George Mason University
Math 110-001
Course Syllabus

Term	Fall 2019	
Title	Probability	
Course	Math 110-001 or 002	
Location	Peterson Hall 1113	
Time	TR 10:30 - 11:45	
Professor:	Douglas Eckley	
	deckley2@gmu.edu	
	mobile #	571 277 7927 (use sparingly)
	office	Exploratory Hall room 4451
	office #	703 993 1682
	office hours	MW 1:30 - 2:50 and W 4:30 - 7:00

Description

This course meets the quantitative reasoning requirement, one of the Foundation requirements of the University General Education program. The goal of the Foundation requirement is to help ensure that students are equipped with the tools and techniques necessary to succeed in college and throughout their lives and careers.

The learning objectives for this requirement are:

1. Students are able to interpret quantitative information (i.e., formulas, graphs, tables, models, and schematics) and draw inferences from them.

2. Given a quantitative problem, students are able to formulate the problem quantitatively and use appropriate arithmetical, algebraic, and/or statistical methods to solve the problem.

3. Students are able to evaluate logical arguments using quantitative reasoning.

4. Students are able to communicate and present quantitative results effectively.

This course meets the quantitative reasoning requirement of the Mason Core. As such, the professor is required to introduce the students to a computer-based math capability. In my class, that means Excel spreadsheets.

We will cover the following topics:

Introduction to Excel
Graphs and Slideshows

Matrices
Linear Equations
Combinations and Permutations
Probability
Mathematics of Loans (Car, Home)
Mathematics of Retirement Saving
Data Fitting - Trendlines and Errors
Encryption

The book is Finite Mathematics and Its Applications, Eleventh or later Edition, by Goldstein, Schneider and Siegel. The lectures are done my way (not from the book). The book serves as a useful source of practice problems and as a back-up resource. The idea is that you have two chances to learn the material: from lecture and from book.

Procedures

If at all possible, but it is not required, bring your pc to class. That way you can be hands-on with Excel during class, which is very conducive to gaining expertise.

The class will consist mostly of a series of lectures.

Grading will be divided as follows:

Online tutorial on 26 Aug	1
Group Assignments (2)	4
Progress tests (5)	75
Final exam	20

Calendar

Date	Topic
27-Aug-18	Online tutorial/problem (do not come to the classroom)
29-Aug-18	Introduction to Excel
03-Sep-18	Graphs and Slideshows
05-Sep-18	Group Assignment #1 / Review
10-Sep-18	Progress Test 1
12-Sep-18	Matrices
17-Sep-18	Matrices
19-Sep-18	Linear Equations
24-Sep-18	Linear Equations
27-Sep-18	Review
01-Oct-18	Progress Test 2
03-Oct-18	Combinations and Permutations

08-Oct-18	Combinations and Permutations
10-Oct-18	Probability
15-Oct-18	Fall Break
17-Oct-18	Probability
22-Oct-18	Review
24-Oct-18	Progress Test 3
29-Oct-18	Mathematics of Loans (Car, Home)
31-Oct-18	Mathematics of Loans (Car, Home)
05-Nov-18	Mathematics of Retirement Saving
07-Nov-18	Mathematics of Retirement Saving
12-Nov-18	Review
14-Nov-18	Progress Test 4
19-Nov-18	Trendlines and Errors
21-Nov-18	Encryption
26-Nov-18	Group Assignment #2
28-Nov-18	Thanksgiving Break
03-Dec-18	Review
05-Dec-18	Progress Test 5
10-Dec-18	Reading
12-Dec-18	Final Exam