UPP 507 Computer Topics in Urban Planning: Intermediate GIS for Planners Spring 2008

Instructors: William "Max" Dieber (maxdbr@uic.edu) and Nina Savar (nsavar@uic.edu)

CRN 26498 Wednesday 6:00 – 9:00 pm, SEL 2058

Office Hours: By appointment (via email).

Philosophy and Background: Max and Nina have worked as colleagues in GIS and data "wrangling"/analysis for over 20 years. Previously employed by the Northeastern Illinois Planning Commission, Nina starred in the role of GIS Manager, ArcInfo specialist, and metadata evangelist while Max served as Research Department manager, demographer/statistician, and ArcView specialist. Max and Nina have been teaching introductory GIS classes at UIC every semester since Fall 2005.

We bring different points of view to many topics in this class. We constantly challenge what we know and believe these challenges strengthen our understanding of the finer points of GIS. Even more than our introductory course, this course is a collaboration between teachers and students. We all will learn from each other.

Objectives and Expectations of Course: We will reinforce topics introduced in our introductory course. We will advance our GIS use to include several extensions, including Network Analyst and Spatial Analyst. We will introduce students to feature editing and geodatabase structures. In addition, we will apply GIS to several applications, along the way covering data collection and compilation techniques; discovering data resources; learning how to teach each other GIS topics; applying GIS to a final project of the student's choice; pushing layouts to Adobe Illustrator for post processing; and learning about raster data. Certain topics will be revisited many times during the course, such as geodatabases and data collection and wrangling. All students are expected to keep project logs for all work they do.

Students should feel even more comfortable with ArcGIS 9.2 interface after this course and feel more secure reading and understanding help files and other on-line GIS resources. The pace of this course will be fast, so it is up to each student to keep up with assignments and request assistance when necessary.

ArcGIS 9.2 software is available on ACCC computers in SEL 2058 and SEL 2265 in addition to computers in the CUPPA lab and CUPPA ancillary studio space in B17. Your instructors expect to procure free student software from ESRI: *ArcView 9.2 and Extensions Student Edition – One-Year Education Use Only*. If you are interested in installing this software on your personal computer, you will be responsible for uninstalling any other demo ESRI software before you can install this copy. Please see information at:
http://www.esri.com/industries/university/education/student-eval_faqs.html

Student Evaluation: Performance will be evaluated on the basis of class attendance, a final project, and 4 selected assignments. The relative weights are listed below

30 points	Attendance	2 points subtracted per missed class; 1 point subtracted if student is not prepared for class even if student is present
30 points	Final Project	Oral presentations will be made in week 14 (April 23) and week 15 (April 30); written reports are due at time of presentation
40 points	4 assignments at 10 points each	Due dates as scheduled throughout semester (stay tuned)

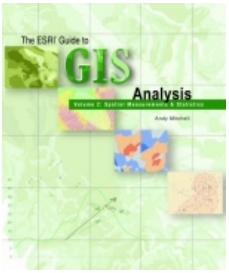
If you cannot make a certain class, you are still responsible for the material covered. You MUST email both instructors ahead of time to let us know when you will miss class.

LET US REPEAT: Attendance is worth 30% of your grade….and attendance means staying for the entire class!

WE WILL NOT ACCEPT ASSIGNMENTS VIA EMAIL.

Required Books and Materials:

USB flash drive capable of holding at least 512 MB of data (but bigger would be better). USB 2 is best; we do not recommend USB 3 at this time .



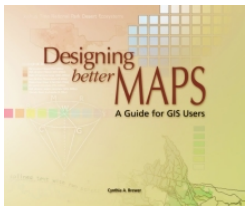
Mitchell. 2005. *ESRI Guide to GIS Analysis – Spatial Measurements and Statistics*, **Volume 2**. ESRI Press, Redlands, CA.
ISBN: 1-589481-16-X

Zeiler. 1999. *Modeling Our World – The ESRI Guide to Geodatabase Design.* ESRI Press, Redlands CA.
ISBN: 1-879102-62-5

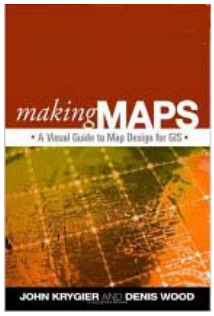
Both books can be acquired through ESRI (www.esri.com) or from Amazon. *The UIC Bookstore will not have the books.*

In addition, a series of pdf's with tutorials and other information will be uploaded to Blackboard. In the first week of class you will receive access codes to gain access at no charge to ESRI's Virtual Campus. Several of the short courses/presentations that exist there will be required.

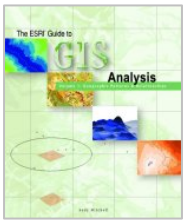
Reference Books: (not required but useful)



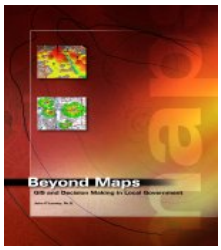
Brewer, Cynthia A. 2005. *Designing Better Maps – A Guide for GIS Users,* ESRI Press, Redlands, CA. ISBN: 1-58948-089-9.



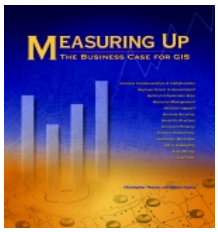
Krygier, Wood. 2005. *Making Maps – A Visual Guide to Map Design for GIS.* The Guilford Press, New York. ISBN: 1-59385-200-2



Mitchell. 1999. *ESRI Guide to GIS Analysis – Geographic Patterns and Relationships*, Volume 1. ESRI Press, Redlands CA.
ISBN: 1-879102-06-4



O'Looney. 2000. *Beyond Maps – GIS and Decision Making in Local Government*. ESRI Press, Redlands CA. ISBN: 1-879102-79-X.
Provides useful background in understanding uses of GIS by local government



Thomas and Ospina. 2004. *Measuring Up – The Business Case for GIS*. ESRI Press, Redlands CA. ISBN: 1-58948-088-0 Interesting examples of use of GIS….see pp25 and 26 for project created by course instructors!

Food and Drink in the Lab

ACCC is **very** adamant about keeping food and drink out of lab. The penalties are stiff (loss of use of your netID). Keep bottles of water, munchies or whatever in your bags. If you need to take care of thirst or hunger, get up and go out to hall.
January 11, 2008