Math 299 Assignments for Fall 2025

for Tuesday, September 2

1. Read the syllabus carefully and be prepared to spend the full 80 minutes in class.
2. We will work on some calculus problems during class.

for Tuesday, September 9

1. Turn in carefully written solutions for Assignment 1.
2. We will review some facts from trigonometry.

for Tuesday, September 16

1. Turn in carefully written solutions for Assignment 2.
2. We will learn some more facts from trigonometry.

for Tuesday, September 23

1. Turn in carefully written solutions for Assignment 3.
2. We will study some simple properties of complex numbers.

for Tuesday, September 30

1. Turn in carefully written solutions for Assignment 4.
2. We will discuss the Principle of Mathematical Induction.

for Tuesday, October 7

1. Turn in carefully written solutions for Assignment 5.
2. We will look at some "common sense" problems, that is, problems that do not require any advanced knowledge of mathematics (nothing beyond high school), but do require some careful thinking.

for Tuesday, October 14

1. We will consider the Mean Value Theorem, the Fundamental Theorem of Calculus, and perhaps some differential equations.

for Tuesday, October 21

1. Turn in carefully written solutions for Assignment 6.
2. We will consider some basic inequalities such as the Cauchy-Schwarz inequality and the Arithmetic Mean/Geometric Mean inequality.

for Tuesday, October 28

1. Turn in carefully written solutions for Assignment 7.
2. We will review sequences and series.

for Tuesday, November 4

1. Turn in carefully written solutions for Assignment 8.
2. We will continue our review of sequences and series.

for Tuesday, November 11

1. Turn in carefully written solutions for Assignment 9.
2. We will discuss modular arithmetic.

for Tuesday, November 18

1. Turn in carefully written solutions for Assignment 10.
2. Students will work on new problems in class for about an hour, then we will discuss various solutions.

for Tuesday, December 2

1. Students will work on new problems in class for about an hour, then we will discuss various solutions.

for Saturday, December 6

1. Session 1 of the Putnam exam will be in Olin 201 from 8 am to 11 am.
2. Session 2 of the Putnam exam will be in Olin 201 from 1 pm to 4 pm.