

**Tennessee Technological University  
Mathematics Department**

**MATH 4310-4320/5310-5320: Introduction to Topology I-II**

**I. COURSE DESCRIPTION FROM CATALOG:**

Topological spaces continuity, connectedness, compactness, separation axioms, function spaces, and fundamental groups. Lec. 3-3. Cr. 3-3.

**II. PREREQUISITE(S):**

MATH 4310: C or better in MATH 3400 (or consent of instructor for MATH 5310).  
MATH 4320: C or better in MATH 4310 or 5310.

**III. COURSE OBJECTIVE(S):** Students understand the basic concepts of topology including limits continuity and improve their ability to read and create mathematical proofs.

**IV. TOPICS TO BE COVERED:**

1. Topological spaces continuity
2. Connectedness
3. Compactness
4. Separation axioms
5. Function spaces
6. Fundamental groups

**V. ADDITIONAL INFORMATION:**

Graduate credit is earned on the basis of additional work required by the instructor per TTU Graduate Catalog.

**VI. POSSIBLE TEXTS AND REFERENCES:**

*Topology: First Course*, by Munkres

**VII. ANY TECHNOLOGY THAT MAY BE USED:**

Students with a disability requiring accommodations should contact the Office of Disability Services (ODS). 1  
An Accommodation Request (AR) should be completed as soon as possible, preferably by the end of the first week of the course. The ODS is located in the Roaden University Center, Room 112; phone 372-6119.