CAAM570 Final Project

Task: Teach the class a concept in graph theory that is acquired from a published (preferably recent) research article.

- You may work in your usual homework groups, or alone, or with part of your group, or if your group is too small, you can join another group for the project.
- Each group will give a 15 minute presentation in class, using slides and/or the chalkboard. In the presentation, provide definitions and examples to understand the material, give motivation/applications for the subject, and sketch a theorem and its proof from the paper. Everyone in the group should speak during part of the presentation. Be prepared to answer questions from the audience at the end.
- Also, prepare three homework-type questions (and solutions) related to the topic of the paper (they could be related to the background material, not necessarily the main results). Some of these questions may appear on the final, or as a bonus homework assignment.
- You will be graded on how clear and educational the presentation is, on how well you were able to answer questions from the audience, and on whether you wrote the 3 homework questions and solutions.
- You may use Google Scholar, MathSciNet, or journal webpages to locate an article. Here are some journals whose scopes include topics in graph theory, where you could look for an article: Journal of Graph Theory, Discrete Mathematics, Graphs and Combinatorics, Discrete Applied Mathematics, Discussiones Mathematicae Graph Theory, Journal of Combinatorial Optimization, Theoretical Computer Science.
- The students who are working on extended research projects do not need to do a separate final project, but should still give presentations on their results.
- Presentations will be held on April 12 and 17, but I recommend you get them ready before that, because you'll also have the final exam to take that week.