

Course Project

As you all know, we will be doing a project report for this class and this will be worth 50 % of your overall score. There are three due dates for this report.

1. **September 27th, 2005, 3pm** By this due date you will need to specify three topics (in order of preference) of interest from the list below.
 - (a) Analysis
 - (b) Geometry
 - (c) Graph Theory
 - (d) Number Theory
 - (e) Probability

If you do not choose topics by the due date then you will be assigned one.

2. **October 19th, 2005, 10am** On September 28th, you will be given a handout with questions to solve. By October 19th, you will need to send me by email a LATEX document, containing :
 - (a) list of references you have found for the topic.
 - (b) A title for your report.
 - (c) (At most half page) Summary of the report that you plan to write.
 - (d) Solution of the problems.
3. **November 9th, 2005, 10am** Your course report is due.

The material that you will be given will be at a bare-bones minimum. Perhaps just enough to direct you. You will be responsible for finding references and doing your own investigating and learning. However please feel free to contact me, in person or by email, for help finding references or solving the problems or for general guidance about the projects, and to give me feedback about how it is going. The initiative will however have to be from your side, if there is silence then I will assume everything is okay.

Last but not least. You may discuss the project with anyone, including faculty. Given this freedom there is one responsibility that you will need to abide by. Each person will be responsible for preparing his/her own report, including writing up his/her own solutions to the problems.

Reports and Grading Criteria

Your report should include some version of the following 5 parts. They do not have to be arranged the way I list them here, but all should be included in your report in some form or another.

1. **(20 points) General Discussion** Should include a description on the person to whom discovered the answer to your problem first.
2. **(20 points) Solutions to Problem** Should be as complete as possible. Please consult me if you have doubts.
3. **(10 points) References** A list of the references that you used, people you consulted, people you worked with, places you found help.
4. **(5 points) Comments** Your comments on how interesting you found the project, whether you feel that the time you spent on this was worthwhile and whether it might help you in the future or lead to anything for you, and suggestions to me for improvements in case I do projects like this again.
5. **(20 points)** For observing the due dates.
6. **(25 points) Presentation** includes
 - (a) innovation in presenting the material,
 - (b) completeness, clarity and neatness,
 - (c) flow and design
 - (d) organization of the report,
 - (e) and creativity used in explaining the ideas.

in the report.