

Calculus 3: Final Project

Your final assignment of the semester is to create and present a project incorporating one or more calculus topics. Your project could come from the list of options below, or you could come up with something on your own. You may work alone or with a partner (no more than 2 people per group). If you work with a partner, both people must contribute equally to the project. Projects must have a written component and a visual aid.

Written component should be typed and use professional language. Visual aids should look professional.

All materials are due on the day of your presentation. You will be randomly assigned a date in advance between Monday, January 6th and Friday, January 17th. Absolutely no late projects will be accepted. If you are absent on the day you are scheduled, make sure your materials are turned in to me on time!

Choices:

- **Review Game** – Create a review game for the final exam. All “questions” used in the game will need to be written out with all work shown and turned in at the time of the presentation (due to notation, this may be neatly handwritten). If an electronic file is used, you must email me a copy of the file or the link used. Only 1 group may create the same game.
- **Music Video** – Create/rewrite the lyrics of a song incorporating a specific Calc 3 topic. You will need to either rewrite the words of an existing song or create an original song based on a specific math topic covered throughout the course of the class. The lyrics of the song need to be typed out and turned in AND must be visible in the video. Please also email me a link to your video or provide me with an electronic copy prior to your presentation. The presentation component will need to be a recorded music video of your song. Be specific with your content. Don’t just use a bunch of math vocabulary, describe a concept or how to “do” problems. Video content must be school appropriate. Remember if you record on your phone, turn it horizontally for best quality 😊
- **Teach a Lesson** – Pick a Calculus 3 topic from our textbook that was not covered in this class and teach a lesson. You must include a typed lesson plan and visual aid for your presentation. Any problems used in the lesson must be worked out with complete solutions (those may be neatly handwritten). Only 1 group may teach a section.

Requirements:

1. A written project proposal describing your choice. This should include an explanation of how you are going to incorporate your mathematical concept. The proposal must be turned in by the end of class on **Monday, December 9th** for approval. If your concept is not approved by the end of the hour it is late and you will not receive full credit on the proposal.
2. You may work alone or in pairs. If you choose to work with someone else, both members need to have an active role in creating the project and presenting the project.
3. You will need to present your project in class on the date you are assigned. All materials are due at the time of your presentation. Absolutely no late projects will be accepted!
4. You must turn in a written component (PRINTED) along with any materials used to present. This could include an electronic file or link and/or poster board etc. Please ask prior to due date if you have questions.

Project Rubric

Name(s) _____

The project will be worth a total of **100 points** and will count as a test grade.

Project Proposal _____ / 10 pts

Math Content _____ / 30 pts

- Accurate
- Specific
- Thorough

Overall Design _____ / 20 pts

- Project is creative and well thought out
- Project is professional
- Interesting, entertaining, fun (depending on project type)

Written component _____ / 20 pts

- No typing, spelling, grammatical or mathematical errors

Presentation/Participation in Group _____ / 20 pts

- Makes eye contact with audience
- Confident and comfortable with content
- Well prepared
- Active participant

FILL OUT THIS PAGE AND TURN IT IN BY THE END OF THE HOUR WEDNESDAY 12/9/19!!!

Project Proposal

Group Member(s): _____

Choose one below and complete the information requested in the space provided on the right.

Music Video	Specific concept to cover, song/artist if known at this point:
Review Game	Type of game, how to score, how to win, any other details:
Lesson	Which section in the textbook, technology needed:
Other	Please explain in detail:

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