



## **MGT 3090 Course Outline**

Models & Methods in Strategic Management (Spring 2020)

Course Meets: Mondays 9am-12pm, Rotman School of Management, Room 7024

Instructor: Laura Derksen

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Office Hours: 95 St. George, Room 7011; by appt.

**Objectives:** This PhD course introduces methods to estimate causal relationships using data.

**Preparation and Prerequisites:** The course complements a graduate sequence in econometrics, but it will be accessible to students with a basic knowledge of statistics (linear regression). We will build intuition for how statistical models relate to data and theory. Readings, discussions, and assignments will include technical material. Feel free to reach out to the instructor if you have any questions about whether this class is a good fit for you.

## Textbook(s):

Angrist, Joshua D., and Jörn-Steffen Pischke. *Mastering 'metrics: The path from cause to effect.* Princeton University Press, 2014.

Angrist, Joshua D., and Jörn-Steffen Pischke. *Mostly harmless econometrics: An empiricist's companion*. Princeton university press, 2008.

These two books cover similar ground. Mastering Metrics (MM) is more intuitive, and Mostly Harmless (MHE) is more advanced and technical. Either will do for this course – have a look at both and choose the one that suits your tastes. If you're on the fence, I recommend MM – gain a deep understanding of the fundamentals and use MHE as a reference.

## **Assignments & Grading:**

Class Preparation and Participation (20%): read the materials, come to class, participate.

**Paper Discussions (30%):** prepare slides and act as primary discussant for (two) papers during the course. Auditing students will be asked to take part.

Data Exercises (20%): Complete short data exercises in Stata to be discussed in class.

**Original Research Design and Presentation (30%):** "Data and Methods" section for a new paper you plan to write (4-6 pages). Describe how you plan to implement an empirical study. Include a description of your data, a specification for regressions you will perform, and justification. You will be invited to present this idea in class at the end of term.

## Schedule

|   | Date   | Topic  |
|---|--------|--|
| 1 | Jan 13 | Introduction: Regression and Causal Inference  |
|   |        | MM Ch. 2 or MHE Ch. 3  |
|   |        | Goldin, Claudia. "A grand gender convergence: Its last chapter." The American Economic Review 104.4 (2014): 1091-1119.   |
| 2 | Jan 20 | Randomization  |
|   |        | MM Ch. 1 <b>or</b> MHE Ch. 2   |
|   |        | *Bloom, Nicholas, James Liang, John Roberts and Zichung Jenny Ying. 2015. "Does working from home work? Evidence from a Chinese experiment." Quarterly Journal of Economics.                 |
| 3 | Jan 27 | Inference: Specification, Sampling-Based vs. Randomization Inference and Standard Errors   |
|   |        | Athey, Susan, and Guido W. Imbens. "The econometrics of randomized experiments." Handbook of Economic Field Experiments 1 (2017): 73-140.  |
|   |        | *Cohen, Jessica, and Pascaline Dupas. "Free distribution or cost-sharing? Evidence from a randomized malaria prevention experiment." The Quarterly Journal of Economics (2010): 1-45.        |
| 4 | Feb 3  | Networks: Peer Effects, Spillovers, and Equilibrium  |
|   |        | *Ashraf, Nava, Oriana Bandiera, and B. Kelsey Jack. "No margin, no mission? A field experiment on incentives for public service delivery." Journal of Public Economics 120 (2014): 1-17.     |
|   |        | *Attanasio, Orazio, Adriana D. Kugler, and Costas Meghir. "Subsidizing vocational training for disadvantaged youth in developing countries: evidence from a randomized trial." (2009).       |
| 5 | Feb 10 | Study Design: Power, Balance, and Pre-Analysis   |
|   |        | Esther Duflo, Rachel Glennerster, and Michael Kremer. 2007. "Using Randomization in Development Economics Research: A Toolkit". Handbook of Development Economics Volume 4, Pages 3895-3962. |

|    |        | Athey, Susan, and Guido W. Imbens. "The econometrics of randomized experiments." Handbook of Economic Field Experiments 1 (2017): 73-140.  |
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|    |        | Bruhn, Miriam, and David McKenzie. "In pursuit of balance: Randomization in practice in development field experiments." American economic journal: applied economics 1, no. 4 (2009): 200-232. |
|    |        | *Blattman, Christopher, et al. Pushing Crime Around the Corner? Estimating Experimental Impacts of Large-Scale Security Interventions. No. w23941. National Bureau of Economic Research, 2017. |
|    | Feb 17 | Reading week   |
| 6  | Feb 24 | Instrumental Variables: MM Ch. 3 or MHE Ch. 4  |
|    |        | *Bloom, Nicholas, Rafaella Sadun, and John Van Reenen. 2013. "The Organization of Firms Across Countries," Quarterly Journal of Economics.   |
| 7  | Mar 2  | Regression Discontinuity Design  |
|    |        | NANA Chi A or NAUE Chi C   |
|    |        | MM Ch. 4 <b>or</b> MHE Ch. 6   |
|    |        | *Kerr, William R., Josh Lerner, and Antoinette Schoar. "The consequences of entrepreneurial finance: Evidence from angel financings." The Review of Financial                                  |
| _  |        | Studies 27.1 (2011): 20-55.  |
| 8  | Mar 9  | Panel Data I: Difference-in-Difference   |
|    |        | MM Ch. 5 <b>or</b> MHE Ch. 5   |
|    |        | Bertrand, Marianne, Esther Duflo, and Sendhil Mullainathan. 2003. "How Much Should we Trust Difference-in-Difference Estimates." Quarterly Journal of Economics                                |
|    |        | *Autor, David and David Scarborough. 2008. "Does Job Testing Harm Minority<br>Workers? Evidence from Retail Establishments." Quarterly Journal of Economics.                                   |
| 9  | Mar 16 | Panel Data II: Fixed Effects, Event Studies  |
|    |        | *Williams, Heidi. 2013. "Intellectual Property Rights and Innovation: Evidence from the Human Genome" Journal of Political Economy, 121(1): 1-27.  |
|    |        | *Nguyen, Bang Dang, and Kasper Meisner Nielsen. "What death can tell: Are executives paid for their contributions to firm value?" Management Science 60.12 (2014): 2994-3010.                  |
|    | Mar 23 | No class   |
| 10 | Mar 30 | Presentations  |
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<sup>\*</sup>To be prepared by student discussant.