

CE108 - Spring 2021

Introduction to Computational Methods in Civil Engineering

COURSE OUTLINE

WEEK	TOPICS
1/19,21	Basic Matlab commands.
1/26,28	Basic Input/Output (I/O) and Algebraic statements.
2/2,4	Basic data types and algebraic expressions.
2/9,11	File (I/O) and logical expressions.
2/16,18	2/15:President's day; Loops and repetitive execution.
2/23,25	Iterative algorithms in applied mathematics.
3/2,4**	Matrix Operations.
3/9,11	Programming with functions and subprograms.
3/16,18	Global variables.
3/23,25	Introduction to UNIX and C-compilation.
3/30,4/1	Basic data types and integer arithmetic.
4/6,8	Basic I/O Operations and Introduction to Pointers.
4/13,15	Data representation and storage schemes.
4/20,22**	Assembler and Machine Languages.
4/27,29	Advanced topics.

** \Rightarrow examination on that day (3/4, 4/22).

Grading Policy:

2 equally weighted examinations (30% each)	60%
12 computer projects	24%
12 written homework on computer algorithms	16%

Textbooks:

- Introduction to Matlab 6 for Engineers, by William J. Palm III, McGraw Hill higher Education, ISBN 0-07-234983-2.

Warning: Not working on the computer projects Can be and Will be hazardous to your examination scores.

Course Website: blackboard.usc.edu