**Lectures** will be offered in person during regularly scheduled class times and will not be recorded. **Exams** will be given in-person. **Office hours**: right after class, remotely on Zoom (details on course canvas), and also by appointment.

## Texts:

- Required: *Game Theory for Applied Economists*, by Robert Gibbons, Princeton University Press.
- Recommended: *The Art of Strategy: A Game Theorist's Guide to Success in Business and Life*, by Avinash Dixit and Barry Nalebuff, Norton. (see also *Thinking Strategically*, by Avinash Dixit and Barry Nalebuff, Norton).
- Other textbooks:
  - *Game theory: An Introduction*, by Steve Tadelis, Princeton University Press. An alternative to Gibbons.
  - Strategy: An Introduction to Game Theory, Third Edition, by Joel Watson, Norton. An alternative to Gibbons.
  - *Games, Strategies, and Decision Making*, Joseph E. Harrington, Jr., Worth Publishing. Examples from industrial organization.

## **Topics and Goals:**

We will follow the book by Gibbons very closely. Parts 1 and 2 on Static and Dynamic Games of Complete Information will be done quite thoroughly. We will introduce Games of Incomplete Information by picking topics from Parts 3 and 4.

I strongly urge everyone to read at least one of the books by Dixit and Nalebuff. They complement the textbook by Gibbons very well, are very well written, and can be read without any preparation in game theory. They provide many wonderful examples and will be helpful in learning to think 'game theoretically'.

Students are expected to be comfortable with elementary partial derivatives and solving systems of equations.

As learning goals, by the end of the course, students should be able to build games to think about common economic situations, to understand standard economic models based on simple game theory and be able to apply standard solution concepts to static games, dynamic games, repeated games, and games of incomplete information.

## Problem sets and Tests:

- Problem sets will be handed out periodically and answer keys will follow soon after.
   They will not be graded, but you are strongly encouraged to do them regularly to check if you are making adequate progress.
- There will be **three** tests in total, and each test will be *cumulative*.

Test 1 Test 2	20% of the grade 30% of the grade	(Mon, January 27) (Wed, February 26)
Test 3	50% of the grade	( <u>UW Sch</u> : Thu, Mar 20, 8:30-10:20)

- The Economics department has a policy on academic conduct and academic honesty. Please be familiar with it: <a href="https://econ.washington.edu/policy-academic-conduct">https://econ.washington.edu/policy-academic-conduct</a>
- "Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at Religious Accommodations Policy (<a href="https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/">https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/</a>). Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form (<a href="https://registrar.washington.edu/students/religious-accommodations-request/">https://registrar.washington.edu/students/religious-accommodations-request/</a>)."