MA 330 Projects in Fall 2017

There are two projects during Fall 2017: A midterm project and a final project.

Both projects are group projects, with each group containing 1 to 4 students. The groups can be reorganized after midterm, if needed.

Here are some of the details:

- The project should be about 15-20 double spaced pages (or longer). It should be typed and should be submitted as a pdf file. The project should have a title page with the names of all group members. If desired, credit for different parts may be attributed to individual members.
  Both projects must be typed and properly formatted, complete with title, abstract, introduction, narrative, conclusions, and references. All material should be presented so that a person reading it should be able to follow the flow of ideas and calculations without prior knowledge.
  Many of you may prefer to use WORD, but it can be tedious to type Mathematics. If you like, I can give you tools to type Mathematics effectively in WORD. Of course, the best tool in my view is TeX/LaTeX. I can help with it, if needed.

- Both projects are expected to have **mathematical as well as historical parts**. I expect more serious mathematical discussion for the final project. See below for the approval details.

- Using Web resources is permitted, but they must be cited, just like any other references. For web references, please provide an active link, rather than a textual citation, so it is easy to follow.

- **Important:** When you present opinions expressed by your sources, you should not accept them by blind faith. Please make an effort to discuss them based on your own knowledge and understanding. Try to find corroborating or contradictory evidence as appropriate.

- Here are some suggestions for project ideas. Of course, it is even better if you have your own novel idea:

o   Think of an interesting theorem based on its intrinsic importance, or applications, or popularity. Find a history of its proof, tracing contributions and preliminary development.

o   Pick a mathematician that may or may not be well known with an interesting life. Be sure to describe details of some of his/her work which may prove to be interesting to the other students.

o   Discuss Mathematical problems which lead to extensive theories. Discuss the growth of the theories and present at least some part of the Mathematics developed.

o   Think of statements/topics that you saw/heard during a Mathematics course, but the teacher said "you may meet it in some higher course". Try to see if you can learn some of these by yourself (with some help from me or others).

o   More may be added to this list…

Here are some important dates

All proposals, previews and submissions must be pdf files. They must include the group members' names and other required details.

Prepare and submit midterm proposal: **September 16**.	Approval of midterm project topics: **September 25.**	Due date for the summary of the midterm project for preview: **October 2.**	Submission of the complete midterm project: No later than **October 14.**
Class presentations for selected midterm projects: **October 23-27.**			
Prepare and submit final proposal: **November 3.**	Approval of final project topics: **November 15.**	Due date for the submission a summary of the final project for preview: **November 30.**	Due date for submission of the final proposal: Any time on or before **December 12.**
Class presentations for selected final projects: **December 4-8.**			