MAT 260 Assignment Guidelines and Rubric

Overview

One of the best ways to understand cryptology is by working with ciphers and using them to solve problems. This course uses MATLAB as an environment to practice with these cryptographic methods in order to gain a better understanding of how they work and can be used. MATLAB is an interpreted language. Programs may be easily written and modified with the built-in integrated development environment and debugger. If you are unfamiliar with MATLAB, the activities in the class have been designed to introduce you slowly to key concepts and operations. No previous MATLAB experience is needed.

Directions

Review the assigned questions located in the Module Activities. To complete computer problems, you should start by downloading the MATLAB Files from the textbook. Extract the items from this folder and add them to your MATLAB directory as well as any associated templates provided with the problems. Review the provided instructions and any examples in the appendices of your textbook. Produce your own code in response to the prompt.

Specifically, you must address the following rubric criteria:

1. Generate an accurate encryption or decryption of each problem.
    A. Create appropriate computations using MATLAB functions.
    B. Apply the appropriate cryptography tools for solving each problem.
    C. Apply quantitative literacy to solve problems using numerical data.

What to Submit

Once your problems have been encrypted or decrypted, you should submit a PDF of any computer problems and a Word document that shows your work for all your answers to the assigned exercises.

Supporting Materials

The following resources support your work on these assignments:

Document: MATLAB Access Instructions

This document provides step-by-step guidance for downloading the template from your learning environment, uploading the template to MATLAB, and then exporting your MATLAB work into PDF format.

Files: MATLAB Files

This zip contains MATLAB files that accompanies the text and supports these assignments.

Video: MATLAB for Students

This video provides a brief overview for using MATLAB hosted on the Pearson site

A video transcript is available: Transcript for MATLAB for Students

Assignment Rubric

Criteria	Exemplary (100%)	Proficient (85%)	Needs Improvement (55%)	Not Evident (0%)	Value
Computation	Correctly computes the problems and clearly defines strategies/process	Correctly computes the problems	Does not sufficiently compute the problems	Does not compute the problems	40
Application of Tools	Effectively applies the appropriate procedures/ formulas/tools to solve the problems	Adequately applies the required procedures/ formulas/tools to solve the problems	Does not apply the required procedures/ formulas/tools to solve the problems	Does not use tools	40
Quantitative Literacy	Effectively works with numerical data and solves quantitative problems from a wide array of authentic contexts in everyday life	Works with numerical data and solves quantitative problems from an array of authentic contexts	Does not sufficiently work with numerical data or solve quantitative problems with effectiveness	Does not work with numerical data or solve quantitative problems	20
				Total:	100%