prerequisites: A grade of C or better in MTH 149 or MTH 182.

Description: This course is an introduction to mathematical reasoning through an overview of different topics in discrete mathematics. Topics covered include: propositional and predicate logic, mathematical induction and other methods of proof, elementary number properties, sequences and recursion, set theory, functions, relations, permutations, combinations, elementary graph theory, and applications.

Learning outcomes: Successful MTH 220 students will:

- become familiar with logical reasoning and common mathematical tools;
- learn to read, understand, phrase, and prove mathematical statements;
- get acquainted with several different topics in discrete mathematics.

Online resources: Visit Blackboard for up-to-date information about this course.

Instructor

Name: Federico Galetto (he/him/his)

E-mail: f.galetto@csuohio.edu

Office: Rhodes Tower 1219

Campus drop-in hours: MWF 10:10 - 11:10 am

Online appointments: Schedule at <https://math.galetto.org/appt>

Materials

Notes and other materials will be distributed online. All course materials are copyrighted and cannot be distributed without the permission of the authors.

The following textbook is required (in either physical or digital format).

Required textbook:

- Kenneth H. Rosen, *Discrete Mathematics and Its Applications*, 8th edition, McGraw-Hill, 9781259676512

Grading

Grade calculation: All grades will be posted online. Your percentage grade will be computed according to the following breakdown and converted to a letter grade as indicated below.

10%	Homework	A	93%-100%	C+	77%-79%
90%	Tests (x3)	A-	90%-92%	C	70%-76%
<hr/>		B+	87%-89%	D	60%-69%
100%	Total	B	83%-86%	F	0%-59%
		B-	80%-82%		

Homework:

- Homework will be assigned regularly, with due dates announced online.
- Homework is completed online. Directions for accessing the online homework will be provided on Blackboard.
- Occasionally, an assignment may direct you to complete a problem on paper, then scan and upload your solutions. Ensure that your scans are of good quality and that they are legible on a screen without the need to rotate them.
- You are expected to work independently on all assignments.
- Your homework score will be taken out of 95% of the total for all homework problems.

Tests: There will be 3 tests held during class time on the following (tentative) dates:

- Wednesday, September 27, 2023
- Wednesday, November 1, 2023
- Monday, December 4, 2023

Each test will cover roughly one third of the material (topics will be confirmed in class). You are required to bring identification.

Final exam: An optional final exam will be held in BH 440 on Wednesday, December 13, 2023, 10:15 am - 12:15 pm. You will be required to bring identification. During this final exam, you may choose to be tested again on the material of up to two of the in-class tests. You must choose to retake the tests with your lowest scores. The final score(s) will only replace the corresponding test(s) if doing so increases your total score.

Participation: Active participation is encouraged and can contribute positively to your grade. Such participation includes asking good questions during class, answering questions in class, contributing to class discussions and activities, etc.

Grade appeal: You are responsible for checking feedback on your work, and for ensuring evaluations are reported correctly on Blackboard. Any appeal request must be submitted within one week after a grade is posted.

Policies

Communication: All communication, outside of class meetings, will be conducted via email. You can reach me at f.galetto@csuohio.edu. You can usually expect to receive an answer from me within 24 hours Monday through Friday, or within 48 hours during the weekends and festivities.

Attendance: You are expected to attend all classes. If you are unable to attend a class, it is your responsibility to notify your instructor in advance and to inquire about any topics covered and announcements made during that class.

Electronic devices: The use of electronic devices such as (but not limited to) phones, smartwatches, computers, tablets, and headphones is prohibited during class, unless otherwise required (e.g. to connect to a Zoom meeting) or indicated by the instructor.

Excused absences: You may only be excused from class and class related activities in case of university sanctioned activities (such as conferences, competitions, etc.) or in case of medical conditions. With the exception of unforeseen medical emergencies, you must notify your instructor of your absence and present sufficient documentation in advance. Sufficient documentation includes an invitation to attend an event or a doctor's note indicating you cannot attend on the scheduled date.

Extra credit and makeups: There is no extra credit in this class. There are no makeups in this class other than for excused absences. Insofar as circumstances allow, all makeups have to be arranged in advance.

Academic integrity: Cheating and/or plagiarism will not be tolerated. Cheating includes copying or receiving help from another student on quizzes, tests or exams, as well as allowing another student to copy from your work. Receiving help from someone else by using an electronic device such as a mobile phone or a smartwatch constitutes cheating. Copying another student's homework, or allowing someone else to do your homework for you, is also considered cheating. If cheating occurs in a quiz or test, the student will receive a grade of 0 for that component of the course. If a student cheats a second time during the course, the student will receive an F for the course. If cheating occurs on the final exam, the student will receive a grade of F in the course. Any cheating activity may be reported for further action. Information regarding the official CSU Policy on Academic Misconduct can be found at https://www.csuohio.edu/sites/default/files/3344-21-02_0.pdf.

Safe space: I am committed to making our encounters (in class, during office hours, in person, and online) feel safe for everyone involved. All participants are expected to conduct themselves in a respectful manner towards other participants and their ideas. Behaviors that are disrespectful or discriminatory towards other individuals or groups of individuals will not be tolerated.

Accommodations: Educational access is the provision of classroom accommodations, auxiliary aids and services to ensure equal educational opportunities for all students regardless of their disability. Students who feel they may need an accommodation based on the impact of a disability should contact the Office of Disability Services at 216-687-2015. The Office is located in BH 147. Accommodations need to be requested in advance and will not be granted retroactively.

Withdrawals: The last day to withdraw is Friday, November 3, 2023. Withdrawing from the course may put a student in violation of the federally mandated standards for academic progress (SAP) that a student must maintain to be eligible for financial aid. Please visit <https://www.csuohio.edu/financial-aid/standards-academic-progress-sap> for more information.

Course modifications: The instructor retains the right to modify the contents of the course, including grading criteria and course policies. Reasonable notice will be given for all time sensitive matters. Course changes will be communicated in class and on Blackboard.