

STAT 473 – Game Theory

Lev Reyzin

Fall 2021

Time and location: T-R, 9:30am - 10:45am. When in-class, the lecture will be at Taft Hall (TH) 207 – students will also be able to attend in-class lectures via Zoom. For lectures that are only online (synchronous), students will be able to attend via Zoom. For lectures that are online asynchronous, then students will be asked to watch recordings posted on Piazza at their convenience. All lectures will be recorded and will appear on the course Piazza page.

Instructor: Lev Reyzin, SEO 417, lreyzin@uic.edu

Prerequisites: STAT 381; or ECON 270; or equivalent.

Office hours: TBD

Website: http://homepages.math.uic.edu/~lreyzin/f21_stat473/

Textbook: Anna R. Karlin and Yuval Peres. *Game Theory, Alive*, online on <https://homes.cs.washington.edu/~karlin/GameTheoryBook.pdf>.

Topics: This course serves as an introduction to game theory. Topics include static and dynamic games; mixed strategies and equilibria, imperfect information; algorithmic aspects; economic, political and biological applications.

Grading: The components are weighted as follows: problem sets 20%, midterm 35%, final 45%.

Attendance and participation: In addition to the grading policies outlined above, a student's grade might be adjusted *slightly*, e.g. a point, upward for positive contributions through class participation. Moreover, students are responsible for *all material covered in lectures*, in problem sets, and in assigned readings.

Problem set grading and collaboration policy: Unless otherwise specified on an assignment, students may discuss problem sets with one another, but they should afterward write the solutions on their own. Collaborators (people you speak to about an assignment) must be named at the top of the assignment. No collaboration will be allowed on exams.

Late work policy: Problem sets are to be turned in by 9:30am the day they are due via Gradescope. In general, late work will not be accepted. Exceptions must be asked for *in advance of the due date* and will be made rarely, on a case-by-case basis.

Course drop policy: According to the UIC administration, "Only a student can initiate the dropping of a course. The student can drop a course through Banner up through the 10th day of the semester; there is no academic penalty nor does a 'W' appear on the transcript. After the 10th day and through Friday of the 10th week, the student may drop courses by seeing a college academic advisor. These late drops are indicated by 'W' on the transcript and are limited to a total of four for the student's entire UIC career. In emergency situations, the college will entertain petitions for drops beyond the official deadlines. The student must see an academic advisor for guidance and a petition form."

Disability policy: Students with disabilities who require accommodations for access and participation in this course must be registered with the Office of Disability Services (ODS). Please contact ODS a 312/413/-2183 (voice) or 312/413-0123 (TTY).