COURSE SYLLABUS
Special Topics: Basic GIS

GEO583 Fall 2005 W 4:00-6:20pm Harris Hall, Room 202

INSTRUCTOR: Anita Walz
OFFICE: Harris Hall 209
OFFICE PHONE: 696-2504
OFFICE HOURS: TR 8:30-9:30 am, 12:15-1:15 pm, W 2:00-4:00 pm
EMAIL ADDRESS: walz@marshall.edu

TEXT: *Getting to Know ArcGIS*, 2nd Ed. for version 9

REQUIRED MATERIALS: You might need some data storage device. Jump drives work best because you can write straight to them.

INTERNET ACCESS AND EMAIL ACCESS is required for this course. Outside of class I will communicate with you through email. The first assignment will be to send me an email from your preferred account so that I can add you to the class list. Be sure to check your email regularly. Homework questions and assignments will be posted on WebCT/Vista ('Vista' for short). You will need to know how to log in to MU computers and how to log in to MyMU for Vista.

COURSE DESCRIPTION: This course introduces principles and applications of Geographic Information Systems with the help of ArcGIS software. During the course we will learn to display and query maps, to understand spatial and attribute data structure, to manipulate existing data, or add our own data. The course will eventually lead to some applications of spatial problem solving in a digital environment.

ASSIGNMENTS: Quizzes and projects will be assigned during class. The finished product is due at the beginning of the next class unless otherwise stated. Late assignments will not receive credit without a valid University approved excuse (see Exam Policy). Expect to spend 6 to 9 hours per week outside the class time to work on assignments and for studying.

QUIZZES: There will be 'take-home' quizzes reinforcing the theory with every topic that is covered. These quizzes are due one week after the topic was covered. You will need to do the exercises in the book, visit online documentation and experiment with the software in order to answer the questions. Be careful, they might look short or quick, but it could take quite some time for some of them, so don't procrastinate. You need to submit your answers on *WebCT/Vista*. These question sets are due one week after the chapter was covered in class. At 4:00 pm the questions will go offline and you will no longer be able to submit your answers, no exceptions will be granted. Be careful as you enter your answer, Vista might re-randomize them.

PROJECTS: With each section that will be covered you will receive an assignment. These will reinforce the applied skills that were covered in the sections. Each Project will be due before the next class period. The due date will be enforced. Each day that your assignment is late you will lose

15% of the grade. Don't fall behind! If you have problems get help a.s.a.p.! Most projects will build on earlier ones. It is critical that you keep up.

TERM PROJECT: You will prepare a research project. If you have a topic that you would like to work on, I need to receive a brief description of your topic by November 2. This will allow you at least five weeks to finish it. The due date for the final project is during dead week. Expect to present your project to the class the week before the finals.

IMPORTANT DATES:	11/2	**Submit proposal for project**
	11/23	Thanksgiving Break
	12/7	**Research Project due; project presentations**

GRADING POLICY:

Your grade will be determined as follows:

Virtual Campus Ribbons	25%
Quizzes	25%
Section Projects	35%
Final project	15%
Total	100%

Grades will be assigned to the following scale:

90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
0 – 59%	F

NOTE: In the event that a grade is "borderline", attendance, punctuality and trend in performance will be used to determine the final grade.

Extra Credit: There will be NO extra credit. If you have time to do extra credit work, you have time to devote to improving your performance.

Attendance Policy: Attendance will be determined at the beginning of each class period. If you are late, it is your responsibility to make sure that the instructor marks you as present AFTER the class period is over. ATTENDANCE IS MANDATORY. This class meets only once every week, and if you miss that day you will have missed the equivalent of three college hours. **Note:** The instructor must be notified within 24 hours of any absence and it will be at the instructor's discretion to accept assignments for delayed grading.

Some Tips for Success:

If you are hoping for a good grade, you should consider the following guidelines:

- Attend class regularly. There will be supplemental information that you will not find in the text book.
- Read the text (best in advance of the lectures). Take good notes on lecture and printed materials. If you have trouble understanding the text, maybe the lecture will clarify these points.
- Do the exercises, and answer the questions, this will clarify some things as well.
- If the material is still unclear contact me. The preferred ways for contact are either during my regular office hours or by email (the phone is the least reliable, especially if you call from a cell phone, my campus phone prevents me from calling certain cell

phone numbers). Do not hesitate to stop by regularly to clarify questions. If you are unable to come to office hours, it might be possible to set up an appointment with me.
- I'm willing to help.

Classroom Behavior:
- While I lecture please don't use the computer, talk with your classmates, sleep
- Also please try to be on time, don't mark on University-owned materials, mishandle the lab equipment, leave trash behind (except in the trash can) and turn of your cell phones and pagers

Should you have any special needs please don't hesitate to contact me after class, during office hours, by email or telephone

Week	Lecture Topic	slides #	Tutorial Source: VC or G	Quiz	Proj. #	Project Topic
1	Course Organization: Virtual Campus, Vista	11	VC1 Mod 1-3			
2	GIS basics	41	VC1 Mod 4-6			
3	Coordinate systems and map projections	35	VC1 Mod 7-8, G 13			
4	Data display and cartography	18	G 3-5c	x	1	map making
5	Data exploration and subsetting	20	G 8,11	x	2	subsetting data
6	Symbol mapping	16	G 6 a,c,d,19	x	3	symbol mapping
7	Vector data model	21	G 7,9	x	4	scale dependent display
8	Overlay and modeling	21	G 10,12	x	5	finding a new home (geoprocessing)
9	raster data	16	G 5d, 6b; 20	x	6	sea level rise
10	vector data input	26+6	VC2 Mod 1-2		7	finding a new home (overlay and modeling)
11	neighborhood trees - map trees (GPS, address and other attribute info), measure circumference at breast height		VC2 Mod 3-4		8	GPS exercise
12	Editing Features	30	G 14,15	x	TP	building geodatabases, digitizing
13	Geodatabases and attribute tables	27	G 16,17	x	TP	editing features and attributes, geocoding
14	Polishing the output	18	G 18,19		TP	
15	Presentations					

G: Getting to Know ArcGIS
VC1: Learning ArcGIS version 9: 8 modules
VC2: Creating, Editing, and Managing Geodatabases v. 9: 4 modules