MATH 523 Section 01S, 41R, and 71R — BA 338 1 – 4:50 MW
Instructor: Dr. Charles Dorsett — Office: Bin-318
Office hours: 10- 11 M - R, and by appointment — Office telephone: 886-5955

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

Prerequisites: Math 522 or equivalent, Graduate standing with background in mathematics, including theorem proving classes.

Topics to be covered: The continued study of subspaces, continuity, classical separation axioms, generalized separation axioms, connectedness, convergence, covering properties, countable properties, and product spaces as time permits.

Student Learning Outcomes:
(1) The students will gain further knowledge of the mathematical language used in the study of advanced mathematics. Properties important and used in advanced mathematics will be known, familiar quantities to the successful students giving the students the knowledge and communication skills to move forward in the study of mathematics.

(2) The students will be knowledgeable of the uniform classifications used in the study of mathematics. The students will be introduced to and have knowledge of many mathematical properties studied in advanced mathematics, such as separation axioms, convergence, covering properties, and continuity, along with the classification system used in the study of the many properties giving the students prerequisite knowledge required for continued study in mathematics.

(3) The students will see and understand the connection and transition between previously studied mathematics and more advanced mathematics. The students will actively participate in the transition of important concepts such as open, closed, and continuity from calculus to more advanced mathematics.

(4) The students will gain experience, confidence, and maturity in proving theorems. A variation of the Texas Method of Teaching will be used in the class requiring the students to prove theorems give the student the experience, knowledge, and confidence to move forward in the study of mathematics.

Graduate Requirements:
1. Graduate students are expected to actively participate in the class putting solutions of assigned problems and proofs of assigned theorems on the board and explaining their work to the class. The problems and theorems will be the expected problem and theorem for a second semester graduate level introductory topology class.
2. Graduate students will continue to explore research in topology, and are encouraged to study research papers published by the instructor. They are also encouraged to discuss research with the instructor, and may consider a topic suitable for Math 595.

Grading policy: The grade for the class will be determined by classroom participation.

ADA Statement
The Americans with Disabilities Act (ADA) is a Federal anti-discrimination statue 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 accommodations 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: (903) 886 – 5150 or (903) 886 – 5835
Fax: (903) 468 – 8148
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.