

GIS 245 MAPS AND SPATIAL INFORMATION

CREDITS: 4

TIME: 6:00 - 8:20 Tuesday and Thursday - CRN 21951

ROOM: Center Building Room 455

INSTRUCTOR: Lynn Songer

OFFICE: Center 410

OFFICE HOURS: Tuesday and Thursday, 1:00 - 2:00. or by appointment

EMAIL: songerl@lanecc.edu

TEXT:

1. *Map Use: Reading Analysis Interpretation* by: Kimerling, Muehrcke, Muehrcke, Fifth edition
2. *Mastering ArcGIS 9.3* by: Maribeth H. Price

Course Description: This course will provide an introduction to the cartographic principles needed to understand geographic information science. The course will explore global reference and coordinate systems, maps and generalization, types of maps: reference, thematic, topographic, aerial photography, and GIS. During the course, students will be introduced to ArcMap. It is assumed that students have no prior knowledge about GIS. This course serves as a foundation course in the GIS sequence. The course assumes participants have taken CIS 101 Computer Fundamentals, or CS 120 Concepts of Computing, or have an equivalent understanding of basic computer literacy concepts, and have experience as a user of the Windows operating system and applications software.

GRADES: Based on 400 total possible points

360 - 400 A

320 - 359 B

280 - 319 C

240 - 279 D

Americans with Disabilities Act: Lane Community College promotes equal educational opportunities for students with disabilities. If you need support or assistance because of a disability, you may be eligible for academic accommodations through Disability Services. For more information, contact Disability Services at (541) 463-5150(voice) or 463-3079 (TTY), or stop by Building 1, Room 218.

Week	Class Focus	Activities	Points
S/O 28 - 1	Chapter 1: Earth and Earth Coordinates Chapter 2: Map Scale	Lab Intro – Computer skills Lab 1 - ArcMap -	10
Oct. 6-8	Chapter 3: Map Projections Chapter 4: Grid Coordinate Systems Using a GPS	HA -Price Chapter 1 Lab 2 – Projections	10 10
Oct. 13-16	Chapter 5: Land Partitioning Systems	Lab 3 – SPLSS	10
Oct. 20 -22	No Lecture this week – Open lab	Lab 4 – Price Chapter 2 Tutorial and Exercise	10
Oct. 27 -29	Chapter 6: Qualitative Maps Chapter 7: Quantitative Maps EXAM 1 October 29	Lab 5 – Qualitative vs. Quantitative EXAM	10 100
Nov. 3-5	Chapter 9: Remote Sensing – Image Chapter 8: Relief Maps	Lab 6 – Google Earth Lab 7 – Remote sensing Lab 8- GPS – Park Map	10 10
Nov. 10-12	Chapter 10: Map accuracy Ethics Debate	Lab 8 – Park Maps HA Price – Chapter 3 Debate summary	30 10 10
Nov. 17 -19	GIS and Analysis	Lab 9 – Buffers	10
Nov. 24	EXAM 2 November 24	EXAM 2	100
Dec. 1-3	Final Project	Final Project	40
Dec 8	Project presentations	Various mini quizzes	20

Class structure: The GIS 245 class is designed as a lecture and laboratory class. Each week we will have some lecture and some lab time. Typically, there will not be time to complete assignments during class time. However, there will be open times during the week where you can use the lab and you will be given a copy of the Environmental Systems Research Institute (ESRI) ArcView software.

In the first few weeks of the term the lab activities will loosely correlate with readings from the primary text, *Map Use: Reading Analysis Interpretation*. The last few weeks we will still have lectures, but the lab activities will be more project-based.

This is only the second time this course has been offered at Lane, so expect some glitches. My goal is to make the course as hands on and relevant as possible awhile meeting the course goals. This will need to be done while adjusting to the inevitable software and hardware issues that arise in most lab

experiences and when GIS software in particular. So, patience, flexibility, and a sense of humor will be important traits of success.

The software we are using can be quite difficult to master. At the strong suggestion from last year's students to have a technical reference, we have ordered a second text, *Mastering ArcGIS 9.2*. This text is used in many Introductory GIS courses across the country. While we will not focus on this text it will be an important reference manual for you. Included in the text is a CD with videos, labs, and lab data. It will be used and referred to in the subsequent GIS classes.

Open lab time:

TBA

Software:

1) Price – CD with lessons and data.

2) The ARcEditor student software comes with a one-year license. It is designed for a PC, but student with Mac's were able to use it if they had access to one of the Windows -based Tools Parallels or Bootcamp.

Platform PC-Intel Operating System Windows Vista (Ultimate, Enterprise, Business, Home Premium), Windows 2000, or Windows XP (Home Edition and Professional) Memory 1 GB RAM Processor 1.6 GHz

Assignments:

Each lab assignment will have a due date. I will try to make them due at the beginning of the week on Tuesday so you will have the weekend to finish up. I believe that due dates are important and will reduce your score by 20% points a day for late assignments.

Communication:

Your email - It is important for you to have an email account that is active. I will send out announcements by email and via Moodle. Do not assume that Lane has an active or correct email account for you. Additionally, make sure your email name is appropriate for a professional setting. I often have people who are interested in student interns and your email name may be their first impression of you.

My email: I get close to 100 emails a day. Many I do not open because I don't have time and the tag lines don't help me sort out what is important.

1. Please use the class name in the RE box along with your last name.– GIS245 – Songer
2. Please be polite and start with some type of greeting. (Hello Dr. Songer, Good Morning Professor Songer). And end with some closing (Thanks, Joe Smith).
3. I do not answer emails every day – So do not worry if I don't respond immediately.

Moodle

I will be using Moodle a course management system. If you are familiar with Blackboard it is similar in "intent". I will post the labs and other documents you will need on this site. There will also be a student help forum set up so you can share information and get help from each other.

To access Moodle, click on the link in the lane web site or type in the URL
<http://moodle.lanecc.edu/fall2008/> You will need to enter your L number and Pin →

You have to include the L → Select your class → hit the Profile button



Login

L-number

PIN

Log in using your ExpressLane L-number (L plus eight digits) and the *first six characters* of your PIN.

Lynn Songer

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General [* Show Advanced](#)

First name Lynn
Last name Songer
Email address*
Email display
Email activated
City/town*
Select a country*
Timezone
Preferred language