

COURSE SYLLABUS
Geography 4940/7940: Geographic Information Systems II
Spring 2008

Instructor: Yingkui (Philip) Li **Office:** 9b Stewart Hall
Phone: 573-882-2879 **Email:** liyk@missouri.edu
Office hours: 11:00am-12:30 pm Monday and Wednesday, or by appointment
Lecture meets: Monday & Wednesday 10:00 – 10:50 am Stewart **107**
Lab meets: Friday 10:00 – 10:50 am Stewart 107

TA: Jeremiah Daniel Steele **Office:** 2 Stewart Hall
Email: jdsvyc@mizzou.edu **Office hours:** By appointment

Requirement: A thumb drive (> 512 MB) to store your personal work

Course Website: <https://courses.missouri.edu/>

Course objectives:

The GIS II will focus on two parts: GIS model (using modelbuilder) and command-line. The GIS model part will help students design the GIS spatial analysis using Modelbuilder. The command-line is to let students get to know basic skills of traditional ArcGIS workstation (ArcInfo). The fundamental goal of this course is to help students resolve their own interested geospatial issues using GIS. The course will use class discussions, lab assignments, group project assignments, and final projects to show students how to resolve these issues using GIS thinking and methods.

Prerequisite: GEOG 4840/7840 Geographic Information System I

Course Goals and anticipated learning outcomes:

- Identification of methods, limitations, and potential in using GIS to resolve geospatial issues.
- Ability to design and perform GIS operations for your own studies or work.
- Further development of GIS, computer, and presentation skills.

Grading System:

Lab and group projects	40%
Midterms	30%
Final Project	30%
Total	100%

Basic final grade for the course will be calculated as follows:

Graduate students: A: >= 90%; B: 80-89%; C: 70-79%; D: 60-69% F: <60%
Undergraduate students: A: >= 93%; A⁻: 90-92%; B⁺: 87-89%; B: 83-86%; B⁻: 80-82%
 C⁺: 77-79%; C: 73-76%; C⁻: 70-72%; D: 60-69%; F: < 60%

Course Policies:

Attendance: Attendance is critical to your success in this class. Although I do not explicitly assign a portion of your grade based on attendance, I will keep track of your attendance and your record will be considered in the case of borderline grades.

Exams: Exams will consist of two midterms during the semester. Exams will consist of multiple choice, short answer, and essay questions covering all lectures, lab exercises and group projects. Exams must be taken on the designated day unless prior arrangements have been made. An unexcused absence on the day of the exam will result in a grade of zero.

Lab assignments: The GIS labs are very important for this course. All students are required to attend all lab sessions and finish the lab assignment by themselves. Generally, there will not be enough time to complete the lab exercises – these are to be completed outside of class. The lab hours (Stewart 107) are posted outside the door. In addition, the lab will be staffed during a couple nights of the week.

Group projects: We will have assigned group projects. All students are required to attend and contribute their group projects. Generally, there will not be enough time to complete the assigned projects – these are to be completed outside of class. After finishing the projects, each group will write a project report and present their results in the class and the project will be evaluated by the instructor, TA and other students. The contributions of each student in the group will be evaluated by the students in the group as well.

Final Project: The final project will allow you to apply what you have learned to a geospatial problem of your choice. Expectations for the project will be greater for graduate students than undergraduate students. It is expected that time will be spent during lab time, as well as outside lab time, in order to complete the project. The final results will be a paper and each final project will be presented during the last week of the semester.

Students with disabilities: If you have a disability that requires some special accommodation, please make an appointment (*with the letter from the Disability Services*) within the first three weeks of the semester for a visit to my office to discuss the appropriateness of the instructional methods in this class, or any academic adjustments that you may need. To request academic accommodations, students must register with Disability Services, AO38 Brady Commons, 882-4696. It is the campus office that is responsible for reviewing documentation provided by students requesting academic accommodations and for accommodations planning in cooperation with students and instructors, as needed and consistent with course requirements. Another resource, MU's Adaptive Computing Technology Center, 396-2380, is available to provide computing assistance to students with disabilities.

Cell phones, Headphones and other electronic devices: Please turn off cell phones during the class time. Headphones and other electronic devices are not permitted in class.

Academic dishonesty: Cheating, plagiarism, and other forms of academic dishonesty will not be tolerated. Please refer to pages 9-13 of the M-Book for details regarding the University's policies on academic dishonesty (<http://www.missouri.edu/~mbook/mbook.pdf>).

COURSE OUTLINE

Week	Date	Lecture	Lab/Group project	Final project
1	01/23-25	Course intro, intro GIS	Lab1	
2	01/28-02/01	GIS model-builder	Lab2	
3	02/04-08	Binary and Index model	Lab 3	
4	02/11-15	Proximity analysis	Lab 4	
5	02/18-22	DEM watershed delineation	Lab 5	Assign final project proposal
6	02/25	Midterm I	<i>Group projects</i>	
	02/27,29	<i>Group projects</i>		
7	03/03-07	<i>Group projects</i>	<i>Group projects</i>	
8	03/10	<i>Group projects</i>	Group Presentations	First version of proposal due
	03/12, 14	Group Presentations		
9	03/17-21	Command-line intro 1	Lab 6	
10	03/24-28	Spring break (No class)	Spring-break (No lab)	
11	03/31-04/04	Command-line intro 2	Lab 7	Proposal review due
12	04/07-11	Command-line intro 3	Lab 8	Final version of proposal Due
13	04/14-18	Command-line intro 4	AAG (No Lab)	
14	04/21	Midterm II	Final project	
	04/23, 25	Final project		
15	04/28-05/02	Final project	Final project	
16	05/05-09	Final presentation	Final presentation	Final paper due
17	05/12-16	Proposed Final presentation		

- This schedule is a work-in-progress, updates will be posted every week on the Blackboard
- While the specified topics will follow this order, dates may change due to uncontrollable circumstances
- All readings are from the required textbook, except where noted