Matlab bootcamp syllabus – September 2013

Instructor: Kyla Drushka kdrushka@ucsd.edu
Class times: Monday September 23 to Friday September 27 (every day), 11am-12pm
Location: OAR room 150 (small conference room on the ground floor of the OAR/Keck
   building)
Office hours: every day after class from 12:30pm to 1:30pm, Nierenberg Hall room 135.
   Or email me to set up an appointment.

Requirements:

You don't need to have any background with Matlab or with any computer programming. In order to do the homework, you will need to have access to a computer that runs Matlab. If your advisor cannot provide you with this, consider buying a copy of the student version at the UCSD bookstore ($100). You do not need to bring a laptop to class, though you are welcome to do so.

References:

Textbooks:

There are many textbooks covering Matlab, so you might check out the selection at the UCSD bookstore. Here are a couple of suggestions:

> *Matlab, Second Edition: A Practical Introduction to Programming and Problem Solving* by Stormy Attaway (bookstore link) (Amazon link) (isbn 9780123850812): this one is well reviewed and also has a relatively recent release data (2011), so it is least likely to be out of date.

> *A Guide to MATLAB: For Beginners and Experienced Users* by Brian Hunt et al. (bookstore link) (Amazon link) (PDF available online, probably illegally). This one is a little out of date, but the basics are clear and you can download the PDF, which is pretty handy.

> *Physical Oceanography: A Mathematical Introduction with MATLAB* by Reza Malek-Madani (bookstore link) (Amazon link) (isbn 9781584888307): this book seems useful for those interested in using Matlab to solve numerical problems in physical oceanography.

Online tutorials:

Mathworks (the company who developed Matlab) has an online tutorial as well as a detailed users manual (http://www.mathworks.com/help/pdf_doc/matlab/getstart.pdf) available.

Matlab help files (online and offline)

All of the Matlab help files are available within the program and online (http://www.mathworks.com/help/matlab/). They are generally quite good, and searching the online help files works pretty well. To get help on a function (e.g. the "plot" function), type `help plot` or `doc plot` into the command-line.