

POL 229: Math, Politics, and Policy

The course aims to familiarize students with application of mathematics to problems in the social sciences, which include political science. The course is designed around various questions/themes listed below.

1. Where does mathematics come from? (History of mathematics)
2. How to lie with statistics?
3. How many people can the Earth sustain? (Rise and collapse of populations)
4. Will contagion kill us? (Diffusion processes)
5. Who is popular among your friends? (Social networks)
6. Games people play (Conflicts and Cooperation)
7. Collective action
8. Arms race and rebellion
9. Human-environment interactions

For each question/theme, specific problems will be posed; basic mathematical concepts and tools to solve them will be introduced; and you will learn how to apply them and interpret their results.



Instructor: David J. Yu (davidyu@purdue.edu)

Credit Hours: 3.00; Duration: Jan 09, 2023 - May 06, 2023

Time & Location: TR: 1:30 pm - 2:45 pm @ BRNG 1245