

---

## UST 605 – Urban Spatial Structures

---

Fall 2017

Tuesday & Thursday 4:00-5:50 PM, 4 credits

Location: UR 27

**Instructor:** Dr. Ganning  
**email:** j.ganning@csuohio.edu  
**Office:** UR 222

**Office hours:**  
Wednesdays 1:30-3  
or by appointment

### **Course Description**

This course explores the structure and function of urban regions. It gives students introductory knowledge about key theories of urban change over time. Over the course of the semester, students will gain the skills to analyze urban regions with a focus on demographics and population change, migration, economics, housing markets, and transportation. The course emphasizes the use and communication of quantitative and spatial data.

### **Student Learning Outcomes**

At the conclusion of this course, students will be able to:

1. Explain fundamental theories central to understanding the structure and change over time of dynamic urban regions, including: population, migration, economics, housing, and transportation;
2. Locate, acquire, and integrate data from common sources and assess quality issues in the data;
3. Conduct descriptive and exploratory analyses related to population, migration, economics, housing, and transportation, including describing past and current conditions, explaining change over time and projecting future conditions;
4. Explain the rationale for public-sector intervention in economic development and housing;
5. Communicate information and analyses graphically (charts, tables, maps), verbally, and in written form.

### **Prerequisites**

UST 504 (if required) is a prerequisite for this class.

### **Material Requirements**

Students are required to purchase the course text book, which is available at the University book store:

Leigh, N. G., & Blakely, E. J. (2013). *Planning local economic development: Theory and practice*. SAGE Publications, Incorporated.

Other course readings will be posted to Blackboard.

Computer and Internet access (you can find a listing of CSU's computer labs and hours here: <http://www.csuohio.edu/computer-labs/computer-labs>)

## **Course Requirements & Grades**

Class meetings will consist of lectures and lab material. Course-related files will be provided via Blackboard to the extent reasonable.

While I encourage students to work together in class, assignments are to be turned in individually and should represent each student's individual work unless explicitly directed otherwise in this syllabus. At no point should files be electronically shared or any parts copied or reused. Refer to the University's policies on misconduct, as given below.

**Assignments:** Three assignments are given in the first half of the semester.

**Projects:** Two projects will be given in the second half of the semester. The projects rely on data analysis, following concepts covered in class.

**Exams:** The midterm exam will take place in class on October 24. A smaller in-class final quiz/exam will take place during the last class session, as given in the calendar.

**Final Project:** The final project, due during the course's scheduled final exam (12/12, 4pm), will build on the previous projects. Students will develop one coherent, professional report presenting data and analysis on a range of related topics.

## **Grading**

The final grade will be determined as follows:

Assignments	20%
Projects	20%
Midterm	20%
Final Quiz/Exam	15%
Final Project	25%

CSU uses the following letter grades. In the Levin College the letter grades follow this numeric scale:

94 through 100: A  
90 through 93: A-  
87 through 89: B+  
83 through 86: B  
80 through 82: B-  
70 through 79: C  
69 and below: F

The "I" grade (Incomplete) is given when the work in a course has been generally passing, but when some specifically required task has not been completed through no fault of the student. An "I" grade can be assigned by the instructor when all three of the following conditions are met:

1. Student is regularly attending/participating in the class and has the potential to pass the course;

2. Student has not completed all assignments and has stopped attending/participating for reasons deemed justified by the instructor; and
3. Student has notified the instructor prior to the end of the grading period

**Note:** Grammar, writing style, and presentation are evaluated in all written exercises. If you are unsure of your writing abilities, please use the CSU writing center. Grading includes the presentation of all tables, spelling, writing style, and grammar.

### **Late Work, Special Needs and Circumstances**

I recognize that you are all busy with many demands on your time. Should life circumstances arise that make regular attendance unlikely or impossible, please consult the College's Graduate Advisor or Assistant Dean for Student Services. They can direct you to the University's available resources and help you to navigate moving forward with coursework.

Absences will be considered excused if they meet the University policy for excused absences or by instructor discretion, and excused absences will impact due dates at the instructor's discretion *and when consulted prior to the due date*. Otherwise, **there is a 10% penalty for each day an assignment is late. Late final projects will not be accepted.** Exams and other in-class activities cannot be made up or taken late without prior arrangements with the instructor.

### **Americans with Disabilities Act**

Educational access is the provision of classroom accommodations, auxiliary aids and services to ensure equal educational opportunities for all students regardless of their disability. Any student who feels he or she may need an accommodation based on the impact of a disability should contact the Office of Disability Services at (216) 687-2015. The Office is located in MC 147. Accommodations need to be requested in advance and will not be granted retroactively.

