

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

**Course #:** MATHEMATICS 4370 (MATH 3341 Introduction to Analysis)

CRN 19933

**Course Title:** Introduction to Analysis

**Credit Hours:** 3

**Term:** Fall 2021

**Course Meetings & Location:** Online

**Prerequisite:** MATH 3325

**Instructor:** Joe Guthrie

**Contact Info:** Office Location: Bell Hall 300

Telephone: 747-6755

email: [jguthrie@utep.edu](mailto:jguthrie@utep.edu)

Fax: 747-6502

Emergency Contact: 747-5761

**Office Hours:** Online by appointment.

**Textbook:** Gaughan, *Introduction to Analysis*, 5<sup>th</sup> Ed.

**Course Objectives:** Students are expected to make considerable progress in the following areas:

#	Objective
1	Students will become familiar with the fundamental results of "Analysis on the Real Line" (highlights of the course include the Intermediate Value Theorem, the Mean Value Theorem and the Fundamental Theorem of Calculus)
2	Students will thoroughly understand the definitions of the basic concepts of Analysis such as convergence, continuity, differentiation and integration
3	Students will be able to apply definitions and theorems in Analysis
4	Students will continue to develop their ability to use the method of proof to establish the fundamental results in Analysis
5	Students will employ effective strategies to decide the truth or falsity of mathematical propositions

**Course Activities and Assessment:**

**Homework:** Homework will be assigned each class day and students will post solutions on the class Discussion Board.meeting. Students will be assigned a grade for participation. Selected assignments may also be collected and graded.

**Exams:** There will be three mid-term exams as well as a final exam. The final exam will cover the entire course.

**Course Grade:** At the end of the semester, you will have percentage scores for your homework and for your mid-term and final exams. The homework and class participation will count 15%, each mid-term exam will count 20%, and the final exam will count 25% toward your course average. Grades will then be assigned according to:

A: 90-100%    B: 80-89%    C: 70-79%    D:60-769%    F: 0-59%.

If you have problems with the course material, need to be absent for an exam, or have any other circumstances that may affect your performance in the course, contact me by phone or email as soon as possible.

**Students taking the course for graduate credit will be required to submit an additional report in addition to the other requirements.**

**Drop policy:** The deadline to drop with an automatic W is Friday October 29.. The Dean's Office of the College of Science will not approve any drops after that date.

**Make-up Policy:** Makeup exams will be given only in extraordinary and unavoidable circumstances and with advance notice to me by phone or email.

**Attendance Policy:** Prompt attendance at all class meetings is expected.

**Academic Integrity Policy:** You are expected to conform to the UTEP policy on integrity. See <http://academics.utep.edu/Default.aspx?tabid=23785>.

**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). You are responsible for presenting to me any CASS accommodation letters and instructions.

**Military Statement:** If you are a military student with the potential of being called to military service or training during the semester, please let me know during the first week of classes and contact me as soon as possible if you do receive such an assignment.

### **Homework Assignments** from Intro to Analysis by Gaughn

Chapter 0 #39,41,44.

Chapter 1 #2,3,6,9,14,17,18,19,20,25,26,32,34,35,36,45.

Chapter 2 #1,3,5,6,7,10,11,15,17,18,20,23,24.

Chapter 3 #1,2,4,6,10,13,15,17,19,20,21,24,33,34,41,44,46.

Chapter 4 #3,4,7,12,16,18,20,30,32

Chapter 5 #2,3,5,7,8,10,16.