

## **GEOG 4073: Urban Geography (A GIS Approach)**

Syllabus for Fall 2021

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Lectures:	Tuesday 9:00 -10:20 AM in 245 Howe-Russell-Kniffen
Mandatory Labs:	Thursday 9:00 -10:20 AM in 260/E220 (TBD) Howe-Russell-Kniffen
Open Labs:	M-Th (9:00am-5pm), F (8am-2:30pm) in E220 Howe-Russell-Kniffen
Office hours:	Tuesday & Thursday 10:30-11:30 AM in 262A Howe-Russell-Kniffen
Teaching Assistant:	TBD

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### **COURSE OBJECTIVES (3 credit hours)**

This course will introduce you to the study of systems of cities (*interurban* studies) and internal structure of cities (*intraurban* studies). In *interurban* studies, we study cities as *points* in a system of cities; in *intraurban* studies, we study cities as *areas* with a focus on the spatial structure inside individual cities. Two perspectives together provide you a complete picture of urban geography.

All projects use *Geographic information systems* (GIS), a technology fundamental to today's geographic studies, to develop your spatial analytical skills. *This course may be used as an elective GIS course for the GIS Concentration in Geography BA/BS, GIS Undergraduate Minor or GIS Graduate Certificate. Contact the instructor for needed paperwork.*

### **PHYSICAL OR LEARNING DISABILITIES**

Any student with a documented disability needing academic adjustments is requested to speak with the Office of Disability Services and the instructor, as early in the semester as possible. All discussions will remain confidential. This publication/material is available in alternative formats upon request. Please contact the Office of Disability Services, 112 Johnston Hall, 225-578-5919. I look forward to talking with you soon to learn how I may be helpful in enhancing your academic success in this course.

### **EVALUATION**

“Walk the walk”. Computer projects weigh heavily in this course. Key concepts, methods and skills are built into each project. An exam covers basic concepts discussed in the textbook and/or lectures.

1. *Class projects*: designed to build your GIS-based spatial analysis skills and help you understand the concepts discussed in class; accounting for 35% of your grade.
2. *Exam*: multiple-choice and short-essay questions; accounting for 40% of your grade.
3. *Independent Project*: after the exam, a comprehensive project is designed for you to integrate skills you have acquired from the previous class projects with important concepts discussed in class; accounting for 25% of your grade.

Policy:

- Late answers to projects will not be accepted.
- No exams in advance or posterior may be schedule unless you provide evidence of absence.

A letter grade will be initially assigned to each of your projects, and the equivalent numerical score (A = 4, A- = 3.7, B+ = 3.3, B = 3 ...) will be posted on Moodle. A final numerical score for the course is calculated as the weighted average of all components (class projects, exam and independent project). Based on the final score, a final letter grade is assigned. Based on my experience in the past, usually the top 35% gets A, the next 35% gets B, then 20% C, 10% D or F.

## **PREREQUISITES**

*None.*

## **LAB ARRANGEMENT**

Use E220 for additional lab hours if needed. After the exam, all lecture hours are used for the independent project in E220.

## **TEXTBOOK**

No required textbook. The instructor will distribute readings in PDF on Moodle.

## **SOFTWARE AND DATA**

Follow the instructions via the link <https://lsu.box.com/s/rh0cifchzizjpwnv7s3aef1zcjy0pcf1>, and use your LSU account to sign into ArcGIS Pro (**Windows only**), the software for all projects. Project data, when available, will be posted for download.

## **COURSE OUTLINES** (tentative plan)

1. Defining “urban” and urbanization  
Project 1. Defining “Urban” in Baton Rouge according to the Census
2. Systems of cities  
Project 2. Understanding the Central Place Theory and the Rank-Size Model
3. Intraurban structure models and social areas  
Project 3. Mapping and Modeling Population Density Patterns in Chicago
4. Migration, suburbanization and gentrification
5. Ethnicity in cities  
Project 4. Analyzing Urban Ethnicity in Chicago Area
6. Economic structure in cities  
Project 5. Understanding Location Quotients in Intraurban and Regional Contexts

**Final Exam: TBD**

**Independent Project:** due date to be announced.