

Data Driven Business Analysis Fall 2024

- Lecturer:** Alina Ozhegova (AO)
- Teaching assistant:** Hung Le (HL)
- Textbook(s):** Peter Davis and Eliana Garcés “Quantitative Techniques for Competition and Antitrust Analysis” (**DG**)
Kenneth Train “Discrete Choice Methods with Simulation” (**KT**)
Selected papers from the reading list
- Lectures:** Tue. 14.15-16.00
Thu. 08.30-10.00
- Exercise classes:** 4 sessions, Thu. 10.15-12.00
- Assessment:** Individual assignments (50%) and a final group project (50%)

Date	No.	Lecturer	Topic	Readings
Oct 22	1	AO	Introduction: Competitive markets, OLS and IV estimation	DG 1 & 2
Oct 24	2	AO	Imperfect competition and product differentiation	DG 1.3 & 9.1
Oct 29	3	AO	Binary choice and maximum likelihood estimation	KT 2
Oct 31	4	AO	Multinomial and nested logit, aggregate data	DG 9.2; KT 2-4
Oct 31	LAB1	HL	Estimation of supply and demand curves	DG 2.2.2.2, 2.2.3.1, 2.2.3.2
Nov 5	5	AO	Ordered choice and Bresnahan-Reiss entry model	DG 5.2
Nov 7	6	AO	Entry, Local Competition, and Regulation	Reading list
Nov 7	LAB2	HL	Discrete choice demand estimation	DG 9.2, KT 3
Nov 12	7	AO	Merger analysis	DG 8.1–5 + 9.3
Nov 14	8	Guest	Guest lecture on pricing in Zalando	
Nov 14	LA3	HL	Entry model estimation	
Nov 19	9	AO	Demand prediction using machine learning	Reading list
Nov 21	10	AO	Group presentations	
Nov 26	11	AO	Price discrimination and uniform pricing	Reading list
Nov 28	12	AO	Price transparency and algorithmic pricing	Reading list
Nov 28	LAB4	HL	Merger simulation	DG 8

Assignments

Topic	Release Date	Deadline	Solution
1. Competitive markets	October 22	October 30	Lab 1
2. Demand estimation	October 29	November 6	Lab 2
3. Entry and market structure	November 5	November 13	Lab 3
4. Merger analysis	November 22	November 27	Lab 4
5. Group project	October 24	Group presentation on November 28 Written document due December 13	