

## Poster Project Guidelines

1. Use PowerPoint or some other typesetting program to prepare your project (possibly LaTeX for people who want to do so). **handwritten projects will NOT be accepted**
2. Your poster should contain each of the following components:
  - Title Sheet
  - Body of Project
  - Bibliography (List of References)

3. Your poster should be on a **Presentation Board** (3 Panel Corrugated Project Board). These are available in the bookstore for a range of prices \$3.70 - \$6.05 (depending on color - the white, cheap version is OK with me) These are 48" x 36", so 12 slides is a pretty good upper bound on the space that you have to work with.

4. Specifications:

Length:	Minimum of 8 pages/slides Maximum of 12 pages/slides
Spacing:	Single spacing of text in paragraphs
Font Size:	12pt. (USE LARGER FONTS FOR HEADINGS, LABELS, etc.)
Title Sheet:	Contains at least Title, Author's Name, Course Title and Date

5. Paragraphs should be included between the figures and tables. Distinguish new paragraphs by including an extra space between paragraphs rather than by indenting the first line.
6. Provide accurate and complete bibliographical information. All references cited in the paper should be listed (in alphabetical order) at the end of the paper on the **Bibliography Page**. These references should be numbered. To cite these references within the body of the project, use a square bracket notation, "[2]", for example. See the attached sheet for an example of a Bibliography Page.
7. References can be in the form of books, journal articles, software manuals or web sites. If you have questions about how to list a web site as a reference, come see me.
8. **Use a spell checker before displaying your project.** Also proofread for grammar, completeness and spelling of proper names and full identification of all organizations and groups named by initials or acronyms.
9. Projects that use computer code written by the author should have the code displayed in some form. Hardware and software used for computations should be clearly specified within the body of the project.
10. Figures and tables should be **numbered**. Refer to them in text by number "see Figure 1" for example. Label the figures clearly and identify what the figure is meant to signify to the audience.

## General Guidelines for Content

- (a) **If your topic is a person**, then give a brief-but-informative biographical sketch of the person. This should include a list of the person's contributions to mathematics. Then choose one of those contributions and discuss it in mathematical detail. Background into the type of problems you are discussing may be necessary. Address the importance of the contribution in general terms as well.
- (b) **If your topic is a numerical method**, answer the following questions in your project.
- Who developed the method, and when was it developed?
  - Give a mathematical formulation of the types of problems that the numerical method is designed to solve.
  - What kind of problems is the method well-suited for?
  - For what kind of problems does the method fail?
  - Is the method particularly useful for a certain class of applications?
  - General advantages and disadvantages of implementing the method. (Computationally intensive—does it require huge amounts of memory/storage? Is it very slow and inefficient for certain types of problems?)
  - Give an example of a problem that the method would work well when solving.
  - Give an example of a problem for which the method would not work well.
- (c) **If your topic is a software package**, answer the following questions in your project.
- Who developed the software, and when (and where) was it developed?
  - How many versions have been introduced?
  - What kinds of capabilities does the software have? (Components for root-finding, optimization, o.d.e. and/or p.d.e. solvers, grid generation, etc.)
  - What capabilities is it missing?
  - Is it used mostly in industry or as a teaching/ educational tool? Is there a student version? How expensive is the software?
  - Construct a problem, use the software to solve the problem and report your results. What kind of algorithm does the software implement in order to solve the problem? Discuss that algorithm in terms of the general types of problems that it is used to solve. Address advantages and disadvantages of the algorithm.
  - Discuss general advantages and disadvantages of using this particular software. (Is it expensive, is it easy (or difficult) to use? Is the language difficult to learn? Does it include on-line help, and is the on-line help useful and presented in a clear, convenient fashion?)