

GEOG 4077: Economic Geography (in GIS)

Syllabus for Spring 2021

Instructor: Dr. Fahui Wang
Contact: Office phone 225-578-6629, E-mail fwang@lsu.edu
Lectures: Tuesday 1:30 pm -2:50 pm, online via Zoom
Labs: TA available for Q/A on Thursday 1:30 pm -2:50 pm, online
(if desirable, a demo will be arranged for each project)
Office Hours: Schedule by email
Teaching Assistant: Mr. Cehong Luo (cluo6@lsu.edu)

COURSE OBJECTIVES (3 credit hours)

1. To develop an international perspective on how resources, production, and services are geographically organized;
2. To develop an understanding of the contrasting geographic theories used to explain the geographic distribution of primary, secondary and tertiary economic activities;
3. To develop an overview of sub-fields (e.g., population geography, agricultural geography, industrial geography, transportation geography and urban geography) in Economic Geography; and
4. To develop basic skills of analyzing economic geographic data in GIS and spreadsheet.

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

- (1) **Projects**, accounting for 40% of your grade. Projects are designed to build your basic analytical skills of geography and increase your comfort with the major theories and methods discussed in class. Each project involves the use of ArcGIS and/or Excel. Students submit all project reports on the Moodle.
- (2) **Midterm Exam** (online via Moodle) accounting for 25% of your grade.
- (3) **Final exam** (online via Moodle; covering all topics covered in the semester) accounting for 35% of your grade.

Policy:

- Late project reports will not be accepted.
- No make-up exams, nor exams in advance.

A final numerical score for the course is calculated as the weighted average of all three components.

Based on the final score, a final letter grade is assigned. Based on my experience in the past, usually the top 30% get A, the next 35% get B, then 25% C, 5% D, and 5% F.

PREREQUISITES: None

TEXTBOOKS: None. I will provide related papers or book chapters in PDF.

SOFTWARE AND DATA

Follow the instructions via the link <https://lsu.box.com/s/rh0cifchzizipwnv7s3aef1zcjy0pcf1>, 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 (a tentative plan, subject to change)

1. Globalization of the World Economy

2. Population

Project 1. Exploring World Population Geography in ArcGIS Pro

3. Natural Resources and Environment

Project 2. Measuring Income Inequality across Parishes in Louisiana

4. Agriculture and Rural Land Use

Project 3. Von Thünen Model in the Contemporary World

Midterm Exam: date to be arranged (on Moodle)

5. Industrial Location Theory and Spatial Patterns

Project 4. Examining Industrial Patterns in the U.S.

6. Service Sector, Central Place Theory and Service Area Delineation

Project 5. Defining hospital service areas in Baton Rouge

7. Transportation and Accessibility

Project 6. Measuring primary care accessibility in Baton Rouge Metropolitan Area

8. Overview of Urban Geography (if time permits)

Final Exam: Monday, April 26, 2021, 3:00–5:00 pm (on Moodle)