Mechanism Design: Reading List

- The primary reference in each section usually contains the most complete treatment of the topic, possibly complemented by one or more other "primary" references. Sources listed as "alternatives" are substitutes, usually either imperfect ones (so give a narrower coverage), or less accessible ones (harder to read, harder to get the source).
- Most items should be available (at least in digital form) through the KU library.
- Items marked with a star indicate optional readings that may be briefly mentioned but not extensively covered in class.
- The list may be changed and/or updated throughout the class.

General references:

Narahari Narahari, Yadati. Game theory and mechanism design. Vol. 4. World Scientific, 2014.

Börgers Börgers, Tilman. An introduction to the theory of mechanism design. Oxford University Press, 2015.

MWG Mas-Colell, Andreu, Michael Dennis Whinston, and Jerry R. Green. Microeconomic theory. New York: Oxford university press, 1995.

Diamantaras Diamantaras, Cardamone, Campbell, Deacle, and Delgado. A toolbox for economic design. Macmillan, 2009.

RS Roth, Alvin E., and Marilda Sotomayor. Two-Sided Matching: A Study in Game-Theoretic Modeling and Analysis. Cambridge: Cambridge University Press. 1990.

Introduction and mechanism design problem (week 1)

- Narahari ch.14
  Alternatives:
    - Börgers ch.1.
    - MWG 23.A.
    - Diamantaras ch.1.

DSIC & BIC mechanisms (week 2)

- Narahari ch.: 15, 16
  Alternatives:
    - Börgers ch.: 7.1-7.2 (DSIC mechanisms), 6.1-6.3 (BIC mechanisms).
    - MWG 23.B-D.
    - Diamantaras ch.2, 4.1-4.3

Efficient implementation with transfers + Payoff Equivalence (weeks 3-5)

- Narahari ch.: 18–20
  Alternatives:
    - Börgers ch.: 7.3 (DSIC mechanisms), 3 and 4 (examples).
    - MWG 23.C-E.
    - Diamantaras ch.2.4-2.5, 4.4, 4.6
- Krishna, Vijay, and Motty Perry. "Efficient Mechanism Design." (2000). Unpublished.
  https://drive.google.com/file/d/0B9qyCPfbmExnbmE1OTk5OGJmQzA/view
- (*) Krishna, Vijay, and Eliot Maenner. "Convex Potentials with an Application to Mechanism Design." Econometrica 69.4 (2001): 1113-1119.
  https://onlinelibrary.wiley.com/doi/abs/10.1111/1468-0262.00233

Optimal mechanisms (week 6)

- Narahari: ch.21 (optional: ch.22)
  Alternatives:
  - Börgers ch.: 6.1-6.3 (BIC mechanisms and revenue equivalence), 2-4 (actual optimal mechanisms, esp. 3.2).
  - MWG 23.F.
  - Diamantaras ch.4.5
- (*) Kleiner, Andreas, Benny Moldovanu, and Philipp Strack. "Extreme Points and Majorization: Economic Applications." Econometrica 89, no. 4 (2021): 1557–93. `https://doi.org/10.3982/ECTA18312`
- (*) Manelli, Alejandro M., and Daniel R. Vincent. "Multidimensional mechanism design: Revenue maximization and the multiple-good monopoly." Journal of Economic theory 137.1 (2007): 153-185. `https://www.sciencedirect.com/science/article/pii/S0022053107000348`
- (*) Olszewski, Wojciech, and Ron Siegel. "Performance-maximizing large contests." Theoretical Economics 15.1 (2020): 57-88.
  `https://econtheory.org/ojs/index.php/te/article/viewFile/3588/26180/749`

Correlated information (week 7)

- Börgers ch.6.4.
  Alternatives:
  - Cremer, Jacques, and Richard P. McLean. "Full extraction of the surplus in Bayesian and dominant strategy auctions." Econometrica: Journal of the Econometric Society (1988): 1247-1257. `https://www.jstor.org/stable/1913096`
- (*) Börgers ch.10.
- (*) Lopomo, Giuseppe, Luca Rigotti, and Chris Shannon. "Uncertainty and robustness of surplus extraction." Journal of Economic Theory (2020), in press. `https://doi.org/10.1016/j.jet.2020.105088`

Implementability (week 8)

