

Math 393 Fall 2010 - Final Project Guidelines

Your final project will be to write up two lesson plans (consecutive, or unrelated - your choice) for the grade level (Pre-K-2, 3-5, 6-8) of your choice, and for each, write a brief report on how and why they conform to the NCTM standards for Data Analysis and Probability, which can be found at

<http://standards.nctm.org/document/index.htm>

by choosing your class level of interest, and the Data Analysis and Probability section.

Lesson Plan: Within each lesson plans, I'll expect:

1. The grade level you are targeting.
2. The NCTM standards and expectations you are trying to meet.
3. A list of any "prerequisites", that is, any foreknowledge your students will need, explain why the prerequisites are necessary.
4. A list of the class materials, worksheets and creations that you will create and include.
5. An introduction; how will you start?
6. An outline of how you will, in general, teach the lesson and how you will interact with the class. How will the children be working, etc.? This should be a hands-on, interactive class (not a lecture).
7. The in-class work and any homework you'll expect your students to do; complete worksheets and solutions. There should be a copy of each material with and without solutions.
8. A detailed explanation about how the learning will be assessed.
9. A closing; how will you end/summarize the class?

Discussion: You must include a report on how and why each lesson conforms to the NCTM standards for Data Analysis and Probability and how they meet the expectations you cited in your lesson plan (be very specific). The discussion of your project should be fairly exhaustive with regards to what children of that age are able to handle intellectually.

You may use the internet for ideas, but make sure that the work you do is your own - don't do anything I can Google and find a verbatim version of! Include references of anything you use for an idea.

You will be graded on quality of lesson and write up - including proper grammar and language use. Please type.

Deadlines:

- **Proposal:** A proposal for your lesson is due on Wednesday 11/10. In the proposal, include:
 - a brief explanation of the topics and lesson plan
 - the NCTM standards you plan to address
 - an explanation of why the lesson will be appropriate for the grade level you've chosen
 - This submission will be 15% of your grade for the project.
- **Final Project** The complete project is due on Monday 11/29 by 4:30 pm
- **Presentation** You will give a 10 minute overview of your lesson during class either Monday 11/29 or Wednesday 12/1. It would be appropriate in your overview to have the class do a short sample activity or portion of an activity.