Course Outline
Locational Analysis for Business (GEOG 4180/5180)
Spring 2012

Time and Location: 2:00-4:30pm Wednesday; ITTC 29 (classroom) and ITTC 234 (computer lab)
Professor: Dr. Tim Strauss, Department of Geography
Office: ITTC 209
Office Hours: 3:30-4:30pm Tuesday/Thursday
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Course Description
This course addresses the use of geographic theories and concepts in business location decision making. Topics include industrial location analysis, retail location, market area analysis, location decision-making processes, the importance of business location decisions for local and regional economic development efforts, and business applications of geographic information systems (GIS). Both the theoretical and applied aspects of location analysis will be addressed. The class will meet in a multimedia classroom (for lectures and discussions regarding theoretical concepts and class assignments) as well as in a GIS computer lab (to focus on the use of GIS and other computer-based analysis tools). No previous knowledge of GIS will be assumed, although familiarity with the Windows-based environment (e.g., user interface, file management) and related applications (e.g., Microsoft Office) will be useful.

Readings
There is no single required textbook for this course. Readings will be distributed in class and/or posted on eLearning (see below).

eLearning
eLearning (Blackboard/WebCT) will be used to post grades, assignments, reading material, and other resources, and it will be used to facilitate class participation and discussion. It will also have the most up-to-date version of this course outline. To access eLearning, go to http://elearning.uni.edu. (See the “Login Instructions” link on this page if you need information on usernames and passwords.)

Assignments
Grades will depend on lab exercises, exams/journals, assignments/participation, and a project. Lab exercises will focus mainly on computer applications related to applied economic geography. Two exams will be given during the semester to undergraduates, largely to address lecture material and readings; however, students may choose instead, with the prior approval of the instructor, to write a journal related to the course material, required readings, outside readings, and other observations (graduate students must choose the journal option). Attendance and active class participation are required; this course component also includes writing brief reactions to the readings using eLearning. Finally, a project will be completed in groups of up to 2 members (graduate students must work on their own projects). Each group will provide a presentation near the end of the semester. More information will be provided on the assignments in the first few weeks of the semester.

Grading
Exam/Journal 1: 20%
Exam/Journal 2: 20%
Project and Presentation: 30%
Assignments/Labs/Participation: 30%
Schedule of Topics (subject to change)
Introduction to the course
Industrial/manufacturing location analysis
  - manufacturing processes
  - factors of production/location factors
  - transport cost minimization/Weber
  - total cost minimization
  - profit maximization
  - agglomeration economies/diseconomies
  - locational inertia
  - location decision-making processes within firms
  - scale issues in the decision-making process (national vs. regional vs. local decisions)
  - expansion vs. relocation vs. closure location decisions
  - location strategies
  - flexibility and uncertainty
Retail/service sector location analysis
  - Hotelling
  - spatial demand curves
  - spatial competition
  - types of market areas
  - central place theory
  - Thiessen polygons
  - Huff model
  - retail trade data (e.g., from Iowa communities)
  - market segmentation
  - cluster analysis

Key Dates to Remember:
February 15: Project teams must be formed. Inform the instructor in writing of team members and possible project topics.
February 29: Exam 1.
March 28: Project proposal due; about 2-4 pages in length, the proposal should include the topic, a description of the information you will use to address this topic, and a description of the methods you will use.
April 18: Exam 2.
April 25: Project Presentations.
Monday, April 30, 3:00-4:50pm: Project Presentations. Project reports due.
(Due dates for lab exercises and eLearning exercises to be announced throughout the semester.)

For Students with Disabilities
The Americans with Disabilities Act of 1990 (ADA) provides protection from illegal discrimination for qualified individuals with disabilities. Students with a disability, who require assistance, should contact the Office of Disability Services (ODS) to coordinate academic accommodations. The ODS is located at 213 Student Services Center; the phone number is 273-2676.