### **A Note on Misconduct**

According to University Policy 3344-21-02, "Academic misconduct refers to any fraudulent actions or behaviors that affect the evaluation of a student's academic performance or record of academic progress." This includes cheating, plagiarism, and tampering. For a full description of terms and procedures in the event that faculty discover academic misconduct, refer to [http://www.csuohio.edu/sites/default/files/3344-21-02\\_0.pdf](http://www.csuohio.edu/sites/default/files/3344-21-02_0.pdf).

While students should read the student code in its entirety, emphasis is additionally placed upon review of definitions and procedures involving disruption, harassment, and sexual misconduct, found at: <http://www.csuohio.edu/sites/default/files/3344-83-04%20-%20eff.%208-17-15.pdf>.

I reserve the right to remove from the classroom any student who chooses to engage in disrespectful or disruptive behavior.

### **Class Schedule**

#### ***Segment 1: Foundational Principles***

August 29—Introductions and course overview. Review Excel basics and expectations of Excel familiarity.

August 31—A big picture view of research methods  
Read for today: Ruane, Chapter 2. Available as an eBook through the Schwartz Library.

September 5—Understanding reliability, validity, and other big-picture quality issues in research. Read for today: Ruane, Chapter 6. Available as an eBook through the Schwartz Library.

Assignment 1 distributed. Due September 12 at 4pm via Blackboard.

September 7—Designing tables, figures, and maps for professional planning/public administration/related documents.

*Segment 2: Mechanics*

September 12—Overview of the Census Bureau: The Decennial Census and Beyond  
Read for today: “Measuring America: The Decennial Censuses from 1790 to 2000” at <http://www.census.gov/prod/2002pubs/pol02marv.pdf>

Assignment 1 due.

Assignment 2 distributed. Due September 19 at 4pm via Blackboard.

Lab: Downloading and formatting data from American FactFinder

September 14—General principles of GIS and an introduction to R

September 19—Definitional issues and data sources in population, housing, and economics  
Assignment 2 due

September 21—Assignment 3 to be completed and submitted in class. You must be present to participate.

*Demographic Analysis*

September 26—20<sup>th</sup> Century US Demographics

Read for today: Wang & Van Hofe, Chapter 3, “Demographic Analysis”

September 28—Trend Analysis

October 3—Linear and exponential interpolation and extrapolation

October 5—Population forecasting

Read for today: Rayer, Stefan. 2008. “Population Forecast Errors: A Primer for Planners.” *Journal of Planning Education and Research* 27: 417-430.

Available on eReserve through the Schwartz Library

October 10—No class, Columbus Day

October 12—No class, Association of Collegiate Schools of Planning annual conference

October 17— Forecasting Day 2

Distribute Project 1, due October 26 at 4pm

October 19—Review for midterm  
Lab time to work on Project 1

October 24—**Midterm Exam**

*Segment 4: Economic Analysis*

October 26-- Lecture: Economic Development in the U.S.

Read for today: Leigh and Blakely, chapters 1 & 3

Lab: Inflation & wages

Project 1 due today

October 31—Calculating and using location quotients

Read for today: Leigh and Blakely, chapter 6

November 2—Shift-share analysis

Distribute Project 2, due November 16 by 4pm

November 7—Workers & Amenities: labor force participation, education attainment, commuting, mobility

Read for today: Wang & Van Hofe, Chapter 7, “Transportation Analysis”

November 9—Devising Economic Development Strategies

Read for today: Leigh & Blakely, p. 207-220

*Segment 5: Housing Analysis*

November 14—Rental housing gap analysis

Read for today: von Hoffman, Alexander. 2009. “Housing and Planning: A Century of Social Reform and Local Power.” *Journal of the American Planning Association*, 75(2): 231-244.

November 16—Owner-occupied housing affordability, housing problems, estimating future households

Project 2 due

November 21—Segregation and likeness

November 23—No class, Happy Thanksgiving!

November 28—Spatial Mismatch

Read for today: Gobillon and Selod, “Spatial Mismatch, Poverty, and Vulnerable Populations,” Chapter 6 in Handbook of Regional Science.

November 30—**in class presentations of final projects**

December 5—**in class presentations of final projects**

December 7—Final quiz/exam in class, course wrap up, course evaluations

**FINAL PROJECTS ARE DUE IN BOTH ELECTRONIC AND HARD COPY TO MY OFFICE (UR 222) BY 4PM ON DECEMBER 12.**

**LATE SUBMISSIONS WILL NOT BE ACCEPTED.**

SUBMISSIONS MUST BE MADE BOTH ELECTRONICALLY AND IN HARD COPY IN ORDER TO BE SUBMITTED. PARTIAL SUBMISSIONS WILL NOT BE CONSIDERED WITHOUT A SPECIAL ARRANGEMENT, TO BE MADE AT THE DISCRETION OF THE INSTRUCTOR, PRIOR TO THE DUE DATE.