

Tennessee Technological University  
Mathematics Department

MATH 4993: Mathematical Research

I. COURSE DESCRIPTION FROM CATALOG:

This course introduces students to the process of performing research. By reading papers the students will learn how to define open and significant problems, set up a research plan and, if applicable, define relevant experiments. Students will be required to give presentations on either their own or other people's research. Cr. 3

IV. TOPICS TO BE COVERED:

- History of the chosen topic: When did the first paper appear, who has been or is currently working on this topic? Where can the resources be found?
- Read and discuss introductory research papers on the topic.
- Identify and study required background knowledge.
- If applicable: Learn (or refresh the knowledge on) a programming language.
- Design and implementation of a webpage that informs about the research project.
- If applicable: Learn to use an existing software package.
- Learn Latex to document results and write reports.
- Learn tools for visualization of results (e.g. MATLAB for graphs, postscript, xfig, etc.)
- If applicable: Define, implement