Econ 556: Topics in Empirical Economics & Public Policy

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Course Summary

In this course students will be introduced to empirical research in economics with a focus on getting started with your own research. By the end of the course, students will have a high-level knowledge of various tools and approaches that can be used to answer questions in economics and public policy using data.

Throughout, we will focus on recent empirical work that highlights various methodological approaches in applied economics.

The main assignment for this class is the research paper due at the end of the semester.

Weeks 1–4 (Charles Hodgson)

In the first part of Econ 556, we will study models of discrete choice. Discrete choice is used to model situations in which agents compare a set of alternatives (products, jobs, places to live etc.) and choose the utility maximizing one. As we will see, these models have a wide application in labor, industrial organization, and public economics, among other applied fields.

Generally, there is one required reading that will be discussed in each class. We will ask why the question asked by the paper is interesting and important, and discuss and critique the methodological choices made by the authors in answering that question.

Assignment: Students must prepare a two page referee report on one “recommended reading” from this syllabus not discussed in class. The referee report is due in class September 21.

Week 1: Introduction to Empirical Economics

Asking interesting questions, identifying appropriate methods, and finding useful data.

- Sept 2: Hodgson (2018)
- Recommended readings:
  - Nevo (2000)
  - Hodgson (2018)
  - Sampat and Williams (2019)

Week 2: Discrete Choice


Applications: Models in which agents choose from a set of alternatives. The migration decisions of technical workers. The effect of advertising on consumer demand.

- Sept 7: Dahl and Sorenson (2010)
- Sept 9: Erdem et al. (2008)
- Recommended readings:
  - Erdem et al. (2008)
- Gentzkow (2007)
- Bayer et al. (2007)
- Dube et al. (2010)
- Dahl and Sorenson (2010)
- Abaluck and Gruber (2011)
- Tebaldi (2020)

• For Reference:
  - Hausman and McFadden (1984)
  - McFadden (1984)
  - Berry (1994)
  - McFadden (2001)
  - Train (2009) chapters 1-7

**Week 3: Choice and Outcomes**

Tools: Generalized Roy models of selection.

Applications: Settings in which agents select into treatment. Selection into migration. Measuring hospital quality with patient choice.

- Sept 14: Borjas (1987)
- Sept 16: Geweke et al. (2003)

• Recommended readings:
  - Borjas (1987)
  - Geweke et al. (2003)
  - Hull (2018)
  - Van Dijk (2019)
  - Kowalski (2019)
  - Agarwal et al. (2020)

• For Reference:
  - Roy (1951)
  - Heckman and Honore (1990)
  - French and Taber (2011)

**Week 4: Dynamic Discrete Choice**


Applications: The dynamics of work experience and labor supply. The impact of demand uncertainty on investment decisions.

- September 21: Keane and Wolpin (1997)

• Recommended Readings:
  - Keane and Wolpin (1997)
Altug and Miller (1998)
- Kalouptsidi (2014)
- Agarwal et al. (2019)

For Reference:
- Rust (1987)
- Hotz and Miller (1993)
- Bajari et al. (2007)

Bonus reading

Here are some additional useful references, mainly on simulation-based estimation of discrete choice models.

- Dube et al. (2010)
- Train (2009) chapters 8-12
- Pakes and Pollard (1989)
- Arcidiacono and Jones (2003)
- Gelman et al. (2013)
- Blundell and Powell (2004)
- Petrin and Train (2010)

References


