

MATH 407 Math Honors Seminar
Dr. Boersma
Spring 2021

Goals: We will learn how three mathematicians unraveled the secrets of the German Enigma cipher machine.

Office: Samuelson 121-A, phone: 963-1395, email Stuart.Boersma@cwu.edu. Until further notice, I will not be holding regular office hours in person, so dropping by my office in Samuelson is not the best way to get a hold of me. Class and office hours will be held over Zoom (see below).

**Required
Materials**

1. The desire to learn how to build, use, and break Enigma ciphers.
2. A willingness to explore the mathematics of the Enigma cipher machine.

Canvas We will be using Canvas a lot this quarter. I will try to keep our Canvas course organized so it is clear when assignments are due and where you can find resources.

Your Grade: Your final grade in this course will depend on Attendance and Class Participation (30%) and your performance on the weekly Missions (70%).

Attendance Live zoom sessions will be held every Tuesday from 3:00 - 3:50 pm. This is a Math Honors Seminar. Thus, I will expect every student to make an effort to be “in class” at those times. We can use this time to discuss ideas that came up during the week, to touch base with one another, and to continue to explore how mathematics can be used to break messages encrypted with Enigma. Please let me know if a health problem forces you to miss too many classes.

Missions: In between our weekly meetings there will be activities for you to work on. Some of these you can work on and complete by yourself. Others will require you to work with a partner or small team. Treat these assignments seriously and complete them on time and you will do fine in the course.

Final grades Final grades will be assigned according to:

A :100% – 93	C+:79 – 77
A-: 92 – 90	C :76 – 73
B+:89 – 87	C-:72 – 70
B :86 – 83	D+:69 – 67
B-: 82 – 80	D :66 – 63
	D- :62 – 60