

GE 103 Economic Geography Syllabus

Boston University, Fall 2006

Instructor: Prof. Joan L. Walker, CAS 439c, joanw@bu.edu

Office hours: M 11:00-12:30 and W 2:00-3:30 PM

Class Meetings: MWF 10:00-11:00PM, CAS 216

Purpose: To provide an introduction to economic geography with emphases on theory and empirical application.

Overview: Economic geographers study and attempt to explain the spatial configuration of economic activities. Economic activities include all human acts that do one of three things: 1) produce goods and services, 2) transfer goods and services from one economic agent to another, and 3) transform goods and service into utility through acts of consumption. All of these activities must take place somewhere – but where? Why does a firm elect to locate its factory in a particular country, region, locality and site? Why is a retail outlet located on a main street, along a highway or in an enclosed mall? Why does a household choose to reside and consume in a particular city, suburb or rural county? These are the questions that this course will seek to answer.

Methods/Software: You will be exposed to some basic tools of the trade, including (but not limited to) Geographical Information Systems or GIS (ESRI ArcGIS and GoogleEarth), Excel, and Regression Analysis (performed in Excel and ArcGIS). All software used will be available on University computers and/or freely downloadable.

Lecture notes: Lecture notes, when available, will be placed on the CourseInfo website (courseinfo.bu.edu). Reading the notes will not be an adequate substitute for attending lectures. In some cases the board will be used in class, and students are expected to take notes on this material.

Grade Evaluation: Midterm Exam 30%
Final Exam 35%
Assignments 30%
Class Participation 5%

Assignments: There will be 6 graded assignments, which will provide an opportunity to apply concepts and models taught in class. They will involve putting numbers into the models and providing a write-up to show that you are able to interpret the model results correctly. Where possible, data relevant to Boston and BU students will be used. Some of these Assignments will require you to work in groups.

Participation: This will be based on attendance, satisfactory completion of ungraded exercises (such as data collection or in-class exercises), and productive contributions to class discussions.

Lecture Schedule (timings are approximate)

Note on Readings: There is no textbook assigned for this course. Instead readings corresponding to the lecture topics will be placed on the CourseInfo website or handed out in class. Readings will be announced prior to each topic. You are expected to read the material contemporaneously with the course topics.

Assignment 0: Collecting local data.

Part I: Fundamental concepts (4 weeks)

- A) Fundamental concepts of discrete and continuous space; the role of models and theory in economic geography; site and situation attributes.
- B) Two critical drivers of the spatial distribution of economic activities: the friction of distance and agglomeration economies. Fundamental market concepts.
- C) Spatial interaction: the three bases of spatial interaction and the gravity model.
- D) Resources, the environment and imperfect markets. The overexploitation of common resources and the role of pollution on location choices.

Assignment 1: Reinforcing fundamental concepts.

Part II: Fundamental methods (1.5 weeks)

- A) Geographical Information Systems: computer programs for capturing, storing, updating, manipulating, analyzing and displaying all forms of spatial information.
- B) Regression: quantitative tools for constructing and testing mathematical representations of the real world.

Assignment 2: Working with GIS and regression.

Part III: Theories of firm location (1.5 weeks)

- A) The partial equilibrium location problem: Weber's triangle; scale economies and substitution; the impact of spatial wage variations.
- B) Strategic location: the Hotelling problem.

Assignment 3: Understanding Weber and Hotelling

Part IV: Theories of the market for space (1.5 weeks)

- A) Agricultural land use: Ricardian rent theory; von Thunen's rent theory; modern interpretations of von Thunen.
- B) Urban land use: descriptive models of urban form; Alonso-Muth framework.

Assignment 4: Analyzing Boston land use data (population and land prices) to see how well the Alonso-Muth theory applies.

Part V: Complexities of cities and behaviors (2 weeks)

- A) Urban patterns and trends: suburbanization, inner-city decline, polycentric urban form, economic performance, social disadvantage.
- B) Micro-level behavior: concepts involved in human spatial decision making and choice behavior; influences on spatial behavior; methods for modeling behavior.

Assignment 5: Studying your own behavior and that of your fellow students in a given day (where do you go? what do you do? how do you get there?).

Part VI: The multiregional economy (1.5 weeks)

- A) Regional autarky versus specialization and trade. Gains from trade based on comparative advantage and agglomeration economies.
- B) Interregional movements of labor and capital. Interregional migration and investment: do they promote or retard regional economic convergence?

Assignment 6: Reinforcing basic trade theory concepts. Analyzing imports of clothing to the US (using aggregate trade data) and imports of jeans to Boston (using data collected by you).

Part VII: The global information economy (1 week)

- A) Globalization of production: bilateral trade flows vs. production chains; logistical challenges; ecommerce and location.
- B) The information economy: Transferring bytes rather than molecules; spatial and transportation implications of e-commerce; the death of distance?

IMPORTANT DATES

I

MIDTERM EXAM Wednesday, October 18, in class

DROP DATE (with "W") Friday, October 27

FINAL EXAM Friday, December 15, 3:00-5:00 PM

The schedule and topics are subject to change, in which case announcements will be made in class as appropriate.

Students are reminded of their responsibility to know and understand the provisions of the Academic Conduct Code. Copies are available in CAS 105. Any violations will be taken seriously.