1. **Overview**

This course sequence provides a graduate-level introduction to Industrial Organization (IO). It is designed to provide a broad introduction to topics and industries that current researchers are studying as well as to expose students to a wide variety of techniques. It will start the process of preparing Ph.D. students to conduct thesis research in the area.

This first quarter focuses on the estimation of production functions and demand functions, presenting both methods and applications. The quarter ends with a section on entry.

2. **Contact Information**

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3. **Office Hours** - by appointment

4. **Text and Readings**

There is no textbook for this course. Instead, students will be asked to read papers prior to each class. We will not discuss all of the papers on the reading list, but we expect you to read all of the papers we discuss in class.

While we will not be following it, Victor Aguirregabiria has written a great book on Empirical Industrial Organization. This is a very useful reference. It is available at:  

5. **Lectures**

MW 1:30-3:20 KGH 1410

6. **Course Schedule**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assigned Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/25/19</td>
<td>Production I</td>
<td>Syverson 2011, Olley and Pakes 1996</td>
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<tr>
<td>09/30/19</td>
<td>Production II</td>
<td>Levinsohn and Petrin 2003, Ackerberg, Caves and Frazer 2015, Gandhi, Navarro and Rivers 2017</td>
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<tr>
<td>10/02/19</td>
<td>Production III</td>
<td>Syverson 2004, De Loecker 2011</td>
</tr>
<tr>
<td>10/07/19</td>
<td>Production IV</td>
<td>De Loecker, Goldberg, Khandewal and Pavcnik 2016, De Loecker and Eeckout 2018</td>
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7. **Grading**
In each part of the course a number of problem sets will be handed out. The final grade will be based 50 percent on problem sets and 50 percent on the final exam.

8. **Course Web Page**
The course web page will be on the Canvas web site. This course outline, reading lists, homework sets, answers to homework sets and lecture notes will all be posted on the web site.

9. **Readings**
The following abbreviations are used for journal titles:

- **AER**
- **AEJ: Micro**
- **BJE**
- **EMA**
- **IER**
- **IJIO**
- **JE**
- **JEH**

- American Economic Review
- American Economic Journal: Microeconomics
- Bell Journal of Economics
- Econometrica
- International Economic Review
- International Journal of Industrial Organization
- Journal of Econometrics
- Journal of Economic History
I. Production, Technology and Industry Structure (Illanes)


C. Hsieh and P. Klenow, “Misallocation and Manufacturing TFP in China and India,” QJE, November 2009, 1403-1448


**II. Demand Estimation**


III. Welfare Measures Computed from Estimated Demand Systems


**IV. Additional Topics in Demand Estimation**


* A. Nevo, J. Turner and J. Williams, “Usage-Based Pricing and Demand for Residential Broadband”, *EMA*, March 2016, 411-443

* C. Nosko, “Competition and quality choice in the CPU market,” Working Paper, University of
Chicago, Graduate School of Business, 2014.


V. Pass-Through


N. Fabra and M. Reguant, “Pass-Through of Emissions Costs in Electricity Markets”, AER 2014


* E. J. Miravete, K. Seim and J. Thurk, “Market Power and the Laffer Curve”, EMA 2018


VI. Identification


S. Berry and P. Haile, “Nonparametric Identification of Multinomial Choice Demand Models with Heterogeneous Consumers,” mimeo, Cowles Foundation

S. Berry, A. Gandhi and P. Haile, “Connected Substitutes and Invertibility of Demand,” EMA, May 2013, 2087-2111.


VII. Computation


VIII. Market Structure (Bhattacharya)

VIII.1. Entry Models


**VIII.2. Entry and Product Quality**


**VIII.3. Entry Deterrence**


**VIII.4. Entry, Growth, and Turnover**


