Math 440 Project Milestones and Due Dates

Milestone	**Description**	**Due Date**	**Points**
Outline of presentation	Outline of presentation – due in person in class	Feb. 16th	10
Pre-Pre-Presentation	Email Cheryl draft of slides for presentation (should be a good draft, but does not need to be final)	Feb. 23rd	20
Pre-Presentation	Practice presentation with Cheryl – (dress rehersal)	Feb. 28th – March 8th	40
Presentation	Length for single presenter: 20 minutes. Length for two presenters: 30 minutes. Length for three presenters: 40 minutes. Length for four presenters: 50 minutes.	March 2nd – 11th	100
Poster draft	Poster: A draft of your poster is due at the time of your practice presentation	Feb. 25th – March 8th	25
Poster	Poster of your topic – see guidelines.	March 16th 8am	75
Attendance	You are required to attend all presentations and our poster session which will be during our scheduled final exam time of Wednesday, March 16th 8-9:50 am. You will lose 2 points for each *person* whose presentation you miss.	Various	30
Total			300

MTH 440 Project Expectations

Outline
Include the following information

- A one to two paragraph summary of the content of your presentation.
- A bulleted outline of your presentation with approximate times for each section
- If you have more than one person in your group explain how the work will be divided up.
    - What is the role of each group member?
    - Who will present which topics?
    - Everyone must participate in the presentation.

Pre-pre-presentation
This should be a draft of your talk. This should not just be an outline or rough first draft, but a reasonable approximation to your presentation. You may have placeholder slides for a *few* sections of your talk (e.g. "proof of this theorem goes here" or "example of this idea goes here") but for the most part all of the ideas should be included.

Pre-presentation
You will present to me a final version of your presentation. I will make revision requests you are expected to respond to. All group members should be present. You should practice your talk before our meeting so when you present to me it is not your first time presenting the material out loud.

Presentation
Introduction: Your introduction should give some background of your topic and clearly state the aspect of your topic that you are focusing on. The mathematical, practical or historical importance of your talk should be clear.
Body: The content of your talk should illustrate a significant mathematical/cryptographic achievement. You should make it interesting and be well-informed on the details. Your talk should be well-organized and original – it must not just be a recitation of one of your references.

Format: Your presentation should be in power point or beamer. If at all possible you should include a class activity to demonstrate one or more of your ideas.

Delivery: Your presentation must be well-rehearsed and clear. You must speak loud enough to be heard and clearly understand the material you are presenting. You will be expected to answer questions.

A detailed presentation scoring rubric will be provided.

Poster draft
The poster draft can be on 8 ½ x 11 paper but should be a good approximation of your final poster. For poster details see "Poster" expectations.

Poster Expectations

When preparing your poster, consider the following guidelines: (excerpts from "How to prepare a poster" by Sven Hammarling and Nicholas J. Higham)

A Poster Tells a Story

In preparing a poster, simplicity is the key. A poster should tell a story. As always in a scientific presentation, the broad outline includes a statement of the problem, a description of the method of attack, a presentation of results, and then a summary of the work. But within that format, there is much scope for ingenuity.

A poster should not contain a lot of details—the presenter can always communicate the fine points to interested participants. In particular, it is not a good idea to present proofs, except in brief outline, unless the proofs are the focus of the presentation.

The poster should begin with a definition of the problem, together with a concise statement of the motivation for the work. It is not necessary to write in complete sentences; sentence fragments may be easier to comprehend. Bulleted lists are effective. An alternative is to break the text into chunks—small units that are not necessarily paragraphs in the usual sense. For presenting results, graphs and figures—easier to scan than the columns of figures in a table—are even more appropriate than in a paper. Legends should be minimal. A brief description of the implications of a graphic, placed just above or below it, is helpful.

Designing Your Poster

Whatever the size of the sheets, the typeface chosen should be considerably larger than standard. Because not all readers will have perfect eyesight, and because the crowd of readers around a popular poster may be several people deep, the type should be easily readable by a person standing a few feet away. In particular, the title of the poster and the author's name should be large and prominent. If it is not convenient to print directly at the desired typesize, pages can be magnified on a photocopier. Good use can be made of color, both to provide a more interesting image and for color coding of the text. A colored backing card for each sheet can be effective. For added interest, try including an appropriate cartoon, photograph, or quotation. There is plenty of scope for creativity. If the sheets are arranged as a matrix, two layouts are possible: horizontal (reading across the rows) and vertical (reading down the columns). While the horizontal ordering is perhaps more natural, it has the major disadvantage of requiring the reader to move to and fro along the poster; if there are many readers, congestion can result. A vertical ordering is therefore preferable, although other possibilities should be considered as well. If you are comparing three methods, for example, you could display them in parallel form, in three rows or columns, perhaps as a "display within a display." Consider the possibility of arranging the poster to represent some feature of the problem, such as a particular sparsity structure of a matrix. If there is any doubt about the order in which the sheets should be read, guide the reader by numbering the sheets clearly or linking them with arrows. Think carefully about the use of the poster board. One extreme is to spread the sheets out to make full use of the board—taking care to position them at a height at which they can be read by both the short and the tall. If there are only a few sheets, it may be best to concentrate them in a small area, where a reader can proceed from beginning to end while standing in one position.