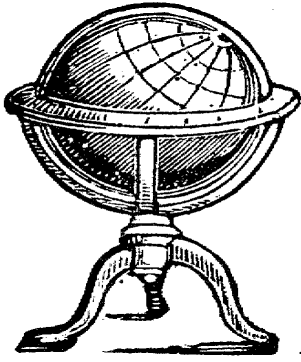


Advanced Cartography - Geography 413 - Spring 2012

Course Objective:

The purpose of this class is to build upon and expand student cartographic knowledge and technical expertise. The course is intended to strengthen student skills in cartographic theory, data visualization, data collection and conversion, and to prepare students for real world cartographic production. The class concludes with the production of a four color, press ready map.

Prerequisite:	Geography313, Introductory Cartography
Time:	Section 1: Tuesday & Thursday 2:00-3:15 pm
Location:	Department Computer Lab, Butte Hall 501
Course Fees:	\$20
Texts:	Adobe Flash Professional CS5 on Demand by Steve Johnson Server Based Course Readings
Recommended	Illustrator CS4 for Windows and Macintosh: Visual Quick Start Guide by Weinmann & Lourekas Photoshop CS4 for Windows and Macintosh: Visual QuickStart Guide by Weinmann & Lourekas
Instructor:	Steve Stewart
Office Location:	Butte Hall 508
Office Hours:	TTH 3:30 – 6:00
Telephone:	898.6089
E-mail:	SStewart1@csuchico.edu



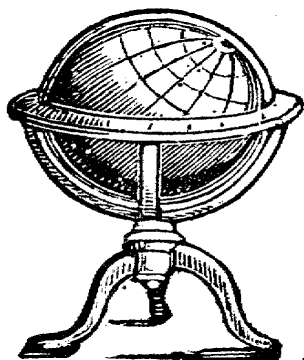
Outline of Assignments:

- ❖ Dispersion Map Revision
- ❖ Techniques Lecture
- ❖ Flash Project #1
- ❖ Flash Project #2
- ❖ GIS Conversion Map
- ❖ Multivariate Map

Overview:

At the introduction of a new assignment, a description of the assignment will be handed out in class and a copy placed in the homework folder under Geography 413. The description will contain the particulars of the assignment including the due date. This information will be reviewed in class (at the beginning of class) on the day the assignment is given. There will be two due dates for each project; the review date and the due date. On the review date, the student must submit a well developed draft of the map at the beginning of class for review by their peers. Failure to prepare for this review will result in a loss of 15 points from the assignment. These points can not be recovered so please be prepared. On the due date, completed assignments are expected by 4:30 pm. All late assignments will be penalized by the loss of points (five points per day including the first day if not turned in on time). An assignment that is late by 10 days, which is a loss of 50 points is not acceptable.

In addition to the technical aspects and readings of the course, there are server based readings as well as a packet of selected readings on various aspects of cartographic research. The instructor will assign these readings throughout the semester. A short quiz will be given or a reflection paper will be assigned to assess students' comprehension of cartographic theories as discussed in these readings.



Grades:

Each assignment, quiz or reflection paper will be worth a certain number of points that corresponds with the value of the activity or endeavor. Students will know the exact point value of assignments, quizzes and papers beforehand. The final grade for this class will be determined by dividing the student’s total number of earned points by the total number of points possible. In general:

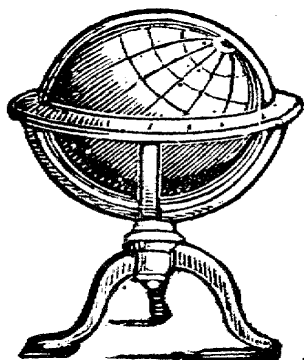
- Your techniques lecture is worth 40 points.
- Flash Project #1 is worth 25 points.
- Flash Project #2 is worth 50 points.
- The GIS Conversion Atlas Project is worth 100 points.
- The Multivariate Map is worth 100 points.
- Quizzes and review papers are worth 25 points unless stated otherwise.
- Peer reviews are worth 15 points.
- In class exercises are worth 10 points.
- Student technique exercises are worth 5 points. Student exercise points are deductive.

The class will have approximately 400 points possible.

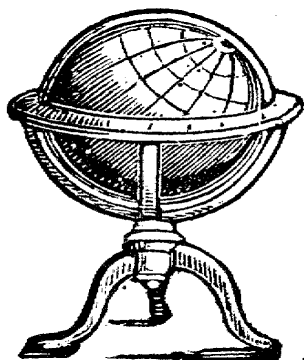
Tentative Class Schedule

The class schedule is subject to change at the discretion of the instructor

Dates	Section 01
Week One Vector Raster Review	Introduction Flash Project #1 <i>Readings Assigned: 1 – 4</i>
Week Two Color Review	Flash Project #1
Week Three Resolution	Flash Project #1 – Due Thursday



