

RESEARCH PROJECT

WESLEY CALVERT

1. WHAT IS TO BE DONE

You will choose some subject in the history of mathematics that both you and I find agreeable. You will research your topic, write a paper on the topic, and give a twenty minute oral presentation to the class during the period of December 4 to December 11.

Your paper and presentation must include analysis of at least two primary sources, including the context of the documents and their authors, and must be sensitive throughout to the historical context of its subject. I have put several books on reserve in the library that contain translations of primary documents that may be useful to you, depending on your subject.

2. PROJECT TOPICS

You have broad latitude in selecting your topic. Think big. Recall that the ambitious nature of the project is part of the grading rubric.

You should meet with me to obtain my approval on your project topic. Nearly any reasonable idea will be approved. I can help you locate resources that may be helpful to you. Talking with me about your project, how it's going, and what you wish you could find for it is a good idea.

Be adventuresome, where possible, in your choice of topics and opinions. I'd dearly love to learn something I don't already know. Some papers will be more demanding than others, but the grade has some built-in factors to reward those who take risks by stretching their abilities.

3. HINTS ON THE PRESENTATION

YOU MUST PRACTICE YOUR PRESENTATION!!! You must practice, and you should practice many times. You should practice with a stopwatch and in a classroom. You should, if possible, practice with an audience (I know one successful mathematician who used her cat as a practice audience, but she knew she needed something). Not long ago I evaluated a speaker (outside the university, by the way) who received failing marks, primarily because he had never practiced his presentation.

4. TIMELINE

September 29: You must have met with me and had a topic approved

November 20: I must receive your written report

December 4 through December 11: In-class presentations

Of course, these are only the times at which *I* need to see things. If you go out on September 28 to pick a topic, you won't find one in time, and if you start your reading on November 13, you won't understand enough in time to write your paper. You must behave as if you were driving in snowy weather: *Start early, and expect delays.*

5. GRADING

In addition to the usual grading questions, I will assess the following:

- (1) Content Questions
 - (a) Is the topic approved?
 - (b) Does the report include the analysis of at least two primary sources, including the context of the documents and their authors?
 - (c) Is the report sensitive to the historical context of its subject?
- (2) Form Questions
 - (a) Is appropriate use made of time in the presentation (there is enough to be worth twenty minutes of people's time, without overloading the presentation or going over the time limit)?
 - (b) Is the presentation well-delivered and professional? Are the tone and language appropriate to the audience and occasion?