

Intermediate ArcGIS 9.3

Geography 119B, Spring 2009

Class Time: February 28 and March 7, Saturday 8:00 am- 4:30pm

Location: Butte 501

Office hour: 4:30-5:00 after class - Butte 501, TTh, 9:30-10:16, Feb. 3-March 12. - Butte 626, or by appointment

Instructor: Chris Lewis **Contact:** Email Address: cclewis@csuchico.edu phone: 898-4774

Course Description

This class will use a number of learning activities to practice skills from the Introductory ArcGIS class to become more skilled in using ArcGIS 9. New functions will be introduced including the use of the geoprocessing tools, modeling, geocoding and the Spatial Analyst extension for working with raster GIS data. Topics will include: project organization & workflow, projections, raster GIS, cartography in ArcGIS, data sources, and metadata development. Class will be divided into approx. 1/4 demonstration, 3/4 hands-on.

Prerequisites

Geography 119A, or equivalent (with instructor permission)

Course objectives

- List the steps in a GIS analysis
- Organize a project file structure.
- Download data from the internet, unzip it and import it into ArcGIS.
- Review and update metadata
- Use a variety of data sources in a project with an understanding of issues regarding projection, resolution and accuracy.
- Heads-up digitize from an air photo
- Use the ArcGIS help and knowledge base
- Work with Rasters in Spatial Analyst
- Know difference between recreation, mapping and surveyor grade GPS units.
- Become familiar with ArcGIS Resource Center and Knowledge base

Required Text/Materials

- ESRI Virtual Campus: "Learning ArcGIS 9", modules 6 & 7, & "Working with Rasters", module 1, (Students responsible for printing exercises for module 7 and 1) instructor materials.
- USB or other back-up device with at least 20MB available. Students from the GIS in Health Policy and Planning have the option to replace module 6 with module 6 or 7 in the Health Tutorial.

Assignments/Exercises

Most of the exercises will be completed in class, but some will require time outside of class to complete. Therefore, you may need to plan some time in the lab during the week to complete or review assignments. The open lab schedule is on the wall by the door.

Grading

Course Modules 6,7: 150 each (quiz scores)	300 points
Geocoding/hyperlinks activity	150 points
Project Management & Workflow activity1	200 points
Project Management & Workflow activity2	200 points
<u>GPS/GIS integration</u>	<u>150 points</u>
TOTAL CLASS POINTS	1000 points

Incomplete given for serious and compelling reasons only, at the discretion of the instructor.