



MATH 522.001, General Topology I

COURSE SYLLABUS: Summer I 2020

INSTRUCTOR INFORMATION

Instructor: Padmapani Seneviratne
Office Location: BIN 316
Office Hours: by appointment

Virtual office hours (skype): tamuc_math

Office Phone: 903- 886-5952

Office Fax: 903-886-5945

University Email Address: Padmapani.seneviratne@tamuc.edu

Preferred Form of Communication: **email**

Communication Response Time: within 24 hours during weekdays

COURSE INFORMATION

Class Schedule: Web-based(D2L)

Textbook: No textbook required. Class notes will be provided.

Additional Reading:

1). Topology 2nd edition, James Munkres, Pearson publishing, ISBN-13: 9780131816299

2). Introduction to Topology: Pure and Applied, Adams & Franzosa, Pearson-Prentice Hall, ISBN 9780131848696

3). Topology without tears : <http://www.topologywithouttears.net/>

Instructional:

Class notes and online lecture videos will be uploaded to D2L website.

The syllabus/schedule are subject to change.

Course Description

Three semester hours Ordinals and cardinals, topological spaces, identification topology, convexity, separation axioms, covering axioms

Prerequisite: MATH 440 or consent of the instructor.

Topics to be covered:

Chapter 1: Introduction:- Nature of Topology, sets, set operations, Cartesian products, functions and equivalence relations.

Chapter 2: Real Line: Upper and lower bounds, finite and infinite sets, Open sets and closed sets, The nested interval theorem.

Chapter 3: Metric Spaces I: Definitions and examples, open sets and closed sets in metric spaces, interior, closure and boundary.

Chapter 4: Metric Spaces II: Continuous functions, equivalences of metric spaces, new spaces from old, complete metric spaces.

Chapter 5: Topological spaces: Connectedness and compactness.

Student Learning Outcomes: Upon successful completion of this course students will:

- Understand terms, definitions and theorems related to topology and metric spaces.
- Demonstrate knowledge and understanding of concepts such as open and closed sets, interior, closure and boundary.
- Create new topological spaces by using subspace, product and quotient topologies.
- Use continuous functions and homeomorphisms to understand structure of topological spaces.
- Demonstrate knowledge and understanding of metric spaces.
- Apply theoretical concepts in topology to understand real world applications.

COURSE REQUIREMENTS

Attendance and participation:

Online attendance is required. Your log in, video viewing, homework and participation in our course in D2L determine online participation in this course.

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Exams

Final exam will be a proctored exam through Zoom or will be a timed take home exam. More information will be provided later.

Final Exam: Thursday, July 2ⁿ, 2020. 3:00pm

Home Work:

Please submit the home work in pdf format. Write clearly and keep space between lines. Save the file as `firstname_lastname_HW#.pdf`

At end of each chapter, homework problems will be assigned and will be graded. Submit homework to the dropbox folder at D2L. The assignment that you submit must be your own work. Plagiarism is prohibited.

Late Home Work: It is essential that you submit your homework by the due date. Late homework will not be graded.

Grading policy: The course grade consists of

Home-work:	200 points
Participation:	30 points
Final:	200 points

Total:	430 points

Grading Scale:

A: 90 – 100%, B: 80 – 89%, C: 70 – 79%, D:60 – 69%, F: 0 – 59%

Weekly Schedule:

Week 1: Chapter 1
Week 2: Chapter 2
Week 3: Chapter 3
Week 4: Chapter 4
Week 5: Chapter 5

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TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements>

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

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COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

You are expected to attend all classes.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:

<https://www.britannica.com/topic/netiquette>

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

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[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

Students with Disabilities-- 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 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

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Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

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