Dr. Laura Gross Spring 2015

Topic: The last writing assignment will address a problem you solved in another class. The class in question could be math or science, one of your current or past courses. The 300 or 400 level is preferred. Please seek prior approval if you wish to use a 100- or 200-level class.

Ideally you should apply the mathematics to a practical context. For example, you could write about a problem from graph theory as applied to analyzing a network. Equally appropriately, your writing goal could be to connect your other coursework with the content of MATH 416. For example, you could write about how a convergence proof from analysis relates to convergence in the mean-square sense from Fourier analysis. State and answer your question clearly.

- 1) **Sources:** Two sources are preferred. Please seek prior approval if you wish to use a single source. The source could be a course textbook or some other book or published scholarly article. You may wish to search the library's book collection and then browse the relevant shelves, or you may wish to browse the reference section at Maxwell library. You may also search databases at the Maxwell library site, such as MathSciNet, Credo, or Gale. A connection between your problem and current scholarly literature could provide you with a powerful example of mathematics as a discipline that is constantly growing and providing new insights to humanity. However, reference to *current* literature is not required.
- 2) **Length:** You should write more than what you wrote in prior assignments because your classmates and professor cannot be assumed to bring perspective to the material that is consistent with your own, as was possible on the prior writing assignments. Write approximately three pages.
- 3) **Submission:** Please upload a .zip file of your writing assignment to Blackboard 9. A .tex file and a .bib file are required, as well as any figure files you may have.
- 4) **Philosophy:** The philosophy here is to present you with a modest assignment to give you a framework for applying mathematics, applying your writing skills in mathematics beyond this classroom, locating/analyzing/synthesizing information, and using appropriate in-text citation in LaTeX using .tex and .bib files. If you feel you can better exercise these skills by writing a different document from the one described here, please see me before your topic and sources are due on Tuesday, April 21st. This assignment should be low pressure, not too overwhelming, and---yes---enjoyable and rewarding.