

## Advanced Concepts of Mathematics (MATH 3452)

**Meeting Times:** 2:30-3:55 pm MWF in RBN 4019

**Last day to withdraw:** Monday, March 25, 2024

**Instructor:** Nathan Smith

**Office:** RBN 4007

**Contact:** nsmith@uttyler.edu

**Office Hours:** Tentatively 1:25-2:20 MWF

**Text:** None

**Course Topics:** Math History and applications to the classroom. Selections from ancient mathematics to the more modern in algebra and geometry.

**Student Learning Outcomes:** By the end of the course students should be able to:

1. Write complete, correct, and coherent proofs.
2. Demonstrate a deep understanding of mathematical reasoning and problem solving.
3. Use correct and precise mathematical language to describe important events in mathematical history.

**Grading:** There will be three tests, each of which will count one fifth of your final grade. There will be a final project consisting of a written paper and a poster presentation, which will count for one fifth of your final grade. The remaining fifth of your final grade will be based upon class participation, in-class assignments, quizzes, homework, etc. Earning 90% of all points guarantees a grade no lower than *A*, 80% of all points guarantees a grade no lower than *B*, and so forth.

**Missed work:** If an emergency situation or university-sanctioned event forces your absence on the day of a test and if you have discussed the situation in advance with the instructor we will work out a way to make up the test.

**Student Academic Conduct:** It is your responsibility to learn the material in this course for your own benefit. You should not let this discourage you from working together on your homework but in the end what you turn in should reflect your understanding, not just be copied from someone else. *During the tests a code of honor will apply under which students are to work alone and neither give help to others nor receive help from any sources.* Students are also expected to help enforce this code. Students are encouraged to obtain a copy of *A Student Guide to Conduct and Discipline at UT Tyler*, available in the Office of Student Affairs.

We point out here, as well, that the written paper must be your own work. Copying things out of another book or from a website is not acceptable.

**University Policies:** For University policies concerning Students' Rights and Responsibilities, Grade Replacement/Forgiveness, State-Mandated Course Drop Policy, Disability Services, Student Absence due to Religious Observance, Student Absence for University-Sponsored Events and Activities, and the Social Security and FERPA Statement please see the policy page on Canvas.