

## GG250 Lab 2 Introduction to plotting with Matlab

The purpose of this lab is to introduce a few examples of how Matlab prepares some simple plots (e.g., plots of y vs, x, histograms, and rose diagrams). My URL is <http://www.soest.hawaii.edu/martel/SteveM.html>

### Exercise 2\_1 (Script file and data file)

- a) Download the following m-files:  
gg250\_lab\_02\_1.m  
gg250\_lab\_02\_1.dat  
and save them in your GG250 directory with the following name:  
gg250\_lab\_02\_1\_lastname.m  
gg250\_lab\_02\_1.dat
- b) Open up this template m-file, and read what it does.
- c) Complete the script.
- d) In an e-mail to [gg250-lab@hawaii.edu](mailto:gg250-lab@hawaii.edu) , attach the completed function, and list the subject in the e-mail as  
gg250\_Lab\_02\_1

### Exercise 2\_2 (function)

- a) Download the following incomplete function m-file from my web page:  
gg250\_lab\_02\_2\_template.m  
and save it in your GG250 directory.
- b) Copy it to a new file, and save it with the following name:  
gg250\_lab\_02\_2\_lastname.m  
Use lowercase names, with underscores (not blanks) in the m-file names!
- c) Open up this m-file, and read what it does.
- d) Complete the function lines that end in semi-colons, and test the script with 1000 fractures and a borehole trend of 30 degrees.
- e) In an e-mail to [gg250-lab@hawaii.edu](mailto:gg250-lab@hawaii.edu) , in the body of the e-mail message answer the following question (for a borehole trend of 30 degrees):  
For a uniform in-situ distribution of fracture strikes, and a borehole trend of 30 degrees, what fracture strikes will preferentially be intersected by the borehole, and what fracture strikes will preferentially be missed?

Attach the completed function, and list the subject in the e-mail as  
gg250\_Lab\_2\_02