

THE UNIVERSITY OF TEXAS AT EL PASO
COLLEGE OF SCIENCE
DEPARTMENT OF MATHEMATICAL SCIENCES

Course #: Math 2300
Course Title: Discrete Mathematics
Credit Hrs: 3
Term: Spring 2023
Course Meetings &
Location: None – course is entirely online via WeBWork, Blackboard and Microsoft Teams.
Prerequisite Courses: Calculus I (Math 1411). This is entirely a mathematical maturity requirement, as we will use no calculus in this course.
Instructor: Francisco Avila
Office Location: Blackboard
Contact Info: Instructor: favila2@utep.edu
Math Department: mathdept@utep.edu
Live Sessions: MW 9:00am – 10:00am via Zoom.
Virtual Office Hrs: MW 12:30 – 1:20pm via Zoom.

Office hours are only held during normal university scheduling. Please allow one business day for the return of emails. Evening and weekend emails will be attended to during regular business hours. Other times at the discretion of the instructor.

During off-scheduling (Finals week) or condensed scheduling (late start, closed university) hours will be adjusted appropriately.

Textbook(s), Materials:

- Dossey, et. al., Discrete Mathematics, 5th Edition.
- Levin, O., Discrete Mathematics: An Open Introduction, 3rd Edition.

Course Objectives (Learning Outcomes): **Contents:** This course is devoted to the study of some topics in discrete mathematics including induction, recursion and recurrence relations, sets and relations, combinatorics, and graph theory

Objectives: Upon successful completion of the course, you will know and be able to use the basic algebra of sets and of logic. You will be able to identify and use common classes of relations. You will know basic properties of arbitrary functions. You will be able to solve counting problems involving combinations and permutations, including counting problems with restrictions. You will know the basic definitions and theorems of graph theory and be able to apply them to specific graphs. You will know the basic algorithms for traversing trees and be able to apply them to specific trees (if time allows).

Activities/Assignments: Reading and homework assignments will be given every day. You will find all assignments on

https://www.math.utep.edu/webwork2/Math_2300_S23_Avila/.

Your username is your UTEP username and your password is your UTEP ID number. These assignments are to be completed as scheduled. Late work is generally not accepted. However, assignments may be rescheduled for a limited number of emergency situations if you discuss your situation with me before (not on and especially not after) the scheduled due date. Students must read the assigned sections from your textbooks and/or watch the material posted on blackboard and on Microsoft Teams before completing the homework assignments. After a few sections of homework, a quiz will be assigned.

If you have questions about the topics and/or homework assignments, connect to the online office hours sessions with the instructor and/or during the TA's office hours.

WeBWork: WeBWork is an open-source online homework system for math and sciences courses. You must have reliable internet in order to take an online course.

Class Activities & Policies: **Homework** - All homework will be completed on WeBWork. Each question has 5 attempts. I recommend you get help after the 3rd incorrect submission rather than waiting until you are out of attempts to get help.

Quizzes – After a few sections of homework, you will have a 60-minute timed quiz over that material on WeBWork. You must solve the entire quiz before you submit your answers. You can submit/correct your answers 3 times.

Exams – There will be 3 partial exams. The exams will be available for a 24-hour period on WeBWork. The exam itself is timed at 120 minutes (two hours). You must solve the entire exam before you submit your answers. You can submit/correct your answers 3 times.

Final Exam – The final exam will be available on WeBWork for two days during final exam week. This exam is a comprehensive exam and is required for all students. You may not opt out of the final exam. The final exam is timed at 165 minutes (2hr45min). You must solve the entire exam before you submit your answers. You can submit/correct your answers 2 times.

