

**MATH 407 Math Honors Seminar**  
**Dr. Boersma**  
**Winter 2018**

- Goals:** We will be investigating elliptic curve cryptography and the role it plays in electronic currency like Bitcoin.
- Office:** Bouillon 108E, phone: 963-1395, email [stuart.boersma@cwu.edu](mailto:stuart.boersma@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.
- Attendance** We only meet once a week, so attendance is very important. We will be exploring new material and having discussions which are hard, if not impossible, to make up. You will receive 2 points per day for attending each class. Note that our final exam period is a regular **class day** and attendance in required!
- Presentation** You are required to give one 10 minute presentation based on an investigation you conduct outside of class. You will need to choose an investigation from the list handed out in class (and available on Canvas).
- Your Grade:** Your final grade in this course will depend on attendance, in-class and out of class assignments, and a presentation:
- Attendance: 20%
  - Assignments: 60%
  - Presentation: 20%
- Mathematica** Mathematica is a powerful computer algebra system (the brains behind WolframAlpha). It is also very expensive! However, CWU now has a site license that allows all students to download Mathematica for their own use on their own computers. Please see [<http://www.cwu.edu/labs/>] for directions on how to obtain your own copy of Mathematica. I will periodically be using Mathematica to help with some of the computations related to elliptic curves and Mathematica will be very useful in many of the investigations we will be exploring. I recommend getting a copy for your own use.