OVERVIEW OF THE COURSE
Why We’re All Here

• Original class (2005): largely for economics Ph.D. students and faculty seeking background on the Census Bureau’s RDC network and data
  – Limited background in survey methodology
  – Relatively narrow set of research interests

• As it has evolved (2017): very heterogeneous class with many disciplinary backgrounds
  – Some experts in virtually all topics covered
  – No experts (even among the instructors) in all topics
Core Learning Objectives

• To understand the history and components of the U.S. federal statistical system, and how these functions are organized in some other countries—you should be able to find the data you want, and know who controls access to them
Core Learning Objectives, II

• To **recognize the source** data for federal statistical products, and use these files properly even if they are only supported as restricted-access confidential data—once you have the source data you should know how to analyze them whether or not they were edited and released for public-use.
Core Learning Objectives, III

• To understand the data flow - acquisition, edit, imputation, weighting, confidentiality protections, publications, and underlying microdata for major household and business data products in the federal statistical system—in preparing and executing your analysis, you should be able to take responsibility for the data preparation needed to create accurate, useful analysis files
Core Learning Objectives, IV

• To use both spatial, temporal, and network modeling methods, especially Bayesian hierarchical models, as research tools when working with the microdata and public-use files from major household and business data products—you should be able to recognize and model the statistical and econometric complexities that occur when data are aggregated over time and space and from multiple sources
Core Learning Objectives, 5

• To produce replicable, properly curated research results based on confidential and public-use data files—you should know how to document the complete provenance of your analysis and the curation of essential elements for reproduction of your results from the original data files
## Videoconferencing

- 9-10 sites, ~100 participants
- Multiple technologies

### Participating Sites

<table>
<thead>
<tr>
<th>Site</th>
<th>Course number</th>
<th>Room</th>
<th>Contact email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cornell University, Economics/Information Science</td>
<td>INFO 7400 / ECON 7400 / ILRLE 7400</td>
<td>Ives Hall 109</td>
<td>Lars Vilhuber</td>
</tr>
<tr>
<td>University of California, Irvine</td>
<td>Econ 249</td>
<td>SBSG 1511</td>
<td>Matthew Freedman</td>
</tr>
<tr>
<td>University of Wisconsin – Madison</td>
<td></td>
<td>TBD</td>
<td>Brent Hueth</td>
</tr>
<tr>
<td>University of Minnesota</td>
<td></td>
<td>Wiley 29</td>
<td>Michael Oakes</td>
</tr>
<tr>
<td>Federal Reserve Bank of Dallas</td>
<td>n.a.</td>
<td>TBD</td>
<td>Wenhua Di</td>
</tr>
<tr>
<td>University of Colorado Boulder, Institute of Behavioral Science (IBS)</td>
<td>GEOG7840</td>
<td>IBS 390</td>
<td>Jani Little</td>
</tr>
<tr>
<td>University of Missouri-Columbia</td>
<td>Economics 9085</td>
<td>Strickland Hall 117</td>
<td>Jake Cronin</td>
</tr>
<tr>
<td>Ross School of Business at the University of Michigan</td>
<td>BE845</td>
<td>Ross R4020</td>
<td>Joelle Abramowitz</td>
</tr>
<tr>
<td>Duke University (Triangle RDC)</td>
<td>ECON 690-99 (9624)</td>
<td>Gross Hall 230E</td>
<td>Gale Boyd</td>
</tr>
<tr>
<td>U.S. Census Bureau</td>
<td>TBD</td>
<td>TBD</td>
<td>Renee Ellis</td>
</tr>
<tr>
<td>Texas Tech University Health Sciences Center</td>
<td>n.a.</td>
<td>TBD</td>
<td>Alyce Ashcraft</td>
</tr>
</tbody>
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Some basic rules

Please mute your mike when not speaking!

Source: https://www.flickr.com/photos/raquelcamargo/3296054642/
Getting attention

• Walk to the camera
  – Unmute your mike
• Write the question on the discussion forum
What discussion forum?
Other technologies

Source: http://www.washington.edu/teaching/files/2012/11/FlippedClassroomUWcolors-1-1024x242.jpg
Use of edX platform

- We are a SPOC – Small
- Private
- Online
- Class
Combination of resources

• Primary information:
  
  www.vrdc.cornell.edu/info747x
  
  – Calendar
  – Links to all other sites
  – Syllabus

• Day-to-day information:
  
  edge.edx.org/courses/course-v1:CornellX+INFO7470x+2017/info
  
  (or just go to the primary site and follow links)

• Content:
  
  – Recorded videos
  – All quizzes/exercises/labs
  – Suggested readings
  – Discussion forums
• Filter by presenter, type of class

Sessions

All session titles are tentative and may change.

For class grades are computed from the lab grades – there is no final exam this year. All dates are for 2016, all times are in Pacific Time.

Previous versions of the course can be found in our archives.
• We will enroll you
  – If you have never used edX, you will get an email
  – If you have previously used edX, you’re all set
Once enrolled, you will

- View videos for designated sessions
- Do quizzes, exercises for ALL sessions
- Participate in the discussion forums
- See updates/news from instructors
Role of the classroom

• We meet every week, unless otherwise cancelled
  – September 14 (FSRDC conference)
  – November 23 (Thanksgiving)
• Live sessions (0, ?)
  – Core material presented in class
  – Discussion in classroom and online forum
• Flipped classroom sessions (1-13)
  – Core material presented on edX
  – Discussion in classroom and online forum
Hybrid sessions

• In some sessions, which we will call “hybrid”
  – Part of the topics covered in the session are “flipped classroom” materials on edX
  – Additional topics are handled in “live presentation”
    • no edX materials available
    • primary information source is the live presentation

• We aim to have no more than **2.5 hours** of total material in any class
Exercises and labs

• First half of the class
  – Quizzes
  – Self-assessment

• Second half of the class
  – Computational exercises in programming language of your choice
  – Project proposal
  – Peer-assessment (of programming, of writing)
Instructor team

Instructors
(vrdc.cornell.edu/info747x/summary/#Instructors)

• Lars Vilhuber
• Warren Brown

Assisted by
• Sylverie Herbert
Live Guest Lecturers

Session 2:
- Margo Anderson, University of Wisconsin-Milwaukee

Session 5
- Gale Boyd, Duke University

Session 7
- Brent Hueth, University of Wisconsin-Madison

Session 10
- John Abowd (U.S. Census Bureau and Cornell University)