

Tuesdays and Thursdays
8:00 AM – 9:20 AM
TBH 225 and 227

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Office Hours:

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Marc: By Appointment (210 TBH)
Chiech: Mondays 3:30-4:30
Tuesdays 9:30AM-10:30AM

Course Overview

This course grounds students in common methods of urban planning analysis, using both primary and secondary data. The course gives you the knowledge and skills to define a region, and to describe and analyze a region's demographic, social, and economic conditions. In the first half of the course, we will focus on the Census Bureau, Bureau of Labor Statistics, and other common sources of "secondary," quantitative data. After Spring Break, the course switches focus to primary data collection: to the surveys, interviews and searches any good planner needs to do in order to create data for issues on which good data do not come pre-packaged.

Will the course pay off? Absolutely. You will at a minimum get experience with the following:

- Key data sources for understanding local and regional demographic and economic change;
 - U.S. Census Bureau
 - Bureau of Economic Analysis
 - Bureau of Labor Statistics
 - U.S. Department of Housing and Urban Development
- Analysis at different levels of geography, including county and metropolitan geographies;
- A working familiarity with software and data management tools including spreadsheets, relational databases, and mapping applications;
- Familiarity with IPUMS, a valuable but rarely used data source that allows planners to make their own calculations from Census data;
- Methods for analyzing demographic change and economic structure;
- Writing to support planning and policy making;
- The effective design of supporting tables, figures, graphics, and maps;
- Principles of survey design and analysis;
- Principles of interviewing and secondary data collection;
- Smart consumption of the reports, advocacy pieces and think-tank materials that will come across your desk as a professional;
- Design, implementation, and analysis of focus groups;
- Ethics in carrying out participatory practices; and
- The ability to move forward on a question when perfect data, easy choices and clear paths of analysis are unavailable. Which is most of the time!

Course Set-Up

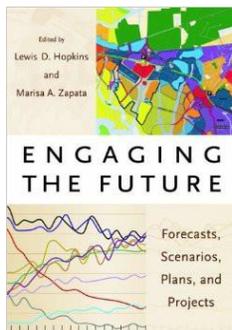
To meet these goals, this course differs from other core courses:

- 1) You will learn by doing. This means weekly assignments through Spring Break
- 2) In week 1, you will select a medium-population county in the U.S. All of your maps, tables, economic data and survey questions will pertain to this county. Make sure it's interesting!
- 3) Tuesdays will usually be lectures. Thursdays will be labs
- 4) Lectures cover a lot of ground. Sometimes they will speak directly to the readings, but usually they will not. Reading carefully and closely is important. I won't test you on it in the classroom. The proof you've done the work will come in the assignments
- 5) Get to know me, Chieh and your fellow students. You will have a lot of questions about the material. Asking us for clarification *immediately* when a question arises will save you a lot of time.

Before Spring Break, you will amass and analyze core (secondary and statistical) demographic and economic data on your county. This will culminate in a final report due immediately after break. This accounts for about 2/3 of the course's work, and about 2/3 of your grade.

After Spring Break, you will identify primary data to be collected from your region. You will design a survey, draft survey questions, and develop a strategy for learning important facts that secondary data sources cannot provide.

A Key Text



Professor Andrew Isserman's paper, "Forecasting to learn how the world can work" lays out a thoughtful and comprehensive perspective on analysis, forecasting, and the planner's use of data. Read it early in the course, then re-read it as your experience grows. Incidentally, the book in which the paper appears, Lew Hopkins' and Marisa Zapata's *Engaging the Future: Forecasts, Scenarios, Plans, and Projects*, is well worth reading and owning. It is full of contributions from people at Illinois or with close ties to Illinois (as well as other talented folks), and the papers in it explore various aspects of evidence-based, deliberative, and continuing planning processes, a perspective on plans and planning that is reflective of the work of many DURP faculty, students, and alumni.

Data Skills: Necessary for Professional Success, but not Sufficient

In recent years, high-achieving graduates of this program have returned to visit us. Many of them are on the hunt for good graduates to hire. Inevitably, students ask what skills they need to be hired. And the exchange goes something like this:

Student: What skill do I need to be hired?

Future Employer: [Flinches]. Everybody always asks that. A skill is the thing that gets you in the door, but that's not what we're looking for. I want to hire people who can think across issues, who can learn new skills, who can fit things into the picture. People who can communicate, identify new problems and opportunities....

Student: [Cuts the employer off] So, should I learn GIS?

Please, don't be this student. Understanding data skills as the beginning and end of your planning education is a sure way to sell yourself short professionally.

So is deciding that good data skills are a distraction from the real work of planning. You won't go very far if you know everything there is to know about housing or green infrastructure policy, but can't use numbers. We'll start the class with cautionary tales about planners who had great ideas they couldn't express numerically, and skilled data analysts who learned the hard way that numbers aren't enough. This course is designed to help you develop an appreciation of the fact that "left-brain" and "right-brain" thinking go together.

Prerequisites

While there are no formal prerequisites, the course draws on concepts and theories covered in UP 504 (Urban History and Theory). If you are uncertain about your qualifications, please see me to discuss.

Schedule and Readings

The sequence of lectures and labs is designed to help you complete the exercises and reports. Mandatory reading assignments are few. Course resources including assignments, slide sets, recommended readings, and support materials are available in one convenient location on the course's COMPASS 2g site (<https://compass2g.illinois.edu>). You are expected to tap the materials as needed to fill gaps in your knowledge about techniques, software, and concepts. You are also expected to seek out additional sources of information as necessary. Please expect some changes to the schedule, especially from mid-March onward. The course has been revised over time, to allow more time for the secondary data work at the beginning, to include IPUMS, and to provide broader coverage of primary data after Spring Break. The schedule won't change much, but it's bound to change some, as I adjust the readings, lecture and assignments to your needs.

