MATLAB CRASH COURSE, OCTOBER 2022

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Course website: https://courses.maths.ox.ac.uk/course/view.php?id=1059

Objectives

The objective of this course is to give an introduction to MATLAB and the essentials of MATLAB programming. This course will last about eight hours and will consist of a mixture of lectures and practicals. The best way to learn the software is by using it. There will be no grades, and no such thing as a stupid question.

Useful references

D.J. Higham and N.J. Higham, MATLAB Guide, SIAM, 2005

T.A. Driscoll, Learning MATLAB, SIAM, 2009

C.B. Moler, Numerical Computing with MATLAB and Experiments with Matlab (freely available online: http://www.mathworks.com/moler/)

Online Matlab courses: https://matlabacademy.mathworks.com/

MATLAB Cody: https://www.mathworks.co.uk/matlabcentral/cody/

Matlab installation instructions

As a student at Oxford you're entitled to a free copy for your personal machine. Follow the link at https://www.maths.ox.ac.uk/members/it/software-personal-machines/matlab. Note, you will need your single sign on details in order to do this.

Tentative timetable:

Monday 3rd October	
11:00 - 12:30	Introduction
	Theory 0: Basic operations with the command window
	Practical 0
13:30 - 15:00	Practical 0 (cont.)
	Theory 1: Scripts, Logic, Control Structures & Anonymous Functions
	Practical 1
Tuesday 4th October	
$\overline{14:00 - 15:00}$	Practical 1 (cont.)
	Theory 2: Cell arrays, Functions & Programming
	Practical 2
15:30 - 17:00	Practical 2 (cont.)
	Theory 3: Graphics
	Practical 3
Thursday 6th October	
14:00 - 15:00	Practical 3 (cont.)
	Theory 4: Built In Functions
15:30 - 16:30	Practical 4