ENGR 120: Introduction to Engineering Computation.

COURSE LEARNING OUTCOMES (CLOs)

1. Articulate the tradeoffs between easy of computation and accuracy.
2. Execute basic commands and scripts in a mathematical programming language.
3. Demonstrate proficiency in the use of input/output commands including: command line, file, and graphical.
4. Create changes in program flow using control structures.
5. Modularize program construction and increase code re-use using functions.
6. Design programs using a top-down design methodology.

Appendix F: Course Outline

Course Outline

I. Programming Basics
   A. Source Code
   B. Compiler
   C. Executable
   D. Interpreter

II. Matlab Environment
   A. Command line
   B. Variables
   C. Statements
   D. Plotting
   E. File Execution

III. Programming Structures
   A. Conditions
   B. Loops
   C. Functions
   D. Vectors and Arrays