

Professors: Andrey Bremzen and Grigory Kosenok

Summary

The course is a part of the advanced graduate sequence in Microeconomic Theory. This module concentrates on models with asymmetric information and unobservable actions, including adverse selection, screening, signaling, moral hazard, and mechanism design.

Textbooks

The main textbook is Mas-Colell, A., M. Whinston, and J. Green. *The Microeconomic Theory* (MWG) We also recommend Fudenberg, D. and J. Tirole, *Game Theory* (FT). Illustrative examples are taken from Milgrom, P. and J. Roberts. *Economics, Organization and Management* (MR).

Course grade

There will be 6 problem sets and a final exam. The final set will contribute 80% of the course grade with remaining 20% contributed by the problem sets.

Week	Topics	Chapters
1	Introduction to games with incomplete information. Oligopoly with private information, war of attrition, double auctions.	MWG 8.E; FT6
2-3	Adverse selection. Signaling. Competitive screening. Applications to labor market, credit market, insurance.	MWG 13; MR pp. 149-53
4-5	Principal-agent models. Moral hazard. Applications to corporate governance, labor contracts, theory of collusion.	MWG 14; MR pp. 176-91, 206-58, 423-46
6	Principal-agent models. Monopolistic screening. Applications to second-degree price discrimination, insurance, and credit rationing.	MWG 14; MR pp. 154-65
7	Implementation and mechanism design. Revelation principle. Dominant strategy implementation. Nash-Bayes implementation. Public good provision. Auctions with private values. Bilateral trade with asymmetric information.	MWG23 FT7