Textbooks. The text for the course is:


Another text is available if you wish additional reading:

*Games, Strategies, and Decision Making*, Joseph E. Harrington, Jr., Worth Publishing.

Gibbons’ book is more theoretical with a formal presentation of game theory. It is a good preparation for students who plan to go to grad school in economics. Harrington’s text is at a more introductory level (despite the title) with lots of examples. These two complement each other. Both books are on reserve in the Foster Library.

Assignments and Exams. The course will have five problem sets, one closed-book midterm, and one closed-book final exam. Each problem set covers a significant amount of material (especially the first one), and so leaving it until the night before it is due is not a good idea. Late problem sets are not accepted without prior permission and a valid reason (being busy does not count). Consulting with other students on problem sets is permitted, but every student must write up his or her own solutions. For all assignments and exams, the UW Student Conduct Code applies.

Assignments are due by 4pm in my mailbox in the economics main office (305 Savery Hall). The main office closes at 5pm, and don’t put your problem set under the door after it is closed.

Students with special needs (disabled students, students athletes and etc.) should send me your documents by October 4th. More information is available online ([http://depts.washington.edu/uwdrs/](http://depts.washington.edu/uwdrs/)). If you cannot make the exams, the same course will be offered again in the Spring quarter.

Grade. The final grade in this course will break down as follows: problem sets (30%), midterm (30%), and final exam (40%).
Discussion. General questions about the course and materials go to the discussion board in Canvas. You are encouraged to answer each other’s questions. Posting the full solutions to questions in the problem sets is NOT allowed. You could contact me through email for other questions. I will respond to my email within 48 hours.

Economics Department’s Policy on Academic Conduct Academic integrity is the cornerstone of the Department’s rules for student conduct and evaluation of student learning. Students accused of academic misconduct will be referred directly to the Office of Community Standards and Student Conduct for disciplinary action pursuant to the Student Conduct Code and, if found guilty, will be subject to sanctions. Sanctions range from a disciplinary warning, to academic probation, to immediate dismissal for the Department and the University, depending on the seriousness of the misconduct. Dismissal can be, and has been, applied even for first offenses. Moreover, a grade of zero can be assigned by the instructor for the course.

Syllabus

• September 25: Introduction to Nash Equilibrium
• September 30: Best Responses, Nash Equilibrium Continued
• October 2: Dominance and Iterative Dominance
• October 7: Mixed Strategies, Existence of equilibrium
• October 9: Applying Nash Equilibrium
• October 11 - Problem Set 1 Due - 4pm
• October 14: Extensive Form Games and Backward Induction
• October 16: Subgame Perfection, Extensive Form Games Continued
• October 21: Subgame Perfection with Incomplete Information and Introduction to Repeated Games
• October 23: Repeated Games and Folk Theorems
• October 25 - Problem Set 2 Due - 4pm,
- October 28: *Repeated Games, Learning, and Imperfect Observation*
- October 30: *Bayesian Equilibrium and Games of Incomplete Information*
- November 1 - **Problem Set 3 Due - 4pm,**
- November 4: **Midterm Exam**
- November 6: *Bayesian Equilibrium and Auctions*
- November 11: **No class - Veterans Day**
- November 13: *Bayesian Equilibrium Continued, Revenue Equivalence and Email Game*
- November 18: *Incomplete Information in the Extensive Form*
- November 19 - **Problem Set 4 Due - 4pm,**
- November 20: *Perfect Bayesian Equilibrium and Signaling*
- November 25: *Signaling and Cheap Talk*
- November 27: *Incomplete Information in the Extensive Form: Mixing, Bluffing, Herding*
- December 2: **Review Session**
- December 3 - **Problem Set 5 Due - 4pm,**
- December 4: **Q and A**
- December 12, 2:30-4:20pm **Final Exam,** Smith Hall 105