Graphs and Networks   Dan Spielman
AMTH/CPSC 462/562
                              Course Feedback

Since I hope to teach this class for many years, I would like to get your suggestions for how I can make it better. I have assembled a list of questions that I hope will prompt useful suggestions. If you have any suggestions not related to these questions, please give me these as well. Feel free to hand this in at the end of class or drop it in my mailbox some time. I'll place a copy of this form on the web, so you can even do both.

Don't worry about trying to be tactful.

1   Lectures

I have included a list of the topics covered on the next two pages. Feel free to make comments on this list, or below.

- Are there any topics that you think I covered particularly well?

- Are there any topics that you think I covered particularly poorly? What should I have done differently?

- Do the topics look familiar?

- Were there any topics that you found particularly exciting or booring, independent of whether or not I covered them well?

- I tried to present two types of material during this class: theoretical analyses and some practical experience. How did you feel about this mix?

- Did you like the demos that I did in class? Were they helpful, or just entertaining?

- Can you give me any other advice on my teaching?

2 List of topics

1. Empirical analyses of graphs.

2. Random walks and diffusion in graphs.

3. Random walks and spectral graph drawing.

4. PageRank.

5. Spectral Graph Partitioning and Image Segmentation

6. Resistor networks and resistance distance.

7. Random Graphs: high girth and high chromatic number (using expectation)

8. Random Graphs: upper bound on diameter (Using variance)

9. Percolation on trees.

10. Percolation: the giant component.

11. Percolation in the grid.

12. Small-world graphs.

13. Gossip in graphs.

14. Flocking.

15. K-nearest neighbor graphs.

16. Routing in graphs and the price of anarchy.

17. Clustering heuristics.

18. The last lecture.

3 Prerequisites

- How adequate was my description of the prerequisites for the class: "discrete mathematics, probability, linear algebra". Should I add something more?

4   Problem sets

- Do you think I should give more or fewer problem sets next year?

- Did the problem sets help you learn the material? Were they worth the effort?

- What did you think about the experimental option on the problem sets?

- How did you feel about my policy on collaboration?

- How did you feel about the way the problem sets were graded?

- How much time did you spend on the problem sets?

- Should I give a final exam in this class?

- Any other suggestions?

5 Final Project

- Do you think providing the option of a final project was a good idea?

- Any other suggestions?

6 Lectures Notes

- Were the lecture notes helpful?

- Were the hand-written lecture notes substantially less helpful?

7 Solution sets

- Did you actually look at the solution sets?

- Were the solution sets helpful?

8   **Are you willing to tell me anything about yourself? For example, are you a grad or undergrad, and what is your major?**

9   **Any other comments?**