- Narahari ch.17
  Alternatives:
  - MWG 21, 23.C
  - Diamantaras ch.2
- Börgers ch.5, 8
- Applications:
  - Holmstrom, Bengt. "On the Theory of Delegation." Discussion Papers. Northwestern University, Center for Mathematical Studies in Economics and Management Science, 1980. `https://EconPapers.repec.org/RePEc:nwu:cmsems:438.`
  - Crawford, Vincent P, and Joel Sobel. "Strategic Information Transmission." Econometrica 50, no. 6 (1982): 1431–51. `https://doi.org/10.2307/1913390`
  - Battaglini, Marco. "Multiple referrals and multidimensional cheap talk." Econometrica 70.4 (2002): 1379-1401.
    `https://onlinelibrary.wiley.com/doi/abs/10.1111/1468-0262.00336`

Dynamic mechanism design (week 9)

- Applications (without transfers):

- – (*risk-aversion*) Thomas, Jonathan, and Tim Worrall. "Income fluctuation and asymmetric information: An example of a repeated principal-agent problem." Journal of Economic Theory 51.2 (1990): 367-390. `https://www.sciencedirect.com/science/article/pii/002205319090023D`
  - – (*no transfers*) Guo, Yingni, and Johannes Hörner. "Dynamic mechanisms without money." Working paper (2018).
    `http://yingniguo.com/wp-content/uploads/2018/07/Dynamic-Allocation-without-Money.pdf`
  - – (*no transfers or commitment*) Li, Jin, Niko Matouschek, and Michael Powell. "Power dynamics in organizations." American Economic Journal: Microeconomics 9.1 (2017): 217-41.
    `https://www.aeaweb.org/articles?id=10.1257/mic.20150138`
- • (*) Bergemann, Dirk, and Juuso Välimäki. "Dynamic mechanism design: An introduction." Journal of Economic Literature 57.2 (2019): 235-74.
  `https://www.aeaweb.org/articles?id=10.1257/jel.20180892`
  Alternatives:
  - – Börgers ch.11.
- • (*) Gershkov, Alex, and Benny Moldovanu. Dynamic Allocation and Pricing: A Mechanism Design Approach. MIT Press, 2014.

Matching (week 10)

- • RS ch.2,4
  Alternatives:
  - – Diamantaras ch.9.
- • (*) RS ch.3,5-9
- • (*) Liu, Qingmin. "Stability and Bayesian Consistency in Two-Sided Markets." American Economic Review 110, no. 8 (August 2020): 2625–66. `https://doi.org/10.1257/aer.20181186`

Verifiable information (week 11)

- • Dekel, Eddie. "On Evidence in Games and Mechanism Design." Econometric Society Presidential Address, 2016 (slides).
  More details:
  - – Grossman, Sanford J. "The Informational Role of Warranties and Private Disclosure about Product Quality." The Journal of Law and Economics 24, no. 3 (1981): 461–83.
    `http://www.journals.uchicago.edu/doi/pdfplus/10.1086/466995`
  - – Verrecchia, Robert E. "Discretionary Disclosure." Journal of Accounting and Economics 5 (January 1, 1983): 179–94. `https://doi.org/10.1016/0165-4101(83)90011-3`
  - – Jung, Woon-Oh, and Young K. Kwon. "Disclosure When the Market Is Unsure of Information Endowment of Managers." Journal of Accounting Research 26, no. 1 (1988): 146.
    `https://doi.org/10.2307/2491118`
  - – Milgrom, Paul, and John Roberts. "Relying on the Information of Interested Parties." The RAND Journal of Economics 17, no. 1 (1986): 18–32. `https://doi.org/10.2307/2555625`
  - – Ben-Porath, Elchanan, Eddie Dekel, and Barton L. Lipman. "Mechanisms With Evidence: Commitment and Robustness." Econometrica 87, no. 2 (2019): 529–66.
    `https://doi.org/10.3982/ECTA14991`
- • (*) Dranove, David, and Ginger Zhe Jin. "Quality Disclosure and Certification: Theory and Practice." Journal of Economic Literature 48, no. 4 (2010): 935–63. `https://doi.org/10.2307/29779704`

Information design (weeks 12-13)

- Bergemann, Dirk, and Stephen Morris. "Information design: A unified perspective." Journal of Economic Literature 57.1 (2019): 44-95.
  `https://www.aeaweb.org/articles?id=10.1257/jel.20181489`
- Kamenica, Emir, and Matthew Gentzkow. "Bayesian persuasion." American Economic Review 101.6 (2011): 2590-2615.
  `https://www.aeaweb.org/articles?id=10.1257/aer.101.6.2590`

The list may be expanded and updated as we progress through the course.