



Course GISC 4326 501: Cartography and Geovisualization
Instructor Dr. Yongwan Chun
TA Lan Hu
Term Fall 2016
Meetings M/W 1:00pm – 2:15pm, GR 3.206

Contact Information

Office Phone 972-883-4719
Office Location GR 3.208
Email Address ywchun@utdallas.edu
Office Hours Tuesday 9:00am – 11:00am or by appointment
Lecture materials will be uploaded on eLearning.
Other Information Email contacts are strongly recommended. I do not read eLearning emails so contact me through my UT Dallas email.

TA Contact Information

Office Phone 972-883-2908
Office Location GR 3.414
Email Address lxh152030@utdallas.edu
Office Hours Monday 3:00pm – 5:00pm or by appointment
Other Information Email contacts are strongly recommended.

General Course Information

Pre-requisites, Co-requisites, & other restriction GISC 2301: Introduction to GIS or equivalent knowledge (or GEOS 2301, GEOG 3304, GEOS 3304, or GISC 3304).

Course description This class examines the theoretical concepts and practical implications of cartographic and geographic visualization. Topics covered in lectures include concepts for geographic data representation, symbolization, and map design; methods for geographic visualization tools and display. 3D visualization, cartographic animation, and web based mapping can be also included. Through lab sessions, the implementation of cartographic and geographic visualization is explored with industry standard GIS software.

Learning Outcomes

- Understand the theoretical concepts and methods of cartographic and geographic visualization
- Produce outstanding visual representation of geographic data using current geographic visualization tools
- Implement basic geographic visualization tools using industry standard software

Required Texts & materials Slocum, T. , R. McMaster, F. Kessler, and H. Howard, 2009,

Thematic cartography and geographic visualization, 3rd edition, Upper Saddle River, NJ : Pearson/Prentice Hall, ISBN: 9780132298346

Reading Materials Additional reading materials may be distributed through eLearning or email.

(Tentative) Assignments & Academic Calendar

Week	Date	Topics	Reading
1	8/22 8/24	Introduction, map data structure Lab1: Introduction to ArcGIS	Ch1
2	8/29 8/31	Coordinate systems and projections I Coordinate systems and projections II	Ch7, Ch8, Ch9
3	9/05 9/07	Labor day (no class) Lab2: Exploring projection	Ch7, Ch8, Ch9
4	9/12 9/14	Map symbolization Lab3: Census mapping	Ch5, Ch10
5	9/19 9/21	Data Classification and Multivariate data Lab4: Data exploration	Ch4, Ch14
6	9/26 9/28	Multivariate mapping and classification Lab5: multivariate mapping	Ch4, Ch18
7	10/03 10/05	Map design Take home assignment	Ch11, Ch12
8	10/10 10/12	Review for midterm exam Midterm exam	
9	10/17 10/19	Interpolation Lab6: interpolation	Ch16
10	10/24 10/26	3D Analysis and visualization Lab7: 3D visualization	
11	10/31 11/02	Cartogram and Flow mapping Lab8: Cartogram	Ch19, Ch23
12	11/07 11/09	Dasymetric mapping Lab9: Dasymetric mapping	Ch15
13	11/14 11/16	Map animation Lab10: map animation	Ch21
14	11/21 11/23	Winter break (no classroom meeting)	
15	11/28 11/30	Internet GIS and Web mapping Lab11: web mapping	Ch24
16	12/05 12/07	Review for final exam Final exam	

* Additional reading materials may be provided

** Schedule is subject to change

Course Policies

Grading (credit) Criteria	Lab assignments: 40% Midterm exam: 20% Final exam: 30% Take home assignment: 5% Class attendance and participation: 5%
Make-up Exams	No make-up exam and/or project will be given without a legitimate excuse accompanied by proper formal documentation (e.g., a doctor's excuse).
Extra Credit	May be given to optional lab assignments.
Late Work	Late submission will be penalized for 10 % per day being late. Late submission after one week since the due date will not be graded.
Class Attendance	Class attendance is mandatory and will be taken in various forms including in-class quiz. Students are expected to arrive to class on time and to participate in class discussion properly and actively.
Classroom Citizenship	Students arriving to a class session after it has begun are expected to enter quietly and take a seat in the least disruptive manner: students leaving a class session early are expected to do so in the least disruptive manner. Students are expected to display a positive attitude toward learning by conducting themselves with civility, respect for others (e.g., sharing thoughts and actively listening to the thoughts and comments of peers and the instructor), and general good, courteous behavior, including not engaging in cell phone (which should be turned off), personal movies/TV and personal newspaper (or other reading materials) usage, and not participating in social discussion groups during class time.

Note: Students must read other syllabus policies (including plagiarism, disability service, religious holydays, and email use), which are available on <http://provost.utdallas.edu/syllabus-policies/>. There descriptions/timelines are subject to change at the discretion of the instructor.