MA 302: Mathematical Engagement

As part of your grade, you are required to complete two mathematical engagement exercises. A mathematical engagement exercise is one of the following:

a: Attend a mathematics colloquium and write 1 or 2 paragraphs of summary and response.

b: Read one of the following articles and write 1 or 2 paragraphs of summary and response:

(1) Sections 8.1 - 8.3 of the *Vector Calculus Text*. You should focus on the definitions of the objects and the statement of Stokes' Theorem. You do not need to work carefully through the examples.

(2) Read Chapter 1, Lecture 2 in *A Mathematical Gift I* by Ueno, Shiga, and Morita. You do not need to understand all the details, just get the general idea and understand the statement of the Poincaré-Hopf theorem.

(3) Read Chapter 1, Lecture 3 in *A Mathematical Gift I* by Ueno, Shiga, and Morita. You do not need to understand all the details, just get the general idea and understand the statement of the Gauss-Bonnet theorem. (Lecture 2 is not a prerequisite for Lecture 3)

The last two selections are on reserve in the Olin science library.