

Introduction to Econ 671

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August 26, 2014

What are you supposed to be able to do after the econometrics core?

1. Have background knowledge on common estimation strategies
2. Take future econometrics and applied economics classes
3. Stay current with future developments in econometrics
 - Read academic journals to learn about new techniques
 - Program new estimators that aren't already supported by statistical packages
4. **Conduct your own empirical research**
 - Collect new data or combine existing datasets
 - Plan the data analysis
 - Decide on a model or models and appropriate statistics
 - Estimate some statistics
 - Interpret those statistics
 - Write a research paper summarizing that analysis

How do those expectations match up with teaching strategies?

- Traditional structure
 - Lecture
 - Class discussion (very little in PhD classes)
 - Individual reading and problem sets
- This structure can help with
 1. *Have background knowledge on common estimation strategies*
 2. *Take future econometrics and applied economics classes*
 3. *Stay current with future developments in econometrics*
- It doesn't help very much with conducting your own empirical research

How do those expectations match up with teaching strategies (cont)?

- “Flipped classroom” structure
 - Spend “lecture time” working on difficult and open-ended problems close to what you will encounter in your research or at work
 - Prepare with background reading and exercises outside of class
- This structure will *still* help with
 1. *Have background knowledge on common estimation strategies*
 2. *Take future econometrics and applied economics classes*
 3. *Stay current with future developments in econometrics*
- But it will emphasize skills that help you conduct your own empirical research

Specifics of Team-Based Learning (in this class)

- Students (you) will study the material **before** we cover it in class
- How do we incentivize this? Tests and peer evaluations
- For each “module” (there are 6 in the semester)
 1. Pre-class individual study
 2. Readiness Assurance Process
 - 1 or 2 class meetings
 - 2.1. Individual test
 - 2.2. Team test
 - 2.3. Written appeal process
 - 2.4. Targeted instructor feedback (a short lecture)
 - 3. Application oriented activities
 - 2 to 5 class meetings
 - Work as teams

What do we do with review sessions?

- Traditional lectures — use the Friday review sessions to go over homework
- That's not necessary in this class
- We'll use the Friday review sessions to teach you computer skills
 - Use the curriculum developed by <http://www.software-carpentry.org>
 - Combination of programming and software development practices

Characteristics of effective teams

- Diverse backgrounds & skills
- Broad cohesiveness & balance
- Trust and mutual respect

Incentives to make the teams fair

- Your team's performance is a major component of your grade
- Your teammates' evaluations of your contribution is also a major component of your grade
- The class will collectively decide how to quantify "major component"

Review the syllabus

1. Form teams and collect your team folder
2. Read the syllabus (10 minutes)
3. Take individual *Readiness Assurance Test* (RAT) on the contents of the syllabus
4. Take team RAT on the contents of the syllabus
5. I'll answer any remaining questions about the syllabus and class structure

Determine grade weights

1. Each team will set preliminary weights and select a member to meet with other teams' representatives.
2. Team representatives will meet in the center of the room and develop a consensus (i.e., every representative has to be in agreement about the grade weights for the class as a whole.)
3. There are some limitations on the grade weights listed in the syllabus

Next class meetings

- You'll have a brief meeting with the TA in the computer lab on Friday
- Our next class meeting will be Tuesday; we'll do the RAT for the probability module