Week Four Flash	Flash Project #2 Quiz: Articles 1 – 4 plus Flash Terms <i>Reading Assigned: Articles 5 – 8</i>
Week Five Flash	Flash Project #2 <i>Mental Maps</i>
Week Six Flash	Flash Project #2 Flash Project #2 Due Thursday Student Techniques Exercises
Week Seven Text & Images	GIS Conversion Map Student Techniques Exercises
Week Eight GIS Conversion	Student Techniques Exercises Reading Quiz on Articles 5- 8
Week Nine Rest & Recuperation	Spring Break
Week Ten GIS Conversion	<i>Reading Assigned: Articles 9 - 12</i> Student Techniques Exercises
Week Eleven GIS Conversion	Student Techniques Exercises <u>GIS Conversion Map Review Thursday</u>
Week Twelve GIS Conversion	Student Techniques Exercises GIS Conversion Map Due Thursday
Week Thirteen Design & Research	Student Techniques Exercises Multivariate Press Project Assigned
Week Fourteen Design & Research	Quiz: Articles 9 - 12 Tuesday <i>Readings Assigned: Articles 13 - 18</i>
Week Fifteen Design & Research	<u>Multivariate Press Project Map Review Thursday</u>
Week	



Sixteen Design & Research	Multivariate Press Project Map Due Thursday
Week Seventeen Finals Week	Final Quiz: Articles 13 - 18

Outline of Packet Readings: Labs\Zenith\Classes\413\Readings

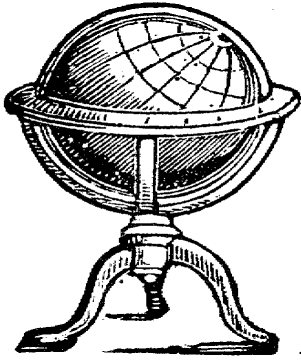
1. Making Maps ch7 – Intellectual and Visual Hierarchies
2. Making Maps ch 9 – Map Symbolization
3. Making Maps ch 11 – Color on Maps
4. Classification and Application of Cartographic Animation
5. Mapping Geography Landscape
6. Mapping Success: Reversing the Mathew Effect
7. The Eurocentric Nature of Mental Maps of the World
8. Learning from Cartograms: The Effects of Regional Familiarity
9. Sources of Error in a Map Series, or Science as a Socially Negotiated Enterprise
10. Cartography, Ethics and Social Theory
11. Politics on the Cartographers Table: The Helvetic Triangulation of Cartography, Politics, and Representation
12. Using Cross-blended Hypsometric Tints for Generalized Environmental Mapping <http://www.shadedrelief.com/hypso/hypso.html>
13. The Greatest Paper Map of the United States You'll Ever See http://www.slate.com/articles/arts/culturebox/2012/01/the_best_american_wall_map_david_imus_the_essential_geography_of_the_united_states_of_america_.html
14. Mapmakers Sleight of Hand
15. What's Up and Down at the USGS
16. The World on Your Desktop
17. This is Your Brain on GPS
18. Thinking Global
19. Cartography is Dead

Suggested Readings

For the Refreshing Your Memory

Readings Suggested: Illustrator CS4 ch 5, 23, 24

Readings Suggested: Photoshop CS4 ch 1, 2, 3, 23



For the Flash Assignment

Readings suggestion Flash CS5 ch 1, 2, 4, 7-9, 11, 14

For the GIS Conversion Assignment

Readings Suggested: Illustrator CS4 ch 16, 17, 19, 25-32

Readings Suggested: Photoshop CS4 ch 6, 8, 12, 13, 27, 32, 33

Cartographic Links:

Color Brewer:

<http://colorbrewer2.org/>

Type Brewer

<http://www.typebrewer.org/>

Map Library – Perry Casteneda

<http://www.lib.utexas.edu/maps/historical/>

History of cartography and GIS:

<http://www.gisdevelopment.net/history/1950-1960.htm>

National Atlas Home Page

<http://nationalatlas.gov/>

Zillow Real Estate Appraiser

<http://www.zillow.com/>

EPA Enviro-Facts Pages

<http://www.epa.gov/enviro/>

Cartographic Web sites:

Topographic Maps:

<http://www.topozone.com>

Color Landform Atlas of the US:

<http://fermi.jhuapl.edu/states/states.html>

Shaded Relief Map Tutorial:

<http://www.shadedrelief.com/>

Cartography and Geographic Information Society

<http://www.cartogis.org/>

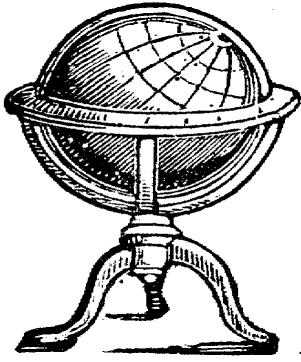
Flash Examples

Map of Metal

<http://www.mapofmetal.com/#/home>

Studio Map

<http://www.tcm.com/moguls/#/studiomap>



NGS Prehistoric Timeline

<http://science.nationalgeographic.com/science/prehistoric-world/prehistoric-time-line/>

The Devil's Highway

<http://devil.ucdavis.edu/>

NGS Earth Pulse

<http://www.nationalgeographic.com/earthpulse/>

Adobe's Flash Site

<http://www.adobe.com/products/flash/>

Best of Flash Site

<http://www.bestflashanimationsite.com/archive/>

Data Links:

Natural Earth

<http://www.naturalearthdata.com/>

California Natural Resource GIS Data:

<http://www.ceres.ca.gov/>

California Spatial Data Library

<http://atlas.ca.gov/>

USGS Home Page

<http://www.usgs.gov/>

USGS Data Center

<http://eros.usgs.gov/>

GIS Data Depot

<http://data.geocomm.com/>

USGS 1km World Data

http://eros.usgs.gov/#/Find_Data/Products_and_Data_Available/gtopo30_info

USGS NED data

<http://seamless.usgs.gov/>

Links of Links:

http://www.cgrer.uiowa.edu/servers/servers_references.html#interact