

Games and Information A and B

Course Syllabus - Spring 2021

Kfir Eliaz

1 Course information

- The course has two parts, **A** and **B**. Part **A** will be taught from **7/3/21** until **13/4/21**. Part **B** will start on **18/4/21** and will continue until the end of the semester.
- Classes are held on **Sunday** and **Tuesday, 9:15-11:45**.
- The TA ("metargel") for the class is **Offer Ozeri** (oferozery@mail.tau.ac.il)
- Problem sets are *optional* and are *not graded* and do not have to be handed in. The course is not easy and so *it is highly recommended* to try and solve the problem sets each week. The aim is to have one assignment per week. Full solutions to each problem set will be made available after the due date of the problem set. In light of that, I may either solve some or no problem sets in class. If you have questions about the homework you can contact me or Brit.
- There is one final exam on part A and another final exam for part B.
- Office hours: **Sunday 15:00-16:00**.

2 Course description

Textbooks:

- *Main text*: Mas-Colell, A., M. Whinston and J. Green (1995), Micro-economic Theory, Oxford University Press. [henceforth, MWG]
- *Supplementary material on game theory*: Martin J. Osborne and Ariel Rubinstein (1994), A Course in Game Theory, MIT. [henceforth, MOAR]
- free access to the book is available at <http://theory.economics.utoronto.ca/books/>.

Topics:

Part A - Game theory

1. Strategic form games with complete information (dominance, iterated deletion, Nash equilibrium, zero-sum games).
2. Extensive-form games
3. Repeated Games
4. Games with Incomplete Information (if time permits)

Part B - Information economics

1. Games with Incomplete Information (if not covered in part A)
2. Adverse Selection, Signaling, and Screening
3. Mechanism-Design
4. Moral hazard