General Guidelines for Written Assignments

You will produce several documents for this class. Through these, we seek to improve your writing skills. These reports should be professional documents, similar to those you may well be writing during your career.

We will provide rough guidelines for each writing assignment in separate instructions, detailing approximate length, sections, and content.

Your goal is to generate clear, readable, concise, but complete documents. Each should have a Title, pages must be numbered, and consist of a coherent sets of paragraphs organized under suitable headings. Your documents should be free of spelling and grammatical errors. The quality of the writing counts.

Each written exercise is to be a stand-alone document, directed at an individual that does not have any familiarity with your work or the topic. Assume the individual has a basic knowledge of GIS. You do not have to define terms such as metadata, buffer, digitize, or GPS, but you do have to describe the goals, motivation, location, and other important details for each assignment. Write each such that a person unfamiliar with the setting, question, and geography of your activity would be able to understand what you did, repeat the procedure, and believe your statements or conclusions. Some insights into the important factors and the general conclusions you draw from your analyses should be included.

You should describe your specific methods so that a person can evaluate or repeat your actions, but in a general way. For example, you need to indicate the target number of GPS position fixes per point, or the date and source of the images you used for digitizing, the snap tolerance, and other defining characteristics of any methods used during data collection. You should not describe the buttons you pushed on the GPS receiver, the name of each file you created, nor the specific ArcGIS commands and their sequence.

The methods section should not be a chronological narrative. By this I mean do <u>NOT </u>write in a style similar to:

"First I used the buffer function to buffer roads with buff_dist of 30 and saved these in a file named rdbuf1, then I did the same with a buff_dist of 60 and saved that in rdbuf2, then I did the same with a buff_dist of 90 and saved it in rdbuf3. Then I used the overlay function with rdbuf1 and rdbuf2 and saved that in rdbuf_comb1."

Rather, use the more general:

"Road buffers at various distances were required for my analysis. Roads were buffered at 30, 60, and 90 meter buffer distances. Resultant layers were overlain to create a nested set of buffer distances around roads."

Do NOT use the names of specific ArcMap operations, as in "I used the Buffer tool" or "the CON functions was applied in Raster Calculator." Rather, use the more general "I buffered point features .." or "Values were re-assigned using a conditional function…"

You will need maps, tables, and/or other figures for most of the documents. Some of these may be generated in ArcGIS, some with word processing or drawing software, and some may be screen captures. The most important graphics and tables should be embedded in the text. Additional graphics and tables may be included in an appendix. At a minimum, the body of each report should include graphics showing the general and specific study area you analyzed, and graphics for each main data layer used for each of your analyses.

You must include section headings, but there are no fixed set you must use, these vary by the writing assignment. In most assignments you need to introduce the work, identify the goals, and describe the activity focus. You need to describe the activities or methods. Perhaps the hardest part will be a succinct explanation of the analysis methods and results, followed by a discussion of the importance, significance, and reasons behind your conclusions.

All figures and tables should have headings, all maps should have scale bars, north arrows, and descriptive legends, and all figures, maps, and tables should be referenced in the body of the report.

Report due dates are in the course pages and assignments.

Some of the reports will require you to submit drafts, but you SHOULD NOT turn in your first draft. Rather, you should produce several "personal" drafts which you read and edit prior to each of the formal drafts you turn in. You should revise each draft, proofing and improving it yourself. You will also proof/evaluate another student's work for at least one of the assignments. You will not assign a grade to your peer. However, you will be graded on the quality of your recommendations of the other student's work.

I will emphasize the following criteria in evaluating each writing assignment:

Is the writing clear, concise, grammatically correct, and complete?

Is the report well-organized?

Was the work done well, meaning all data collected with apparent diligence, and the analysis appropriate and correct?

Are the work and report complete? Are all the parts there, including, appropriate figures, summary of metadata and/or other relevant information in appendices?

Does the report contain the appropriate amount of information? Is the report too detailed? , Is the report a personal narrative, or too vague?

Ask yourself the following questions: Are your methods described such that a person could reasonably evaluate what you did? Could they repeat your exercise, given they are adept with the hardware and software. Did you think about the results critically, and describe why you came to your results and conclusions? Did you think about how robust your results and conclusions were, and how different methods or approaches might change your results or conclusions? Are the graphics appropriate, informative, and attractive?