Syllabus for Intermediate Microeconomics (310-2)

Northwestern University, Spring 2020,

Tuesdays and Thursdays, 15:30-16:50, Tech Institute Lecture Room 3.

Instructor: Harry Pei.

Office Hours: Thursday 17:05-18:35 at KGH 3391.

Email: harrydp@northwestern.edu

Teaching Assistants:

• Loren Fryxell: LorenFryxell2019@u.northwestern.edu

Section: Monday 3-3:50pm, TCH A110 and Monday 4-4:50pm, LCY 301.

Office Hours: Monday 5:00-6:30pm, Location: TBA.

• Tony Jingxiong Hu: jingxiongHu2022@u.northwestern.edu

Section: Wednesday 3-3:50pm, TCH A110 and Wednesday 4:00-4:50pm, ANN G21.

Office Hours: Monday 3:00-4:30pm, KGH 3411.

• Gabriel Ziegler: Gabriel Ziegler 2019@u.northwestern.edu

Section: Mondays and Wednesdays 3-3:50pm, TCH M128. (On occasions the Wednesday

section might be combined with Tony's section held in TCH A110).

Office Hours: Monday 4.15-6pm, KGH 3198.

Recommended Textbooks (not required, no need to buy):

Robert Gibbons "Game Theory for Applied Economists," Princeton University Press.

David Besanko and Ronald Braeutigam "Microeconomics," any edition, Wiley.

Jeffrey M. Perloff "Microeconomics: Theory and Applications with Calculus." Fifth Edition.

Grading:

1. 75%: 3 in-class exams (25% each), April 23rd, May 14th, June 4th.

Location: Tech Institute Lecture Room 3.

Exams are **not cumulative**. There will be **no make-up exams**.

Any missed exam will have its weight added to the 3rd exam on June 4th.

2. 25%: 5 problem sets. A problem set due at 11pm on April 15th, 22nd, May 6th, 13th,

 ${\bf 27th}.$ Students are required to turn in their own solutions.

The 6th problem set is optional and will not be graded.

Submissions & Returns: When a new Pset is released on Canvas and until the due date, students will be able to upload their work on **gradescope.com**. For the first Pset, students will receive an email prompting them to sign up. Students may still hand-write their solutions, but only electronic submission on **Gradescope** will be accepted and graded. Upon uploading a pdf document that shows their work, students should indicate which page corresponds to which question, just as **gradescope** asks them to do. This greatly simplifies the grading and feedback process. On their **gradescope.com** page, students will also be able to see all of their graded problem sets and exams.

No late submissions are allowed, regardless of the excuse.

Solutions will be posted on *Canvas* right after the deadline.

3. In class participation is highly encouraged. It will be used for students who fall on a cutoff between two grades.

Course goals:

- 1. Improve abstract reasoning, especially as it relates to the economic topics listed below.
- 2. Develop tools used to predict outcomes when people make decisions in isolation and when people interact with each other.
- 3. Gain deeper intuition for economic concepts, such as equilibrium and rationalizability.
- 4. Practice problem solving, including both formal logic and numeric calculations.

Course Materials:

- April 7th: Preferences and choices.
- April 9th: Risk.
- April 14th: Uncertainty.
 - 11pm, April 15th: Problem set 1 due.
- April 16th: Violations of expected utility.
- April 21st: Review.
 - 11pm, April 22nd: Problem set 2 due.
- April 23rd: 1st Exam.
- April 28th: Normal and extensive form games.
- April 30th: Dominant strategy & Dominated strategy.

- May 5th: Nash Equilibrium & Rationalizability.
 - 11pm, May 6th: Problem set 3 due.
- May 7th: Subgame perfection and backward induction.
- May 12th: Review.
 - 11pm, May 13th: Problem set 4 due.
- May 14th: 2nd Exam.
- May 19th: Applications to Industrial Organization.
- May 21st: Repeated games.
- May 26th: Lemon's market.
 - 11pm, May 27th: Problem set 5 due.
- May 28th: Signaling games.
- June 2nd: Review for exam.
- June 4th: 3rd Exam.

AccessibleNU: Any student requesting accommodations related to a disability or other condition is required to register with AccessibleNU (accessiblenu@northwestern.edu; 847-467-5530) and provide professors with an accommodation notification from AccessibleNU, preferably within the first two weeks of class. All information will remain confidential.

Laptop Computer Policy: (does not apply to online instructions) Except in the case of proven medical necessity, students may not use a laptop computer or computer tablet during the lectures. Such devices must remain in your bag, and may not be placed on your desk.

Mobile Communications Policy: Mobile telephone devices should have the ringer turned off and be placed in pockets or backpacks. Students may not make or receive phone calls, surf the web, or send or receive text messages during class.