

Problem Solving and Mathematical Reasoning

October 11 through November 1 (4-week, OLLI session II)

Instructor

Wendy K. Tam Cho

Email

wendycho@illinois.edu

Location & Time

Zoom, Tuesdays 6:00-7:30pm

General Information

Course Description

We will explore how to solve problems using mathematical reasoning. I will go over some basic strategies and then we will apply them to solve some interesting problems and to learn how to play fun games that do not initially appear to be mathematical in nature. My aim is to showcase and foster your appreciation for the beauty of mathematics.

Course Schedule

Week	Topic	Optional Readings
October 11	Problem Solving Strategies	Martin Gardner. My Best Mathematical and Logic Puzzles Martin Gardner. The Colossal Book of Short Puzzles and Problems
October 28	Proofs without Words	Figurate Numbers
October 25	Josephus Problem	Josephus Problem
November 1	Merlin	Merlin