

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

Principles of Mathematics - 21895 - Math 3325

Jan. 16, 2024 – May 02, 2024 / Final Exam: May 07, 2024

Instructional Method: Min Tech - 49% or Less Online

Scheduled Meeting Times: Tue, Thu / 5:00 pm – 6:20 pm / in BH 130

Instructor:

Dr. Emil Schwab (Professor / Mathematical Sciences / Office: BH 201)

E-mail: eschwab@utep.edu

Office Hours:

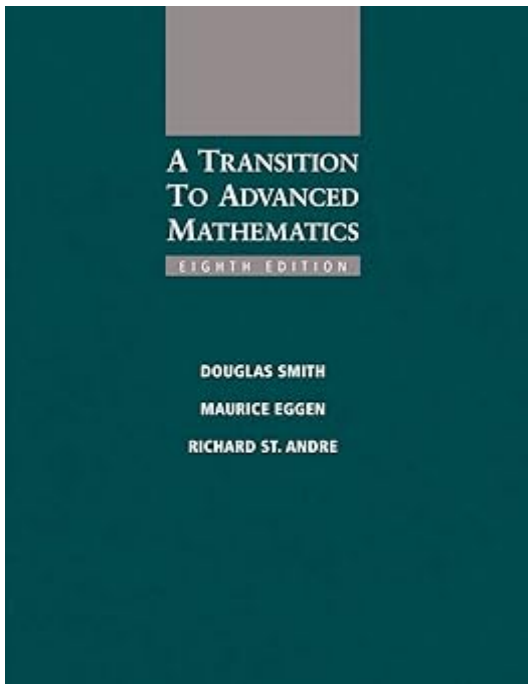
Tue & Thu / 9:00 – 10:00 am, online on Zoom

Tue & Thu / 4:30 – 5:00 pm, face-to-face in BH 201

E-mail communication: you must use only your UTEP email address.

Textbook :

A Transition to Advanced Mathematics / Douglas Smith / 8th edition



Course Objectives and Content

- 1.) Students will be able to understand the basic of logic and to write propositions and sentences by emphasizing the correct usage of mathematical symbols.
- 2.) Students will be able to construct proofs, thoroughly understanding several important proof techniques including direct proof, proof by contraposition, proof by contradiction, proof using cases, and mathematical induction
- 3.) Students will build a solid understanding of some concepts most useful for advanced courses.
- 4.) Students will be able to read and understand mathematical proofs working with definitions and theorems based on the deductive reasoning.
- 5.) Students will be able to write clear and concise mathematical proofs using correct logical steps from hypothesis to conclusion.

The course will cover sections from the chapters 1 – 5 of the textbook .

You will be responsible to access BLACKBOARD to watch the video-lectures posted each week, check the announcements /homework , review the notes posted and follow the lessons in the textbook.

Exams and Assignments:

There will be **three face-to-face midterm exams** (Exam 1, Exam2 and Exam 3) and **one comprehensive final exam**. There will be no extra credit or curves on exams.

Regularly homework will be assigned. The homework will not be collected. The exams will include problems from homework or similar.

Exams Tentative Schedule and Grading Policy:

	Date	Topic	Weight
Exam 1	Thursday Feb. 15	Chapters: 1,2	100 points possible (25% of final grade)
Exam 2	Thursday Mar. 21	Chapters: 3	100 points possible (25% of final grade)
Exam 3	Thursday Apr. 18	Chapters: 4,5	100 points possible (25% of final grade)
Final Exam	Tuesday May 07	All chapters	100 points possible (25% of final grade)

The dates/times for the exams may be changed during the semester.

The Final Grade will be the average of all four scores (Ex1, Ex2, Ex3 and Final) respecting the following grading scale:

- 90 – 100 = A
- 80 – 89 = B
- 70 – 79 = C
- 60 – 69 = D
- 0 – 59 = F.

Late Work and Make-up Policy:

Make-up exams will only be given under extraordinary circumstances, approved by instructor.

Attendance & Withdrawal:

The student may be dropped by the instructor for (excessive absences) 4 or more absences of the class meetings.

It is the student's responsibility to drop the course if desired a grade W, before the drop deadline. The Drop Deadline for this semester is **Thursday/ March 28, 2024**.

No W grade can be given after the drop deadline.

Technology Requirements:

Video-Lectures are delivered via Blackboard.

You will need to have access to a computer/laptop.

IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP [Help Desk](#)

Netiquette/Copyright Statement:

Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professor only and you are not allowed to copy documents and paste them to a publicly accessible website, blog, or other space.

All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

Scholastic Integrity:

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 <http://www.utsystem.edu/bor/rules/homepage.htm>

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. To learn more, please visit [HOOP: Student Conduct and Discipline](#).

Accommodations:

If you need special accommodations, please contact The Center for Accommodations and Support Services (CASS) at 915- 747-5148, or by email to cass@utep.edu, or visit their website at <https://www.utep.edu/student-affairs/cass/>