## George Mason University Math 453/553 Course Syllabus

Date Spring 2018

Title Advanced Mathematical Statistics

Course Math 453/553 Location Planetary Hall 126 Time Wednesday 7:20PM

Professor: Dr Eckley

deckley@gmu.edu office #: 703 993 1682

office: Exploratory Hall room 4451 office hours: Tue and Thu 2pm-to-7pm

## **Description**

This course covers the basics of probability and statistical analysis. For those interested, it also helps the student prepare for the statistics-related professional exams in the Society of Actuaries and/or Casualty Actuarial Society sequences. This course will utilize the "R" programming language to some extent, and also will utilize large datasets to some extent.

The textbook is An Introduction to Mathematical Statistics 5th Edition, by Larsen and Marx.

## **Procedures**

The class will consist mostly of a series of lectures.

Homework and quizzes will be determined as we proceed.

Grading will be divided as follows:

Homework / Quizzes 60 Final exam 40

We will use a OneDrive folder for handing in quizzes Proceed as follows:

https://onedrive.live.com/about/en-us/

click on "Go to my OneDrive"

enter your prof's email, ie "deckley2@gmu.edu"

enter the password, ie "spring2018"

Now you should see a folder for this class, ie Math 453

Please upload your work into that folder

Please also retain a copy of your work in your own computer

## Calendar

Date	Topic	Reference to Book
24-Jan	Probability	Ch 2
31-Jan	Probability	Ch 2
07-Feb	Hypothesis Testing	Ch 6
14-Feb	Inferences based on Normal Distr	Ch 7
21-Feb	Inferences based on Normal Distr	Ch 7
28-Feb	Two-Sample Inferences	Ch 9
07-Mar	Goodness-of-fit Testing	Ch 10
14-Mar	Spring Break	
21-Mar	Goodness-of-fit Testing	Ch 10
28-Mar	Linear Regression	Ch 11
04-Apr	Linear Regression	Ch 11
11-Apr	Analysis of Variance	Ch 12
18-Apr	Randomized Block Designs	Ch 13
25-Apr	Nonparametric Statistics	Ch 14
02-May	Review	
09-May	Final Exam	