

COEN 45, MATLAB Programming
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Lab Instructions

General

COEN 45 is a five-unit course of which one unit is for the lab sessions. You should be registered for one of the four lab sessions which are held in the Design Center. The lab assistants will take charge of the lab sessions. All work is to be completed and submitted during the lab period. If you are unable to finish an assignment or are absent from a session, you can attend a makeup session near the end of the quarter. Download and study the instructions for each lab *before* coming to the lab session. Bring your textbook - you may need it for reference.

Assignments

Assignments will be posted at <http://www.gibson2.com/coen45>, the class web page. You must do your own work, though I encourage students to consult with each other during the lab. The end product of each submission will be a MATLAB script that does the work specified in the assignment. In some cases you will also generate function files. Your lab assistant is there to help if you get stuck. When you have finished, please do the following:

1. Demonstrate the script to the lab assistant.
2. Print a copy of your script file and sign it. Also print a copy of any function files that you have generated and any plots that were requested.
3. Some assignments ask you to explain some result. Write your comments on your script printout at the appropriate point.
4. For some assignments, you may be asked to submit an electronic copy of your script, in which case instructions for doing so will be provided.
5. All files must begin with a comment section (text with a % character at the start of each line). At a minimum, the comment section must include:
 - Assignment number
 - Brief description of the assignment
 - Your name
 - Today's date

Commands that fail

Lab or homework assignments may occasionally ask you to do things that will generate MATLAB error messages (such as bogus matrix multiplications). In order to prevent MATLAB from terminating your script when it encounters such an error, enclose the offending command in a try-catch-end sequence.

```
try
    x = sqrt(z);    %% will fail if z does not exist
catch
    disp('error!'); %% write your own message
end;              %% MATLAB continues after end
```

Grading

Assignments will be graded as follows:

- Script executes properly: up to 70
- Questions answered: up to 15
- Style: indentation, comments, sensible variable names: 15