

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

**CRN 29053 - MATH 3325 – Principles of Mathematics**

1:30 - 2:50 pm	TR	LART 304	Spring 2018
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**Prerequisite Courses: Math 1312 Calculus II**

Instructor: Dr. Emil Schwab  
Office Location: BH 201  
Contact Info: Phone # 747-6758  
E-mail address: [eschwab@utep.edu](mailto:eschwab@utep.edu)

Office Hrs: TR 3 – 3:50 p.m.

Textbook: A Transition to Advanced Mathematics /Smith

Course Objectives: 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.

Course Contents: Logic and Proofs. Sets. Relations. Functions. Cardinality.

Exams and Assignments: There will be three unit exams (each worth 100 points) during the semester and a comprehensive final exam (also worth of 100 points). Regularly homework will be assigned. The homework will not be collected, but will be discussed in class. The exams will include problems from homework.

Grading Policy: Each exam including the final represents 25% of the final grade.  
The final grade will be determined by the average of all exams scores including the final, respecting the following grading scale:  
A 90-100; B 80-89; C 70-79; D 60-69; F below 60

Extra credit work won't be given for this class.

Make-up Policy: Make-ups/retests will be given only under extraordinary circumstances documented by the student and at the discretion of the instructor.

Attendance & Withdrawal: It is the student's responsibility to attend class, to be in contact with all the information transmitted in the class and to make up the work for the missed class. It is expected that everyone attend every class and arrive on time.  
It is the student's responsibility to drop the class. Any student with 4 or more absences from lecture might be automatically dropped from the class by instructor. The deadline to drop or to be dropped with an automatic W is **March 29**, 2018. After the drop deadline the College of Science will not approve any drops (W) and you can be dropped only with an F.

Academic Integrity Policy: Students are required to follow UTEP policy (Academic Dishonesty at UTEP) and to comply with the Regents' Rules and Regulations.  
<http://academics.utep.edu/Default.aspx?tabid=23785>  
<http://www.utsystem.edu/bor/rules/homepage.htm>

Disability Statement: If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to [cass@utep.edu](mailto:cass@utep.edu), or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at [www.sa.utep.edu/cass](http://www.sa.utep.edu/cass).  
The student is responsible for presenting to the instructor any CASS accommodation letters and instructions.

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.

Tentative Schedule: Feb. 13 – Exam 1  
March 27 – Exam 2  
May 1 – Exam 3  
May 10 – Final Exam ( 1:00 pm)

(the dates for the exams may be changed during the semester)