3450:438/538-001 **Poster Session** Fall 2007

The Department of Theoretical and Applied Mathematics will host a student poster session on Wednesday, December 5, 4:00–6:00 p.m. You are invited to create a three-panel poster related to advanced engineering mathematics and discuss it with people who attend the event. **This activity is entirely optional.** If you participate, you can say so on your resume, plus show off your skill at thinking, writing, organizing, and communicating. You can meet faculty, administrators and other students, and it may increase your grade by one notch (e.g. B+ to A−). If you are interested in this endeavor, please read all the instructions on this page carefully.

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1. **Objective**: Present a problem related to advanced engineering mathematics. Consider the poster's audience to be your classmates and instructor.

2. **Topics**: The topic you pick must relate to advanced engineering mathematics and go beyond our required curriculum. You may present an application of subjects we cover (complex variables, linear analysis, systems of ordinary differential equations, and/or vector calculus) to physics or engineering. You may present the history of a topic in advanced engineering mathematics. You could do and/or extend an advanced problem from one of the textbooks on reserve for our course at the Science and Technology Library or present a topic we don't cover in AEM I (using one of these books as a guide). You might extend any subject we cover.

   In complex variables, some topics you might consider are: phasors, transfer functions and poles, graphing conic sections in the complex plane, the singularities of the complex logarithm function (and branches of the logarithm and of w^z), application of the Cauchy-Riemann equations and harmonic conjugate functions to electrostatics, and complex integration and poles.

3. **Collaboration**: You may work with a partner if you wish. In this case, the two of you will create a single poster with both of your names on it.

4. **Citations**: Cite all sources, whether they are books, articles, or web sites. *In the case of web sites, list the author, title, date, URL, and the date you referenced it (since web pages change fast).*

5. **Deadlines**:

   - **Topics**: Choose about three topics, being as specific as possible, and rank them in order of preference. The list is due **Wednesday, October 10**. I will assign topics from your list by the following class. Each poster from our class will have a different topic. **(OVER)**

- **Description**: A full description of your poster is due on **Wednesday, November 7**, containing all or most of the technical details and showing your full understanding. Please include your **name, poster title, and brief abstract** (summary). *You must also touch base with me that week for a brief discussion of your poster.* Please schedule an appointment with me before leaving class on Monday, November 5.
- **Revisions**: You may discuss as many revisions of your poster with me as you like. The final one, including your name, poster title, and brief abstract, must be given to me by **Monday, November 19**.
- **Final cut**: On **Wednesday, November 21** I will either approve your poster for inclusion in the session, or award some partial credit for effort, if appropriate. The poster must show that you have a deep understanding of the problem under consideration.
- **You MUST meet all of these deadlines in order to be eligible to participate in the poster session.**