

GGIS/BADM 205

Spring 2023

Lectures: Tues. 3:30-4:50 PM, 137D Davenport Hall

Labs: Thurs. 3:30-4:50 PM, 1020 Natural History Building (NHB)

Instructor: Alexander Michels

2027 Natural History Building

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Office Hours: Mon. 1:30-2:30
Wed 11a-12p

Business Location Decisions

This course is intended to introduce economic geography and business location analytics. It draws on economic theory to explore and explain why businesses locate where they do and the impacts of these decisions. We will discuss concepts such as transportation costs, land use, labor, globalization, and location theories. The course is designed to equip students with necessary tools and methods for analyzing business location decisions and location/regional impacts. We will cover the key concepts and theories and learn how to apply this work using tools such as Excel and Geographic Information Systems (G.I.S.) software like ArcGIS Online and ArcGIS Business Analyst.

Course Objectives

After completing the course, students should be able to:

1. Understand the economic, social, and geographical factors affecting business location decisions and differences in location factors for different types of business.
2. Understand and critically evaluate classical theories of economic geography that explain how agricultural, industrial, service, and real estate firms make location decisions
3. Apply geospatial data and methods including geographic information systems (GIS) to analyze the uneven locations of economic activities and their impacts on people and communities.
4. Communicate the results of a business location analysis in a clear and persuasive manner.

Textbook

Wood, A., and S. Roberts. *Economic Geography: Places, Networks and Flows*. Routledge, 2011.

The textbook is [available online through the UIUC Library](#). We will use the textbook for readings only so the specific version is not necessary. We will also use other readings which will be posted on the course website.

Software

All necessary software will be made available through the university. We will primarily be using ArcGIS Online, ArcGIS Business Analyst, and Excel/Google Sheets.

Course Requirements

Assignment Type	Total Proportion of Grade
Reading Responses	10%
Labs	20%
Assignments	20%
Final Project	20%
Exams (2)	15% each

Reading Responses - Reflective paragraphs and questions each week when there is a reading. You will reflect on the concepts covered in the reading, the connections between the readings and other course materials, and allow you to ask questions about concepts you didn't understand or hope to learn about.

Labs - There will be labs almost every week on Thursdays and they will be due Fridays. These labs will utilize a variety of tools and software relevant to economic geography including Excel, ArcGIS Online, and ArcGIS Business Analyst. **Labs turned in on time receive full credit and there will be a 20% penalty for each day a lab is late up to 4 days late. The lowest lab grade will be dropped.**

Assignments - There will be four assignments which ask a mix of short-answer, formula, and multiple-choice questions. **Assignments turned in on time receive full credit and there will be a 10% penalty for each day a lab is late up to 9 days late. The lowest assignment grade will be dropped.**

Final Project - The final project will involve research, data collection, and analysis about a topic or case study concerning business location decisions, economic impacts, and/or regional economic development. Full details and a project proposal will be announced next month.

Exams - There will be two in-class exams covering the topics covered in assignments, class, and labs. These exams will be cumulative and contain multiple choice, short answer, and formula-based questions.

Grading

Grade assignments will be made by converting your points earned to a percentage and compared to the following grading scale:

A+	96.67% - 100.00%	C+	76.67% - 79.99%
A	93.34% - 96.66%	C	73.34% - 76.66%
A-	90.00% - 93.33%	C-	70.00% - 73.33%
B+	86.67% - 89.99%	D+	66.67% - 69.99%
B	83.34% - 86.66%	D	60.00% - 66.66%
B-	80.00% - 83.33%	F	<60%

If the mean final percentage for the class is under 80%, I will adjust the final grade such that the mean score is 80%.

Absence Policy

Missing Class: You are not graded on attendance, however if you miss class, you are responsible for material you may miss. Slides and labs will be provided through the course website and you may ask questions in office hours. However, you may miss important discussions and office hours cannot be used for personal lectures/lab sessions.

Test Policy: If you are unable to take an exam, please contact your professor before the exam and as soon as possible. I may provide a make-up exam at a later date which may be different from the one given to the rest of the class.

Academic Integrity

The University of Illinois at Urbana-Champaign Student Code should also be considered as a part of this syllabus. Students should pay particular attention to Article 1, Part 4: Academic Integrity. Read the Code at the following URL: <http://studentcode.illinois.edu/>.

Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policy: <https://studentcode.illinois.edu/article1/part4/1-401/>. Ignorance is not an excuse for any academic dishonesty. It is your responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructor(s) if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity.

Community of Care

As members of the Illinois community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether in regards to their well-being or yours, we encourage you to refer this behavior to the Student Assistance Center (217-333-0050 or <http://odos.illinois.edu/community-of-care/referral/>) Based on your report, the staff in the Student Assistance Center reaches out to students to make sure they have the support they need to be healthy and safe.

Further, as a Community of Care, we want to support you in your overall wellness. We know that students sometimes face challenges that can impact academic performance (examples include mental health concerns, food insecurity, homelessness, personal emergencies). Should you find that you are managing such a challenge and that it is interfering with your coursework, you are encouraged to contact the Student Assistance Center (SAC) in the Office of the Dean of Students for support and referrals to campus and/or community resources.

Disruptive Behavior

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the problem and may be reported to the Office for Student Conflict

Resolution (<https://conflictresolution.illinois.edu>; conflictresolution@illinois.edu; 333-3680) for disciplinary action.

