MATLAB Assignments

After the first assignment, you will work on in groups the problems in *Differential Equations with MATLAB®*. Prepare the MATLAB homework in the form of a published M-file (see *Differential Equations with MATLAB®* §4.4.3 and 4.4.5) and print it out (with all the input, output, and graphics). A homework group should submit only one copy of a MATLAB assignment with the names of all group members on it.

Here are some tips.

- Begin by reading the MATLAB material carefully. Work through all the examples and make sure you understand the commands and how to use them.
- Look at the solutions in the book to see what your solutions should look like.
- Start early.
- Plan to work on the problems starting three or four days before the assignment is due. Begin a problem by reading it carefully and thinking about the issues.
- After Problem Set A, use a separate solution m-file for each problem. Staple all the problems together in the correct order.
- When you get stuck on one problem or part of a problem, go to the next one if possible.
- After this first session, think about the problems, read over your work, find your gaps, mistakes, etc., and figure out how to fill in the missing parts. A few days later, go back to the computer. Make sure your answers are well-written as well as correct.
- Save your work often.
- Use lots of cells. This will make your work much more readable.
- Make sure any numerical results are in a digestible form.
- When it would be useful, convert an exact answer to a decimal using **double** (for example, to compare it with a decimal, or because it isn't a recognizable number).
- Be sure you answer ALL the parts of each question.
- Be sure you answer ALL implied questions.
  - If you solved a problem more than one way, compare the solutions.
  - Is your solution reasonable? Explain how you know.
  - Is there anything unusual, weird, striking, ... about what you found? Be sure to comment on it.
- Before turning in your printout, read it over carefully. Make sure it makes sense and is in a form that will be easy for the grader to read. Make sure your comments and explanations have not been chopped off at the right.
- Struggling with MATLAB code isn't the purpose. If you run into a problem ask me for help. If you do this in an email, be sure to attach your m-file.