ENGI 9605 Papers and Presentations Paper due Wed. February 5th, 2014 at 10:00 a.m. Presentation PowerPoint slides due Wed., February 26th, 2014 at 12:00 a.m.

Select a paper topic from the attached list and in consultation with the professor. The topic can be further refined after a preliminary literature search. The paper length is to be between 1500 and 2000 words. References are to be limited to between 6 and 12 English language journal papers published between 2010 and 2014. Any reference not directly obtainable from the MUN libraries should be included with your paper submission. The use of websites is discouraged for writing the paper. The paper should include your name, the paper title, an introduction, discussion, conclusion and a list of references used.

The use of websites is recommended for your preliminary topic search and is recommended for your presentation as it is a good place to find images. Images from websites must be fully referenced in your presentation. Practice presentations with a colleague are recommended before the presentation given in class as reading of notes is not recommended. The class size will influence the length of the presentations.

Web of Science, Google Scholar, Scopus and Compendex are four of the library data bases that could be most useful and the first three also show the number of times a paper has been cited. The QEII reference librarian for Engineering and Geological sciences is Ms. Dianne Taylor-Harding (Tel.: 864-4857) who can help with searching.

The Arial 12pt font is preferred as it is easiest for reading. Single spacing and 1 inch margins are preferred. The APA Style Guide (Style Guides link left column of Library Home page) should be referred to. Hanging indents are requested for listing the references.

When you are making a table, give the references in the last column or in footnotes. For a modified table from a single source, at the end of the table title and in brackets write "modified from ..." For a redrawn, unmodified table taken from a single source, at the end of the table title and in brackets write "redrawn from ..." If many references were used for a table of figure the information can also be explained in the text. Describe how a table or figure was obtained to get full credit for your work. Table titles appear above tables and figure titles appear below figures.

In class on Wed., January 22nd 2014, submit a hard copy with your name, your paper title, an abstract, an outline and your list of references. The final paper will be submitted electronically to the professor as a Word document (and as a PDF file if you prefer).

Marks for the final Report will be allocated approximately as follows:

- 50% for technical content and originality,
- 30% for readability, organization, cohesiveness, usage, style, and appearance
- 20% for satisfying the other requirements and for correct referencing

Possible Paper Topics

Trade in virtual water for sustainability

Water conservation for St. John's, Newfoundland

Slow sand filtration for water treatment with a case study

Wastewater treatment for potable water use with a case study

Prevention of membrane fouling

Treating (managing) membrane (reverse osmosis) concentrates (brines)

Antibiotics in sewage (wastewaters), resistance, transformation, fate and/or removal

Extracting phosphorus (phosphates, struvite) from wastewater for fertilizer use

Wetlands for nitrogen removal from wastewater

Emergency water supply

Silver nanoparticles or nanosilver for water disinfection

Seawater desalination and a case study (plant)