

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

Principles of Mathematics - 22740 - Math 3325

Online via Blackboard	Jan. 18, 2022 – May 05, 2022 Final Exam: May 10 , 2022	Spring 2022
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Prerequisite(s)

([MATH 1312](#) w/C or better) OR ([MATH 2313](#) w/C or better) OR ([MATH 2326](#) w/C or better)

Instructor:

Dr. Emil Schwab

E-mail: eschwab@utep.edu

<https://hb2504.utep.edu/Home/Profile?username=eschwab>

Office Hours:

Online on Blackboard :

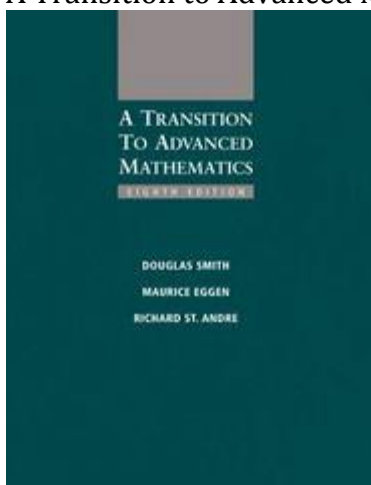
- Monday 9:00 – 10:20 am and 12:00 – 1:20 pm
- Wednesday 4:00 – 5:00 pm

For communication, you must use only your **UTEP email address**.

I will try to return e-mails within 24 hours (except weekends/holidays)

Textbook :

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



(also eBook available)

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 videos posted each week, check the announcements which include the homework , review the notes posted and follow the lessons in the textbook.

Exams and Assignments:

There will be three midterm exams (Exam 1, Exam2 and Exam 3) and one comprehensive final exam. There will be no extra credit or curves on exams. Your exams will be offered on specific dates and will have a time window. Once you log on for exam on Blackboard, the time runs regardless and the exam must be completed in one sitting. Regularly homework will be assigned. The homework will not be collected. The exams will include also problems from homework or similar.

Exams Tentative Schedule and Grading Policy:

	Date	Topic	Weight
Exam 1	Tuesday, Feb. 22 90 minutes	Chapters: 1,2	100 points possible (25% of final grade)
Exam 2	Tuesday, March 29 90 minutes	Chapters: 3	100 points possible (25% of final grade)
Exam 3	Tuesday, May 3 90 minutes	Chapters: 4, 5	100 points possible (25% of final grade)
Final Exam	Tuesday, May 10 180 minutes	All chapters	100 points possible (25% of final grade)

The dates/times for the exams may be changed during the semester. The exams will be available for a 24-hour period on the date specified (from 12 am until 11:59 pm).

The Final Grade will be the average of all four scores : Ex1, Ex2, Ex3 and Final (add all four scores and divide the sum obtained by 4), respecting the following grading scale:

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

Graduate Credit. University policy requires additional course work for graduate student taking this course for credit toward graduate degree. In this case the graduate student have to complete additional work from ch.6 of the textbook (groups, rings, fields), topics which will be included in the final exam. This additional work will represent additional 30 points in the final exam. Since your possible score therefore increases to 130%, I will divide your total final exam score by a factor of 1.30 to get to a 100% scale.

Late Work and Make-up Policy:

No late work and submission of exams will be accepted if the reason is not considered excusable. Make-up exams will only be given under extraordinary circumstances, approved by instructor.

Attendance & Withdrawal:

This is an online course and as such you do not have any strict attendance guidelines. You are expected to work toward completion of the course weekly. It is the student's responsibility to drop the course if she/he desires a grade W. The Drop/Withdrawal Deadline for this semester is **April 1st , 2022**.
No W grade can be given after the drop deadline.

Technology Requirements:

Course content is delivered via Blackboard.
You will need to have access to a computer/laptop and scanner.
IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP [Help Desk](#)
IMPORTANT: I strongly suggest that you submit your work/answers through e-mail as pdf or jpg file attachments if you have a technical issue during exam.

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. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the [Office of Student Conduct and Conflict Resolution \(OSCCR\)](#) for possible disciplinary action. To learn more, please visit [HOOP: Student Conduct and Discipline](#).

Disability Statement:

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

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 are encouraged to contact the instructor as soon as possible.

Resources:

[Math Tutoring Center \(MaRCS\)](#): The MaRCS tutoring center offers free tutoring: <https://www.utep.edu/science/math/marcs/>.