

Bonus Project

Introduction: This project, if completed correctly and according to all the provided specifications in the grading rubric, will be worth 20 bonus points on your HIGHEST in-class examination score. In other words, if you earned a 70% on your highest in-class exam, successfully completing this project will increase that grade to a 90%.

This is an optional project. Your grade will not be adversely influenced if you refuse to complete the essay.

Description: You are to write a 600 to 700 word research paper about one of the following topics. The essay must conform to the grading rubric that will be available on-line at: <http://netra.math.ttu.edu/rca/CurrentTeaching/homework.html> on March 13, 2009. **FAILURE TO FOLLOW THE RUBRIC WILL RESULT IN SERIOUS POINT DEDUCTIONS. READ AND FOLLOW ALL DIRECTIONS!**

CHOOSE ONE OF THE FOLLOWING FOR YOUR ESSAY:

- a. Explain how the material in this class will help you in your chosen profession. You can discuss applications that we have already talked about or you can elect to cover material from future sections. You'll have to research materials BEYOND WHAT IS COVERED IN YOUR TEXTBOOK.
- b. Choose a subject you are interested in and research how mathematics is used in that field. The applications you choose to discuss DO NOT HAVE TO BE covered in this class. However, they must be accurate and well explained. YOU WILL NEED TO RESEARCH OUTSIDE OF THE TEXTBOOK. Here are a few general subjects. Whatever you choose, make sure you select a topic that is specific enough so you can adequately do it justice in 600 to 700 words, but not so specific that you can't get enough "meat" to reach the minimum word limit.
 - a. Mathematics and Music
 - b. Mathematics and Medicine
 - c. The Mathematics of Economics
 - d. Why is mathematics important in business?
 - e. How is mathematics used in politics?
 - f. The Mathematics of Climate Change
 - g. Art and mathematics (geometry of perspective, etc)
- c. Chose a civilization and explain some of their contributions to our understanding of mathematics. Some civilizations/nations to consider are:
 - a. Babylon
 - b. India
 - c. Ancient China
 - d. Russia
 - e. France
 - f. The Romans
 - g. The Ancient Greeks
- d. If you would like to write about another topic, you must obtain approval. I'll likely approve it, but I need to know what your topic is first.

GENERAL NOTES AND GUIDELINES:

1. Be very careful to narrow your subject enough so that you can do the topic justice in the page limits. MORE EXAMPLES ARE NOT NECESSARILY BETTER.
2. Clearly explain all of your examples.
3. **DUE DATE: April 8th, 2009. No late submissions will be accepted!**

Your essay must conform to the following to receive credit:

1. **Read the rubric and follow it! Download it from the course website at: <http://netra.math.ttu.edu/rca/CurrentTeaching/homework.html>**
2. Word limit of 600 to 700. **Failure to meet this limit will result in no credit being awarded.**
3. Your essay **MUST** be typed using a word processor or mechanical typewriter.
 - a. Use the following guidelines for formatting:
 - i. Use 11 or 12 point font
 - ii. Use "Times New Roman" or "Cambria" **BLACK** font.
 - iii. Use page margins of no greater than 1" on all sides
 - iv. Your essay should be double-spaced.
 - b. If you type mathematical formulas, symbols, etc, make sure they are neat. You should consider using an equation writer. Ask me if you need help with this.
 - c. For in-paper citations, you must use either APA or MLA format. You can find this information at the websites below. You **MUST** include a bibliography or works cited page.
 - i. APA Formatting:
<http://owl.english.purdue.edu/owl/resource/560/01/>
 - ii. MLA Formatting:
<http://owl.english.purdue.edu/owl/resource/557/01/>
4. Turn in a paper copy of your essay **BY APRIL 8th, 2009**. Wrinkled or otherwise untidy submissions will not be graded!
5. Proofread your essay! Poor use of grammar and/or poor spelling will result in substantial point deductions.
6. **Download and sign a copy of the rubric and submit it as the first page of your essay.**

Plagiarism: Plagiarism will NOT be tolerated. Your essay will be read and may be checked against on-line databases of known papers. Any submissions found to include plagiarized content will receive an immediate zero and your actions will be reported to university administration. You must credit all of your sources.