



## **GL 199 Hydrogeology Spring 2013 Research Paper**

### **Introduction:**

With a view to explore topics of interest to you in hydrogeology, you will work on a research project that may result in a research paper, case study or technology review. The relevant details on this project are as follows:

1. This is an individual project, so you will each work on your own.
2. Your final submission will be approximately 10 pages long, not including a cover page, and reference page, but including all figures, tables.
3. You will use Times New Roman and font size 12 and use double spacing between lines.
4. You may use any one of the APA, MLA or CMS styles in your writing as long as you are consistent. You can see the difference between these styles at [http://owl.english.purdue.edu/media/pdf/20110928111055\\_949.pdf](http://owl.english.purdue.edu/media/pdf/20110928111055_949.pdf)
5. The Kreitzburg library resources should be used in your research. All references must be from credible, peer reviewed sources. At least three references must be from peer reviewed journal articles, and at least two references must be from a federal or state agency publication. Web resources, if used must be credible and appropriately cited. For online research, tools such as “Google Scholar”, and “Scirus” are good starting points.
6. In addition to the Kreitzburg library resources, several other universities offer good online resources that are helpful for student research. An example is Purdue University’s Online Writing Lab. <http://owl.english.purdue.edu/owl/resource/658/1/>

### **Paper Sections:**

***Your paper must include the following sections:***

- Title page, your name, date
- Abstract – A one-two paragraph summary of the paper, which explains the topic of your choice and your findings based on the available research.
- Introduction – Make a case for why you selected the topic you did, its relevance and relevant literature reviewed.

- Main content – Should follow a logical thought process and be easy to read and understand. Include any relevant figures and tables, remembering to label these and reference them within the text of your paper.
- References – Be consistent in the use of your selected reference style.

Submissions:

To help you work on this project consistently throughout the semester, the following deadlines are provided along with the expectations of each submission:

1. Topic Choice and Approval Meeting:
  - a. Worth: 10 points
  - b. Due Date: Friday, January 25, 2013
  - c. Details:
    - i. You will email me your choice of topic and indicate whether you will write a research paper, develop a case study or work on a technology review
    - ii. You must email me this information at [tkulkarn@norwich.edu](mailto:tkulkarn@norwich.edu) by 4:00 pm of the due date. The subject of the email must be LASTNAME\_GL199\_PaperTopic
    - iii. Late submissions will not receive any points
    - iv. You will also sign up for a meeting on the appointment sheet posted on my door to discuss your topic with me and receive approval.
    - v. The 10 points will be awarded only if both parts of this process are followed.
2. Topic Outline and Summary of 3 references:
  - a. Worth: 30 points
  - b. Due Date: Wednesday, February 20, 2013
  - c. Details:
    - i. You will email me a detailed outline with section and sub-section headings based on your research so far.
    - ii. You will also include in the same submission, the citations for three peer reviewed journal articles that you will use in your research. These may be obtained from the Kreitzburg Library databases or other sources. If you find relevant articles in abstract form, but do not have access to the complete paper, let me know early enough, so I may help you locate the article.
    - iii. Each of the three references must be summarized in a paragraph for this submission.
    - iv. The final submission of the outline and three citations and summaries must be in one document titled "LASTNAME\_GL199\_Outline\_Ref.docx"

- v. The MS Word file must be submitted to [tkulkarn@norwich.edu](mailto:tkulkarn@norwich.edu) by 4:00 pm on the due date.
  - vi. No points will be awarded for late submissions.
- 3. Draft paper
  - a. Worth: 30 points
  - b. Due Date: Wednesday, April 10, 2013
  - c. Details:
    - i. You will submit your draft paper by email to me at [tkulkarn@norwich.edu](mailto:tkulkarn@norwich.edu) by 4:00 pm of the deadline. The submission must be titled "LASTNAME\_GL\_DRAFT\_PaperTitle"
    - ii. Set up a meeting (see appointment calendar) on my door to discuss your progress.
    - iii. I will provide feedback to you during our meeting to help you finalize your paper.
- 4. Final paper
  - a. Worth: 80 points
  - b. Due Date: Wednesday, April 24, 2013
  - c. Details:
    - i. You will submit your draft paper by email to me at [tkulkarn@norwich.edu](mailto:tkulkarn@norwich.edu) by 4:00 pm of the deadline. The submission must be titled "LASTNAME\_GL\_PaperTitle"
- 5. Presentation
  - a. Worth: 50 points
  - b. Due Date: On the day of your presentation (See table below)
  - c. Details:
    - i. You will prepare a PowerPoint presentation highlighting the important points from your research and present to the class on your assigned date.
    - ii. Your presentation will be graded by me and peer reviewed by your class.
    - iii. The PowerPoint is worth 20 points, your presentation is worth 20 points and the peer review is worth 10 points.
    - iv. On the day of your presentation, by 4:00 pm you will email me your PowerPoints presentation at [tkulkarn@norwich.edu](mailto:tkulkarn@norwich.edu). Name your file "LASTNAME\_GL199\_ProjectTitle"