For all timed assignments, the clock begins once you open then assignment. This clock will not stop for any reason, not even if you log out. For this reason, it is important to check for any updates on your computer prior to beginning the timed assignments. **NO EXTRA CREDIT OR CURVES ON EXAMS. NO REPLACEMENT OF EXAM WITH FINAL EXAM.**

Course Schedule: A comprehensive course schedule is available as a separate document. Semester highlights include:

- January 17th, 2023 first day of classes
- February 1st, 2023 Spring census day
- March 30th, 2023 Spring Drop/Withdrawal deadline
- May 5th, 2022 Dead Day

Grading Policy: Your grade will be calculated as follows:

Homework	10%
Quizzes	10%
Exam 1	20%
Exam 2	20%
Exam 3	20%
Comprehensive Final	20%

The grading scale for this course is:

90 – 100 = A

80 – 89 = B

70 – 79 = C

60 – 69 = D

0 – 59 = F.

Drop Policy: **The Drop Date for this semester is Thursday, March 30th, 2023 before 5:00 PM. No drops will be approved after this date or time.**

Students who decide to drop the course must process a drop form, by emailing records@utep.edu by March 30th. Please note that the College of Science will remain aligned with the University and **will not approve any drop requests after that date.**

Make-up Policy: **Homework:** Homework extension may be requested within 7 days of the original due date. If granted, no penalty will be applied to problems submitted after the original due date.

Quizzes: A make-up quiz will only be given in extraordinary circumstances (severe illness, death in immediate family), and with appropriate documentation (e.g. doctor's note).

If you feel like you have some extraordinary circumstance or have an excused absence that will keep you from completing the assignment or quiz in a timely manner, please contact me right away and be prepared to show supporting documentation.

University Sponsored Events: (conferences, student athletes, etc...) The student needs to inform me of any traveling conflicts before they leave and make adequate arrangements to make up the missed material with one week of returning. Failure to do so, will result in the forfeiture of points.

Exams: A make-up exam will only be given in extraordinary circumstances (severe illness, death in immediate family), and with appropriate documentation (e.g. doctor's note).

Attendance Policy: If you do not submit any assignments by Friday, Jan 27th at 11:59 PM, then you may be dropped from this class for lack of effort. You are expected to work toward completion of the course assignment daily. If you do not submit any assignments for two consecutive weeks, then you may be dropped from this class due to lack of effort. You are expected to check WeBWork, Blackboard, Microsoft Teams, and your miners email regularly (daily) for announcements.

Civility Statement: All correspondence with your instructor, TA, and other students should be conducted in an appropriate manner.

Military Statement: If you are a military student with the potential of being called to military service and /or training during the course of the semester, you must contact me as soon as possible before you leave.

Disability Statement: If you need accommodations for your success, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email at cass@utep.edu, or visit their office located in the UTEP Union East, Room 106. For additional information, please visit the CASS website <https://www.utep.edu/student-affairs/cass/>

The student is responsible for informing me of the accommodations needed and will be responsible for proactive actions in regards to having accommodations met.

Academic Integrity Policy: The University policy is that all suspected cases or acts of alleged scholastic dishonesty must be referred to the Dean of Students for investigation and appropriate disposition. Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. For the official policies on academic integrity and scholastic dishonesty, please refer to <https://admin.utep.edu/Default.aspx?alias=admin.utep.edu/hoop>

Each student is responsible for notice of and compliance with the provisions of the Regents' Rules and Regulations, which are available for inspection electronically at <https://www.utsystem.edu/offices/board-regents/regents-rules-and-regulations>.

All students are expected and required to obey the law, to comply with the Regents' [Rules and Regulations](#), with System and University rules, with directives issued by an administrative official in the course of his or her authorized duties, and to observe standards of conduct appropriate for the University. A student who enrolls at the University is charged with the obligation to conduct himself/herself in a manner compatible with the University's function as an educational institution.

Any student who engages in conduct that is prohibited by Regents' [Rules and Regulations](#), U. T. System or University rules, specific instructions issued by an administrative official or by federal, state, or local laws is subject to discipline, whether such conduct takes place on or off campus or whether civil or criminal penalties are also imposed for such conduct.

Course Schedule: See separate calendar.