Graduate Student Presentations

During the last days of the course, we will have presentations by graduate students. Each presentation will be for the duration of the class period, and will be given by a team of students. The presentation will be based on a journal article that employs network analysis techniques, most of which we have discussed (or will discuss) in class. I have identified a list of appropriate articles, which are posted on my web site. Each team can select an article to present. Alternatively, if a team finds an article it would like to present that is not on the list, then this would be fine as long as I have approved it.

You should think of the presentation as a seminar or talk that you would give at a conference. Each presentation should be divided up so that each team member presents an equal portion of it. It will be scored by me, and the score used to assign a grade for the presentation. There are four scoring categories that are important for giving good seminar or conference talks. Scoring in each category ranges from 1 to 5 (with 5 being the best score). The categories are described below.

(1) **Accuracy:** Are the concepts presented correctly? Many concepts will have been discussed in class, but it is likely that some concepts in the paper will not have been. These might be network concepts, or concepts related to an application that is the focus of the paper. In this case, you should investigate what they mean, and present them accurately, and give accurate answers to questions raised during the presentation. It is important to avoid presenting something during a seminar that you don't understand. Someone will always ask about it!

(2) **Clarity:** A good seminar talk will be presented in such a way that all those in the audience can understand it. This means explaining terms or concepts that the audience member may be familar with. It also means using illustrations to help explain ideas, rather than writing them as bullet points (bullets kill!). If you show an equation, you should make it clear to the audience what it means, and how it was derived. You don't have to show every equation in the article, but if you show one you need to explain it clearly to the audience. The worst seminar speakers are those who quickly run through slides without taking the time to clearly explain what is on them. The best seminar speakers are the ones who teach their audience something by presenting their work with great clarity.

(3) **Background and contextual support:** Each journal article tells a story. To make that story interesting and useful to the audience, the speaker should provide the necessary background to understand why the paper was written, what questions it addressed, and how it addressed the questions. You will

likley need to look for illustrations and explanations outside of what is in the journal article. Remember that the audience members for your presentation have mixed backgrounds, so you can't assume expertise in, for example, biology. Tell the audience what they need to know to get the most out of your talk.

(4) **Aesthetics:** A seminar presentation should not be a sleep aid. There is nothing more boring than a series of text bullets (have I mentioned that bullets kill?), or a sequence of equations shown one after the other. Make your presentation interesting by making your slides interesting. Show lots of figures and illustrations (some from the article, some from elsewhere). Break up multipanel figures (which are made this way to save room in the article) into single panels if that will improve the flow of the story that you are telling. (In a multipanel figure, the audience often focuses on panels other than the one you are discussing, so they stop listening to you.) Add arrows, text boxes, and other things that are easily done with PowerPoint to make the figures you show more self-explanatory. A seminar done with great aesthetics will sell the story, and the speaker. This can be the difference between getting the job or not!