

**MATH 407 Math Honors Seminar**  
**Dr. Boersma**  
**Winter 2014**

**Goals:** We will investigate the mathematics of iterations: the process of repeating the same operation over and over. We will start relatively simple (the iteration of linear functions) and progress to more complicated and challenging scenarios depending on our progress. This is not supposed to be a course on reading mathematical sources to determine what is known about the material. Rather, it is supposed to be a course where we work as a team to understand the interesting mathematics which underlies the topic under consideration. For us, we will be *discovering* the mathematics! We will follow through on the questions we feel are most interesting. We will make our own definitions and state our own conjectures and theorems. In essence, **we will do mathematics!**

**Office:** Bouillon 107E, phone: 963-1395, email [boersmas@cwu.edu](mailto:boersmas@cwu.edu). Office hours will be announced in class shortly. You may of course drop by anytime. If I'm not busy I'll be glad to talk with you.

**Required  
Materials**

1. The desire to participate in mathematical discovery and experimentation.

**Canvas** We will be using the course management system *Canvas* in order to keep our discussions alive and moving forward during the week in between our face-to-face meetings. By the time the quarter begins, there may be a direct link to Canvas from CWU's main webpage [[www.cwu.edu](http://www.cwu.edu)] under the wildcat connection menu at the top of the screen. Or, you should be able to go to Canvas directly by visiting [<https://canvas.cwu.edu>]. If you are registered for our course, you should be able to logon to Canvas using your standard Novel (CWU) username and password. Please try logging on right away so we can sort out any problems as soon as possible. Your first assignment should be available.

**Your Grade:** Your final grade in this course will depend on attendance, class participation, and your participation in the online discussions. Please come to class prepared and have a few ideas ready to share with others. If you miss a day, you may be required to hand in written "make-up" work. Each missed day that is not made up will result in your final grade being reduced by 1/6th of a letter grade.