

MATH 497 Section 001  
Instructor: Dr. Charles Dorsett  
Office hours: 10 – 11 MTWR, and by appointment

BA 338 1 – 4:50 MW  
Office: Bin-318  
Office telephone: 886-5955

Course Title: Point Set Topology

Textbook: None. The class will be taught using a “modified Texas Method”.

Prerequisites: Math 440 or equivalent

Topics to be covered: Within this class, topics studied in calculus, advanced undergraduate, and graduate courses such as open sets, closed sets, continuity, convergence, compactness, connected, and product spaces will be studied giving each student deeper and better understanding of the mathematics they have studied and preparing them for future mathematical studies.

Student Learning Outcomes: At the end of the class,

1. The successful student will have working knowledge of important mathematical properties such as continuity, convergence, compactness, and product spaces.
2. The student will have experience and success in theorem proving and be able to exhibit their theorem proving abilities.
3. The students will have studied product spaces and be able to exhibit and communicate their knowledge of product spaces.

Undergraduate Requirements:

1. This is a second course of topology for an undergraduate math major. By a variation of the Texas Method of teaching, the students will actively participate in class activities such as presenting their solutions, examples, and proofs of theorems in class.
2. The students need to engage in problem solving and theorem proving preparing themselves for continued study of mathematics.
3. The students will sufficiently exhibit their knowledge and understanding of topics taught in an introductory, undergraduate topology class on a final exam.
4. Undergraduate students will collaborate with graduate students to discuss topological definition, properties, theorems, and separation axioms; and develop interest in research and pursuing graduate study at A&M-Commerce.

Grading policy: In the class 85% of the grade will be determined by your classroom participation. During the class you will be given hand-outs containing definitions, problems, and theorems for which you are to provide solutions and proofs. The expectation is that you will present your solutions to the problems and proofs of the theorems during class time in a timely fashion. There will be final test in the class worth 15%.

ADA Statement

The Americans with Disabilities Act (ADA) is a Federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other

things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

GEE Library – Room 132

Phone: ((03) 886 – 5150 or (903) 886 – 5835

Fax: (903) 468 – 8148

[StudentDisabilityServices@tamuc.edu](mailto:StudentDisabilityServices@tamuc.edu)

### Student Conduct

Attendance and participation in classroom activities are expected. According to the Student's Guide Handbook, Policies and Procedures, Conduct, all students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.

Let's all work hard and have a happy, productive semester.