Emergency Response Recommendations

Emergency response recommendations and campus building floor plans can be found at the following website: <https://police.illinois.edu/em/run-hide-fight/>. I encourage you to review this website within the first 10 days of class.

Mental Health

Significant stress, mood changes, excessive worry, substance/alcohol misuse or interferences in eating or sleep can have an impact on academic performance, social development, and emotional wellbeing. The University of Illinois offers a variety of confidential services including individual and group counseling, crisis intervention, psychiatric services, and specialized screenings which are covered through the Student Health Fee. If you or someone you know experiences any of the above mental health concerns, it is strongly encouraged to contact or visit any of the University's resources provided below. Getting help is a smart and courageous thing to do for yourself and for those who care about you.

- Counseling Center (217) 333-3704
- McKinley Health Center (217) 333-2700
- National Suicide Prevention Lifeline (800) 273-8255
- Rosecrance Crisis Line (217) 359-4141 (available 24/7, 365 days a year)

If you are in immediate danger, call 911.

Religious Observances

Illinois law requires the University to reasonably accommodate its students' religious beliefs, observances, and practices in regard to admissions, class attendance, and the scheduling of examinations and work requirements. Students should complete the [Request for Accommodation for Religious Observances](#) form should any instructors require an absence letter in order to manage the absence. In order to best facilitate planning and communication between students and faculty, students should make requests for absence letters as early as possible in the semester in which the request applies.

Sexual Misconduct Reporting Obligation

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX and Disability Office. In turn, an individual with the Title IX and Disability Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options.

A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: <https://wecare.illinois.edu/resources/students/#confidential>.

Other information about resources and reporting is available here: <https://wecare.illinois.edu>.

Students with Disabilities

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor as soon as possible and provide the instructor with a Letter of Academic Accommodations from Disability Resources and Educational Services (DRES). To ensure that disability-related concerns are properly addressed from the beginning, students with disabilities who require assistance to participate in this class should apply for services with DRES and see the instructor as soon as possible. If you need accommodations for any sort of disability, please speak to me after class, or make an appointment to see me or see me during my office hours. DRES provides students with academic accommodations, access, and support services. To contact DRES, you may visit 1207 S. Oak St., Champaign, call 217-333-1970, e-mail disability@illinois.edu or visit the DRES website at <http://www.disability.illinois.edu/>. Here is the direct link to apply for services at DRES, <https://www.disability.illinois.edu/applying-services>.

Course Schedule

The table below is the planned schedule for the course. Unless otherwise stated, all assignments, labs, and project components are due at 11:59 PM of the due date.

Week/Topic	Readings, Assignments, Labs, Projects, and Exams	Dates/Due Dates
Week 1: Jan 16-20 Intro & Location Quotients	Read: W&R, Ch. 1 and pp. 127-130 and “ How the Supply Chain Crisis Unfolded ”	Jan 20
	Lab 1 - Location Quotients	Jan 20
Week 2: Jan 23-27 Distance, transportation, and spatial interaction	Read: Anderson 16-29	Jan 27
	Assignment 1	Jan 27
	Lab 2 - Distance and LQs	Jan 27
Week 3: Jan 30-Feb 3 Manufacturing location: Weber's location theory	Read: W&R, pp. 20-26, Gatrell (2017)	Feb 3
	Lab 3 - Manufacturing and Mapping LQs	Feb 3
Week 4: Feb 6-10 Competition for land: agricultural land use location theory	Read: W&R, pp. 15-20	Feb 10
	Lab 4 - Agricultural Land Use	Feb 10
Week 5: Feb 13-17 Urban land use and real estate	<i>Extra Credit Reading: read Filatova and use ALMA notebook</i>	Feb 24
	Assignment 2	Feb 17
	Lab 5 - Overview of ArcGIS Online	Feb 17
Week 6: Feb 20-24 Retail and service location: Central place theory	W&R, pp. 26-33	Feb 24
	Lab 6 - Food deserts and building a factory	Feb 24
Week 7: Feb 27-Mar 3 Midterm	Midterm Review	Feb 28
	Midterm Exam	Mar 2

Week 8: Mar 6-10 Geographies of the firm: Agglomeration and industrial clusters	Read: W&R, Ch. 4, Adler (2020)	Mar 10
	Project Proposals	Mar 10
	Lab 8 - Overview of ArcGIS Business Analyst, Part 1	Mar 10
Week 9: Mar 20-24 Corporate geographies	Read: Dixit et. al. (2019)	Mar 24
	Lab 9 - Overview of ArcGIS Business Analyst, Part 2	Mar 24
Week 10: Mar 27-31 Research & development	Assignment 3	Mar 31
	Lab 10 - R&D Suitability Analysis	Mar 31
Week 11: Apr 3-7 Economic impacts of business location decisions	Read: W&R, pp. 43-49	Apr 7
	Lab 11 - Property infographics	Apr 7
Week 12: Apr 10-14 Globalization and business location decisions	Read: W&R, Ch. 5	Apr 14
	Assignment 4	Apr 14
	No Lab, this time is set aside to work on the final project.	Apr 14
Week 13: Apr 17-21 Economic Restructuring	Read: W&R, Ch. 7	Apr 21
	Final Review	Apr 20
Week 14-15: Final and Projects	Final Exam	Apr 25
	Project Presentations (Apr 27 & May 2)	Apr 27/ May 2nd