CoSM Class Syllabus/Policy
MTH439 Introduction to Analysis I-Fall 2016

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Office: Math 314
Office Hours: 10:00-11:10 MW and 2:00-3:00 MW. Other times by appointment.
Class meeting time and place: Math 357  8-9:15amTR

Text and Materials: A Friendly Introduction to Analysis by Withold Kosmala-2nd Ed. A scientific calculator is required.

Content: This course will cover the first 5 chapters in the text.

Course Requirements: I expect each student to gain a deeper understanding of the Real Number System, the concept of limit, derivative and continuity. In addition, I expect each student to be able to state mathematical definitions with accuracy and to be able to produce mathematically sound proofs.

Course Calendar: A TENTATIVE calendar is attached as page 3.

Grading Policy: There will be four two-part tests. Part I will consist of problems assigned daily to be turned in as “homework”. I will cut these off at the appropriate time and begin new problems for the next test (these problems start with homework #01). Part II will be a test designed to test your knowledge of the concepts and your ability to state definitions precisely and correctly and perhaps a “short” proof or two will be added. On each test I reserve the right to ask at least one question on anything I wish. Part I will have a weight of 2/3 and part II 1/3 for grading purposes. On homework, write only on one side of the pages and staple multiple pages of problems in the order they are assigned.

Attendance Policy: Don’t miss class.

Student Learning Outcomes (SLO): At the end of MTH 439, a student who has studied and learned the material should be able to:
1. A knowledge of the definitions and characteristics of sequences, limits, continuity, and derivative. [PLO: 1,2,5]
2. A knowledge of the critical theorems of Real Analysis dealing with derivatives. [PLO: 1,2]
3. The ability to do original mathematical proofs. [PLO: 1,3,4]
4. An understanding of the critical connections and differences between sequences and functions of a continuous variable. [PLO: 1,2]
5. The ability to use analytic knowledge to solve problems. [PLO: 3,5]
6. The ability to use the problem-solving process of experimentation, conjecture, and proof. [PLO: 3,1]
7. The ability to communicate mathematics to a heterogeneous audience in both oral and written form. [PLO: 4,5]
8. The ability to use available technology in the problem solving process. [PLO: 4]

Program Learning Outcomes (PLO):

Students graduating from SFASU with a B.S. degree and a major in mathematics will:
1. Demonstrate comprehension of core mathematical concepts.
2. Execute mathematical procedures accurately, appropriately, and efficiently.
3. Apply principles of logic to develop and analyze conjectures and proofs.
4. Demonstrate competence in using various mathematical tools, including technology, to formulate, represent, and solve problems.
5. Demonstrate proficiency in communicating mathematics in a format appropriate to expected audiences.

**Academic Integrity (A-9.1)**

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

**Definition of Academic Dishonesty**

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at [http://www.sfasu.edu/policies/academic_integrity.asp](http://www.sfasu.edu/policies/academic_integrity.asp)

**Withheld Grades Semester Grades Policy (A-54)**

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average. The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

**Students with Disabilities**

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

**Acceptable Student Behavior- In short, Just be nice!**

Classroom behavior should not interfere with the instructor's ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed. Please be respectful of your fellow students and your instructor. Cell phone use and texting are not allowed in class. Remember to turn your cell phone off or place it in quiet mode before entering the classroom.
<table>
<thead>
<tr>
<th>Week</th>
<th>Beginning Date</th>
<th>Topic</th>
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| 1    | Monday 8/29/16 | Course Orientation  
Chapter 1 |
| 2    | Monday 9/5/16  | Labor Day - No class September 5  
Chapter 1 |
| 3    | Monday 9/12/16 | Chapter 2 |
| 4    | Monday 9/19/16 | Chapter 2 |
| 5    | Monday 9/26/16 | Chapter 2 |
| 6    | Monday 10/3/16 | Chapter 2-3  
Exam I Chapters 1-2 |
| 7    | Monday 10/10/16| Chapter 3 |
| 8    | Monday 10/17/16| Chapter 3 |
| 9    | Monday 10/24/16| Chapter 3-4  
Exam II Chapter 3 |
| 10   | Monday 10/31/16| Chapter 4 |
| 11   | Monday 11/7/16 | Chapter 4 |
| 12   | Monday 11/12/16| Chapter 4-5  
Exam III Chapter 4 |
| 13   | Monday 11/19/16| Chapter 5  
Thanksgiving Recess - No class November 23-25 |
| 14   | Monday 11/28/16| Chapter 5 |
| 15   | Monday 12/1/16 | Chapter 5 |
| 16   | Monday 12/8/16 | Final Exam Chapter 5 8am Thursday Dec. 15 |