Instructor:
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HS 252
Office hours: MTWR, 8:00-9:00am; T 12:30-1:30pm

Prerequisites:
Completion of GEOG 205

Required Text:
TBD

Course Description:
This course provides students with the opportunity to work independently on a GIS project. Students will use GIS skills to collect data, model and analyze complex spatial relationships. **Before enrolling** students must have computer skills, knowledge of geo-referencing, coordinate systems, process of data capture, data management and analysis, and the skills necessary to produce a GIS map. This course is intended for Geography/GIS majors and persons interested in using GIS in professional settings.

Students will be able to:
1. Describe the nature and types of spatial data needed for their project.
2. Collect spatial data and construct a working database.
3. Identify appropriate applications for various statistical measures when analyzing spatial data.
4. Design methods for solving geographic problems and analyzing spatial data using GIS.
5. Apply analytical skills and the use of statistical methods to resolve spatial questions using GIS.
6. Create a final GIS project.

Grading Breakdown:
The grading will be based solely on the successful completion of a GIS project meeting the following standards and timetable (A = 90-100%; B = 80-89%; C = 70-79%; D = 60-69%; F = 0-59%).
**Policies:**

1. Appropriate college behavior is expected. If you disrupt those around you with personal conversations during lectures you will be asked to leave. Please respect others in the class.
2. Assigned readings must be completed prior to each class. Students should plan on spending at least one to three hours outside of class for every hour of lecture reading & reviewing assigned materials.
3. The prerequisites are important! I will expect college level reading, writing, and thinking throughout the class.
4. Late work will be docked 20% and can only be turned in within one week of the due date.
5. Students are expected to adhere to all standards of academic integrity. In particular, failure to submit independent work (i.e. plagiarism or cheating on tests) can be grounds for severe sanction including expulsion from the college. See the AVC College Catalog or Student Handbook for more information on the definition and consequences of plagiarism.
6. You must drop the class if you indeed intend to drop it. With the exception of missing the first week, I will not drop for you. You will receive an “F” if you simply stop showing up and fail to successfully complete any assignments or exams.
7. If you have a legally protected disability under the Americans with Disabilities Act (ADA) or California discrimination law, and you believe you need reasonable accommodation to participate fully in this class, please make an appointment to see me during my private office hours to discuss your need.

**SLOs**

The Student Learning Outcomes (SLOs) defined for Geography courses can be found on the AVC website at:

http://www.avc.edu/administration/organizations/slo/msslos.html#geography
YOUR PROJECT

Your project will include the following:

1. Introduction – This identifies the general topic area and scope of the project. If you are working for a client, identify the client and discuss general client background.
2. Thesis statement – This statement will guide your project and let the reader know exactly what you hope to accomplish with your work.
3. Identify project needs – This includes a detailed discussion of project goals and objectives. Make sure to identify the specific issues that will be studied, discuss exactly what questions will be answered, what functions will the GIS perform, how long will the project last, who your intended audience is and what format the final product will take.
4. Develop suitable model – You must develop a methodology or model to explore or analyze the data. This can be simple or complex, depending on the scope of your project.
5. Data collection – this can begin after identifying project needs and models to be used. Issues to be addressed at this time include accuracy, data resolution, and projections. Describe the data acquisition process. Describe what types of data will need to be acquired, how it will be acquired, and transformation into usable formats. The sources of your data should be documented using standard metadata formats.
6. Perform analysis – During this phase of the project it is not unusual to discover problems with lacking or insufficient data or with the model that you have chosen requiring you to rethink steps 3 and 4.
7. Presentation – No project is complete until the results are presented or published in some form. You must complete a paper detailing the above steps, with at least one attached map or table (more are certainly welcome), and give a PowerPoint or PDF based presentation to the class on the final night.
8. References, data sources, & metadata – The final paper must include at least five references/outside sources from white papers, journals, or books and cited properly (using the style of your choice: MLA, Chicago, etc.).

Week 4 (Friday February 28, 2014) – Initial project report due
The initial project proposals will have detailed descriptions outlining your GIS project, focusing on steps 1-3. This document must be typed with the amount of details to reflect the amount of units attempted (1-2 pages is a good start).

Week 8 (Friday, March 28, 2014) – Written report of progress on data collection due
Submit one page detailing how much data you currently have, still need, can’t find. Also submit any changes to the Initial Project Report.

Week 12 (Friday, May 2, 2014) – Written report of progress on analysis due
Submit one page detailing how your analysis is progressing. Document any problems, concerns, and changes to any of the above submittals.

Week 16 (Tuesday, May 27, 2014) – Final paper and presentations due