

The weekly plane of course 352 Math
By Huda Alsaud

	Lecture	Tutorial
Week 2		MATLAB lecture which will cover: MATLAB desktop environment (command window, workspace window, command history window, current folder window), variable, operations, definition of Algorithms, definition of computer programs, introduction to M-file (open new M-file, save M-file) Homework: 1. Some calculations on the command window. 2. Create an M-file. Deadline: The tutorial lecture of week 3.
Week 3		MATLAB lecture which will cover: M-file Function that returns a single result, calling a function, relational operations (>,<==,...), logical operations (, &&,...), If statement, while statement, the 'fprintf' function, the 'feval(,)' function. Homework: Create an M-file function that use if and while statements. Deadline: The tutorial lecture of week 5.
Week 4		
Week 5		
Week 6		
Week 7		Quiz
Week 8	Tuesday: MATLAB Lecture: Fixed-point method in MATLAB. Homework: Newton method in MATLAB. Deadline: 9am on Tuesday of week 10. Note: You have to submit your homework by email in PDF format.	Sunday: Midterm Exam
	Holiday	Holiday
Week 9		
Week 10	Tuesday: MATLAB Lecture: Gaussian Elimination Method. Homework: Gaussian Elimination Method. Deadline: 9am Thursday of week 11. Note: You have to submit your	MATLAB lecture which will cover in the: Matrix operations (array multiplication ".*", matrix multiplication, addition, and subtraction), inverse of a matrix, matrix transpose, solution to linear system (using $x = A^{-1} * b$ or $x = A \backslash b$), determinant of a matrix, plotting functions in 3D (ezmesh, ezsurf). Homework: 1. Some matrix calculations.

	homework by email in PDF format.	2. Plot a surface in 3D. Deadline: The tutorial lecture of week 11.
Week 11		
Week 12		
Week 13		Quiz
Week 14		Sunday: Midterm Exam
Week 15		

MATLAB references:

- 1) B.R. Hunt, R.L. Lipsman, and J.M. Rosenberg. A Guide to MATLAB, for beginners and experienced users. Cambridge University Press, 2001.
- 2) Stormy Attaway. MATLAB: A Practical Introduction to Programming and Problem Solving. Elsevier Inc, 2012.