Math 20550 - Calculus III - Summer 2014
Presentation Guidelines

Your project will be to give an approximately 10 minute presentation in class on an application of a topic from class. Your presentation should incorporate media in some manner. Some suggestions for this are doing a slideshow presentation (programs you could use for this are: Powerpoint, Beamer (this uses LaTeX code, but is a lot easier to type math into), or Prezi. There are, of course, other options), using Mathematica to visualize the material, or making a video to play in class. Regardless of your chosen way to present, you should be ready to answer questions about your presentation afterward.

Here is a timetable of the work required for the presentation. For each item you have to submit, there is an assignment on Sakai to do so. Next to each is the amount of the 20 points each item is worth:

(1) Choose a topic to present on by the end of the first week (see list below of suggested topics). I must approve this topic.- 1 point
(2) Write a summary (at least one paragraph) detailing what the application you will talk about is and which topic(s) from class it is an application of. Due by the end of the second week. - 6 points
(3) Write and post an abstract of your presentation to the discussion page of Sakai at least 2 days before your presentation. - 2 points
(4) Submit your presentation materials to me at least 2 days prior to your presentation - 2 points
(5) Give your presentation. The deadline to give your presentation is July 23rd. You should give your presentation after the required topic(s) is covered in class. - 9 points

Here are some possible topics. You may, and are encouraged even, to find and choose an application which interests you!

- Kepler's Laws of Planetary Motion (you will probably only have time to present one of them if you choose this)
- Cobb-Douglas Production Function
- Weather
- Partial Differential Equations (PDEs) have a wealth of applications. While this class may not give you a means to solving PDEs, you can do an application that uses PDEs. You should only need Calc III to understand the set-up.
- Vehicle aerodynamics.
- Calc III has plenty of applications to Physics. These can most easily be seen in Electromagnetism.