# Learning Objectives – First Midterm GE-4200, Winter 2011-12, Dr. C. S. Tritt

When I say use in the objectives below, I mean correctly and successfully use.

#### Reintroduction

Be able to create and use Matlab variables (including typical array indexing).

Be able to use *if-else*, *switch*, *while* and *for* blocks.

Be able to call built in functions.

Be able to create and call user defined function.

Be able to properly test and document your Matlab programs (scripts and functions).

Be able to use the Matlab environment (the command window, workspace, help, etc.).

Be able to use *input* to get console input and *disp* to produce console output.

Be able to use *fprintf* to produce formatted console output.

### Cell Arrays (including simple graphical dialog and message boxes, textscan and file I/O)

Be able to use cell arrays.

Be able to use the *inputdlg* and *msgbox* functions.

Be able to use the *uiwait* function.

Be able to use *fopen*, *fprintf*, *textscan* (only relatively simple cases), *fscanf* (only very simple applications), *fgetl* and *fgets* file I/O functions.

Be able to use *sscanf* (only simple cases) and *sprintf* to read and write strings.

#### **Variable Argument Lists**

Be able to create functions that accept a variable number of arguments.

Be able to create functions that return a variable number of arguments.

Be able to use the special variables *nargin*, *nargout*, *varargin* and *varargout* in functions having a variable number of arguments.

#### Structure Arrays (includes xlsread)

## **Exceptions and Error Handling**

Be able to correctly use *try-catch* blocks.