

As specified on the syllabus, one of the course requirements is a project. Listed below are possible projects, with general project guidelines afterwards.

Option 1. (*Book Projects*):

The textbook contains projects at the end of each chapter. Choose two projects from 1.2, 1.5, 1.6, 1.7, 2.2, 2.3, 2.5, 3.1, 3.2, 3.3, 3.5, 4.2, 4.3, 4.4, and 4.5 from different chapters and turn in a report containing detailed answers to the them.

Option 2. (*Book Extensions*):

Many topics that could have been covered in Math 103 weren't. For example, Math 103 isn't covering Arrow's Theorem (Section 1.5), the Hill-Huntington Method of Apportionment (Section 2.3), Balinski and Young's Theorems (Section 2.4), Amortization Schedules (Section 3.5), or Measures of Central Tendency (Section 5.2 and Section 5.3). Pick such a topic and learn the appropriate material. Then either (a) turn in a report containing a thorough explanation of the content, worked out examples, and an original question on the topic or (b) prepare a lesson, write a worksheet or quiz, and teach the topic to the class.

Option 3. (*History Report*):

Some of the topics covered in Math 103 have had a profound effect on the history of the United States and other countries. For example, the choice of voting method and apportionment in the United States has certainly influenced the course of elections. Write a report detailing what election and apportionment methods have been used in the United States and Connecticut and what effects these choices have had on elections .

Option 0. (*Suggest Your Own*):

By no means are the above projects the only possibilities; rather they are meant to be a list of some of the possibilities. Feel free to suggest any mathematical project that grabs your attention.

Before starting your project, let me know which project you'll be doing. Doing so will allow me to suggest and possibly provide useful resources (appropriate math books, other reference books, helpful websites, etc.). It'll also make sure we agree on what the project entails and gives me a chance to clarify the particular project expectations.

Regardless of which project you do, the report will be graded much as an English paper would be. Style and presentation are as important as the mathematical content. Your project report should be typed. Using complete sentences, it should answer all the relevant questions, with detailed explanations of the solutions (as appropriate).

As with an English paper, you should be sure to give credit to any resources you use. Any popular format (MLA, APA, etc.) is acceptable for the references. Note that any plagiarism or cheating will be handled as per University policy. The project is an individual project, and should be completed individually.

The project is due by the last day of class, Friday, 7 December 2007. If you wish, I'll happily provide feedback on any rough drafts submitted to me on or before the Wednesday before Fall Break, i.e., on or before 14 November 2007. I strongly encourage all of you to take advantage of this (the grader of the final report makes a good editor for a rough draft). At the very least, please do not wait until the last minute to get started; remember that the project is a significant portion of your grade. Absolutely NO EXTENSIONS will be given as you'll have had a large portion of the semester to have completed it.