Introduction to Matlab: Psychology

Course #101-1-0045
Sundays 10:00-12:00, Room 112, Bldg #98

This course is intended to give undergraduate students from the Biology-Psychology program a solid foundation in using Matlab for research purposes. After learning the basics of writing code in Matlab, the course will focus on building simple experiments and performing simple analyses of behavioral and EEG data. The course is taught in a computer lab and students without previous experience are expected to spend 1-2 hours every week performing exercises at home. The grade will be based on 10 assignments that will be handed in during the semester (each will account for 2% of the final grade) and the final exam that will account for 80% of the grade.

Except for class, students will have a training session with a TA in the computer lab.

Attendance in **80%** of the classes and lab sessions is obligatory.

Passing grade is 56.
Instructions for how to hand in your homework assignments can be found here.
There are no scheduled office hours. If you need help, you can contact your TA by email.

A good way to learn the basics is by following this guide written by Prof. Antonia Hamilton from UCL – PDF

Lesson 1: Basics, vectors, matrices, punctuation, and indexing – Class Files

Lesson 2: Basic math, logical operators, basic functions, and basic graphs – Class Files

Lesson 3: Basic scripting and flow control – Class Files

Lesson 4: Functions and structures - Class Files

Lesson 5: Figures – Class Files ,Tutorial about object oriented programming

Lesson 6: Handling files, importing, and exporting – Class Files

Lesson 7: Manipulating Images – Class Files

Lesson 8: Building a visual experiment - Class Files

Lesson 9: Analyzing behavioral data from visual experiment – Class Files

Lesson 10: Basic EEG analysis - Class Files

Lesson 11: Visual categories EEG experiment - Class Files

Lesson 12: Visual motion fMRI experiment – Class Files ,fMRI data