# GIST 1140 GIS CAPSTONE PROJECT REQUIREMENTS

## PROJECT PROPOSAL

Initial project proposal submitted in module 3. Please review and revise the proposal, and submit the proposal to the instructor in module 6. Highlight all areas of change on the proposal. Place a copy of your proposal in the GIST 1140 Capstone Project folder as described on page 2 of this document. (10 points)

## DATA PREPARATION REPORT

Please fill in the data preparation report and submit for grading. This report should also be placed in your project folder. (10 points)

# WEEKLY PROGRESS REPORT

Every week the student will be required to complete a progress report of his/her accomplishments on the project for the week. Demonstrable progress. Can you produce evidence that you have been able to make steps towards your goals?

A weekly progress form will be provided for the student to fill in. (10 Points)

## POWERPOINT PRESENTATION AND FINAL REPORT

The student must create a PowerPoint presentation and a written final project report.

The PowerPoint and report should include the following:

* + - Introduction
    - What your project is and why you chose it?
    - What information were you trying to obtain by doing this project?
    - Present the data and your findings.
    - Describe where you obtained your data and information.
    - Describe any problems you may have encountered with your project.
    - What conclusions were you able to make by doing this project?
    - Closing statement
    - Citations to include the websites and/or locations of where data use in the production of your project was obtained.
    - All PDF maps should be included in the PowerPoint and written report.
    - For the written report you will also need to include a title page. (40 Points)

## PROJECT DATA

GIST 1140 CAPSTONE PROJECT FOLDER

On the N: drive inside the GIST 1140 folder create another folder titled “GIST 1140 Capstone Project”. All data related to the project must be stored in this folder. This includes proposal, reports, PowerPoint, geodatabase, mxd’s and all other data related to the project. Basically, put everything you do in this folder. (10 points)

### CREATION OF A GEODATABASE WITH FEATURE CLASSES

All shapefiles used must be imported into the geodatabase which will convert them into feature classes. Use

ArcCatalog to complete this task. Do not use Windows Explorer! (20 points)

### SPATIAL ANALYSIS AND GEOPROCESSING TOOLS

**Spatial Analysis** The process of examining the locations, attributes, and relationships of features in spatial data through overlay and other analytical techniques in order to address a question or gain useful knowledge. Spatial analysis extracts or creates new information from spatial data.

**Geoprocessing Tools** ArcGIS tools that can create or modify spatial data, including analysis functions (overlay, buffer, slope), data management functions (add field, copy, rename), or data conversion functions. <http://support.esri.com/en/knowledgebase/Gisdictionary/browse>

The use of spatial analysis and geoprocessing tools must be present in your project. (20 points)

### FINAL MAP ELEMENTS AND PDF’S

Any maps you produce for your final project should include the following items: (5 points each)

* Title
* North Arrow
* Projection Information
* Legend
* Scale Bar
* Name/Date/Class

Any maps you produce for your final project should include the following items: (Note: If more than one map is provided, the instructor will choose the best map to grade.)

Title, North Arrow, Projection Information, Legend, Scale Bar and Name/Date/Class (30 points) + (20 Points) for design appeal and clarity. (50 points total)

PDF’s must be created for every map you create.

### THE SIX C’S RUBRIC

Part of the evaluation process by the instructor will include evaluating your project on the six C’s.

The six C's is designed to emphasize both the technical and artistic aspects that are essential to making effective maps. It is easy to make maps with GIS, but making good and effective maps requires careful thought and skill. Cartography is a skill you can learn and need not become a lost art.

#### The 6 C's and their definitions are:

Colorful - An effective use of color to distinguish features and emphasize key aspects of your map.

Creative - (but not confusing) There are lots of creative ways to display your geographic data and analyses

Correct - All analyses, calculations and labels are correct

Context - (location, coordinates, projections, scale, orientation, setting) All maps should have enough context for the user to discern where it is, what it is about, and what the scale is within the context that its presented (e.g. stand-alone map vs. within a report).

Convincing - All maps have a purpose, and your map should be effective at conveying the message it is intended to.

Consistent - There should be logical, graphical and typographic consistency both within a single map and amongst multiple maps in the same assignment or project.

[http://gis.joewheaton.org/about/grades#TOC-The-Six-C-s-Rubric](http://gis.joewheaton.org/about/grades%23TOC-The-Six-C-s-Rubric)

### PROJECT GRADING CRITERIA

Refer to the course calendar for the due date of project.

Total Points - 200

Project Proposal – 10

Proposal Revisions - 10

Data Preparation Report – 10 3 Weekly Reports – 30

PowerPoint Presentation – 20

Project Report – 20

PDF Final Map – 50

Project Folder – 10

Geodatabase – 20

Spatial Analysis and Geo-processing Tools – 20

**You must complete the final project. If you do not complete the project, a deduction of 100 points will be subtracted from your overall grade in the course.**

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