Required Equipment

Data Storage

You will want a secure place to store the data that you will be working with. The UIUC Box platform provides 50 gigabytes of free cloud-based storage space for your use (uofi.app.box.com). It's a nice resource, at no cost to you. Alternately, or additionally, you can store the data on a thumb drive. But thumb drives get lost, broken and bent. Stuff happens. Don't learn that the hard way!

Software

This class devotes some instructional time to hands-on work with data. The DURP computer lab (TBH 227) contains computers equipped with all the software that you will need to complete course assignments. Some of you may prefer to work on your own personal computer. DURP has a cloud computing application that will allow you to access DURP lab software from your personal computer (on or off campus). All software is available via the UIUC Webstore (webstore.illinois.edu) to be downloaded to your personal computer:

- Microsoft Office (we will use Excel and Access)

- ESRI ArcGIS 10.2
- SPSS
- Adobe Acrobat Professional (for converting documents to PDF for uploading)

This class has large enrollment, so we will be a tight fit in Room 227 TBH for our lab sessions. If you have a laptop you're comfortable with, that might make things less cramped for you and your classmates.

Data Sources

You will download large data files from the websites of several federal agencies. Primary data sources include the decennial census, the American Community Survey, the population estimates program, and County Business Patterns (CBP) from the U.S. Bureau of the Census, U.S. Department of Commerce, IPUMS, and several others.

Assignments and Grading

Grading criteria include creativity and resourcefulness, technical competence, quality of writing and graphics. An "A" means outstanding work. A "B" means good, solid professional work. A "C" means that work needs some significant revision or rethinking. Improvement over time, assistance to fellow classmates, contributions to class, and other achievements *may* lead to adjustments in course grades. As often in professional practice, the product counts most. Your course grade will consist of the following assignments and exercises:

Assignment	% of Grade
Exercises 1-7 (4% each)	28
Draft Report Part 1	10
Place Profile	26
Gap Analysis	8
Survey Question and Design Analysis (5% each)	10
Primary Data Report and Strategy	18

All assignments should be submitted as a PDF file (unless otherwise noted in the assignment) via the course COMPASS 2g assignment dropbox by the time specified on the individual assignment. Late assignments will only be accepted with prior written permission, and will be automatically graded down 5 points per day (starting from the specified time the assignment is due). The deadlines for your end of course assignments are hard deadlines- late assignments will not be accepted.

Your full participation and presence in all class sessions is expected. Excused absences will be granted on a case-by-case basis, but you need to contact me *prior* to the course session which you are absent from. You get one "free" absence. After that, for each course from which you are absent (excluding excused absences) 2 percentage points will be deducted from your *final course grade*.

Honor Code and Learning Environment

The Illinois Student Code states: "It is the responsibility of the student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that

aids others in such infractions.” Note that you are subject to the Honor Code, as well as procedures for addressing violations to the Code, regardless of whether you have read it and understand it. According to the Code, “ignorance is no excuse.”

To meet this standard in this course, note the following: in written work, all ideas (as well as data or other information) that are not your own must be cited. Note that ideas that require citation may not have been published or written down anywhere. While you are free—and indeed encouraged—to discuss assignments with your peers, all of your data collection, analysis, and writing should be your own. The consequence for violating these expectations may include receiving no credit for the assignment in question, and at the discretion of the instructor, may include automatic failure of the course. The Department of Urban and Regional Planning (DURP) is committed to maintaining a learning environment that is rooted in the goals and responsibilities of professional planners. By enrolling in a class offered by the Department of Urban and Regional Planning, students agree to be responsible for maintaining an atmosphere of mutual respect in all DURP activities, including lectures, discussions, labs, projects, and extracurricular programs. See Student Code Article 1-Student Rights and Responsibilities, Part 1. Student Rights: §1-102.

Course Schedule

You will find a summary of our course schedule below. Please consult the course Compass site for a more detailed course schedule, including readings and assignments in PDF format.

Course Schedule

1/15	Course Welcome and Introduction
1/17	Lab: Mapping Regions
1/22	Defining Regions Exercise #1 Due
1/24	Lab: Analyzing Journey to Work Data
1/29	Demographic Data Sources Exercise #2 Due
1/31	Reasoning with Numbers and Data
2/5	Writing with Numbers and Data Exercise #3 Due
2/7	Lab: Introduction to SPSS
2/12	IPUMS Exercise #4 Due

2/14	Lab: IPUMS
2/19	Presenting Tables and Figures Exercise #5 Due
2/21	Demographic Data Storyline Workshop
2/26	Economic Data Sources Draft Report Part 1 Due
2/28	Economic Data Measures
3/5	Lab: Economic Data Sources and Swifty Shifty Work Time Exercise #6 Due
3/7	Lab: Work Time and Advising
3/12	Final Report Storyline Workshop Exercise #7 Due
3/14	Lab: Work Time and Advising
<i>Spring Break</i>	
3/25	Secondary Data Final Report Due by 5PM
3/26	Primary Data Overview
3/28	Primary Data Collection and Ethics
4/2	Interviews
4/4	No Class – Gap Analysis Work Time
4/9	Quantitative Data Collection (Surveys) Gap Analysis Due
4/11	Lab: Quantitative Data Analysis
4/16	Qualitative Data Analysis (Interview Coding) Survey Question Assignment Due
4/18	Lab: Survey Design Work Time

4/23 Using Primary Data to Inform Decision-Making

Survey Design Assignment Due

4/25 Workshop: Primary Data Recommendation

4/30 Course Wrap-Up and Discussion

5/3 Final Proposal Due at 5pm