GEOG 4240/5240 - Spring 2006
GEOGRAPHIC INFORMATION SCIENCE FOR BUSINESS AND INDUSTRY
University of Wyoming
Department of Geography

Lecture
W – 14:10 to 17:00

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Office Hours
W - 9:00 to 10:30
R - 15:00 to 16:30

Required Materials
The required textbook for this course is Measuring Up: The Business Case for GIS by Christopher Thomas and Milton Ospina, ESRI Press. Other sources may be used as reference materials, and will be provided as necessary.

Course Description
If you choose to believe the all knowing pundits, over 80% of all business data is location-based. Consequently, more and more businesses, local governments, non-governmental organizations and others are employing geographic information science and technology (GIS&T) in some way. An examination of the diverse manner in which location information is used in a business context offers key insights into various economic geographies, data capabilities and limitations, various related social issues, as well as economic and legal aspects of geospatial information and technology.

Using a series of case studies coupled with hands-on learning experiences, this course will explore a variety of business applications of GIS&T as well as the data and analytic techniques that form the foundations for many such applications. Through our classroom interaction and assignments we will also consider issues related to personal privacy, ethical use of spatial information, consequences of error, and a variety of other factors. Our goal with this class is to:

1. Introduce you to the vocabulary, fundamentals, and approaches to understanding the roles of geographic information science and technology in both business and societal contexts.
2. Increase your understanding of the significance of the many roles that GIS&T play in the workplace.
3. Develop your ability to recognize when GIS&T may be an appropriate solution to a business problem.
4. Increase your understanding of organization and institutional aspects of GIS&T, including current and future trends, management issues, and workforce issues.

This course assumes no existing familiarity with the use of ArcGIS. If you are already familiar with the software, you will continue to build on your experience. If you are not familiar with GIS software, this course will offer a brief introduction to the theory and mechanics of GIS, as well as hands on experience with GIS data and applications used in the business community. The course will generally be presented seminar style with significant levels of interaction and hands-on effort during each class meeting. Given the highly interactive nature of this course, regular attendance will be vital to your success.
Course Content and Evaluation

The assessment of your learning experience will fall into two primary categories. First, by the end of the course, you will be responsible for conveying complex thoughts regarding both theory and practical aspects related to the roles of GIS&T in the business setting. Second, you will be responsible for participating in hands-on exercises as well as a small group project. The assessment process is based on 500 total points distributed in the following manner:

- Ten Short Reaction Papers: 100 points
- Annotated Bibliography: 100 points
- Group Exercise Participation: 100 points
- Portfolio: 100 points
- Case Study/Client Report: 100 points

The Case Study/Client Report will involve a presentation to the class, which will include a peer evaluation of the quality of your presentation.

Your final course grade will be assessed on a 10 point scale (A = 90-100, B = 80-89.99, etc.) where the total number of points earned shall be divided by the 500 total available points. Rubrics will be distributed to clearly outline the expectations for each assignment. Because we will be discussing the reaction papers in class, the papers are due a minimum of 48hrs before class. Papers received less than 48hrs before class will be docked 2 points. Late papers will not be accepted.

Students taking this course for graduate credit have two additional requirements pertaining to the annotated bibliography. Those students seeking graduate credit will be responsible for completing a minimum of 15 citations (10 for undergraduates), and each graduate student will be responsible for leading a 30 minute discussion on an article of their choosing. A portion of the graduate student annotated bibliography assessment will be in the form of peer evaluations of the quality of the discussion.

Students and Teachers Working Together

All members of the university community are responsible for upholding the values and principles that serve as the foundation for a university education. The College of Arts and Sciences has prepared a document called “Students and Teachers Working Together” that serves to clarify basic guidelines to facilitate positive interaction between students and teachers. The document addresses issues ranging from academic integrity and classroom behavior to issues related to communication and the course syllabus. As a student in my class, you are responsible for reviewing this document. Please find the document at:

http://uwadmnweb.uwyo.edu/a&s/Current/2005Stud&TeachersWorking%20Together(7-29-05).doc

If you have trouble locating the document, let me know and I will make a copy available.

Statement for Students with Disabilities

If you have a physical, learning, or psychological disability and require accommodations, please let me know as soon as possible. You will need to register with, and provide documentation of your disability to University Disability Support Services (UDSS) in SEO, room 330 Knight Hall.