

MATH 166

Semester Project

Summary: As a class, we are going to contribute to the ongoing development of a Calculus “manual” which future UWRF students may use as a reference. The main objective is to present your interpretation of some of the topics/themes we cover and to provide personal insights on your understanding of these topics. This will be done in narrative form. All of these narratives will be assembled into one “book” which we can either have bound and printed or published on the web.

Guidelines:

1. Self-select one to two individuals with which to work.
2. Select a topic from the course which you find interesting and worthy of discussion. Brainstorm some ideas about how you understand the topic, how you think it might best be explained to someone, some applications of the idea, etc. Note: Don’t “rush” to choose the first topic you see. It is far more important to pick something that piques your interest. At the same time, weigh your options carefully since the longer you wait to select a topic, the less time you will have to work on the narrative. You can think about the organization and presentation of your narrative long before you pick a topic.
3. The most important component of this project is to explain the essence or IDEA behind your topic (less important is the actual technical mathematics). You may make the narrative as “mathematical” as you’d like. Remember your audience: Future students enrolled in MATH 166/167/266 whose interest may need to be piqued upon reading about Calculus. **Reveal the conceptual heart of the mathematics.**
4. You might supplement your ideas with pictures, statements, theorems, etc. but it is not necessary. This is not intended to be an “airtight” textbook.
5. If you have an interesting idea, don’t hesitate to share. Your input may be more interesting than anything discussed here.

Odds & Ends:

1. Use font size 12, Times New Roman. This is simply to ensure that everyone’s contribution will have a similar appearance when we assemble the pieces into one unit.
2. Length of narrative?
3. Any other ideas? Too much uniformity stunts creativity!

What this project is not:

1. A textbook.
2. A dry & boring exposition of contemporary mathematics (see 1 above).

Wrapping up:

If you want me to look at your work in advance and/or provide feedback on an idea, don’t hesitate to ask! When you have proofread your narrative and you and your partner(s) are pleased with it, send an electronic copy to keith.nabb@uwrf.edu. I may make suggestions for revisions; I may not. A final copy should be ready no later than June 14.