Mathematical Statistics

Math 310

**Instructor**

Sybil Prince Nelson

Chavis Hall 112

Office Hours:  TRF 12-2pm on Zoom or by appointment in person. Email me at [sprincenelson@wlu.edu](mailto:sprincenelson@wlu.edu)

Office Phone:

Website: <http://spn.academic.wlu.edu>

**Text**

*Modern Mathematical Statistics* by Jay L. Devore and Kenneth Berk. Springer, 2012

**Course Catalog Description:** Probability, probability density and distribution functions, mathematical expectation, discrete and continuous random variables, and moment generating functions

**Class Schedule**

Tuesday-Thursday 10-11:30am

**Course website:**

**Prerequisites:** Math 221

**Learning Objectives**

* Students will learn to collect, analyze, interpret, and draw conclusions from data
* Students will expand quantitative skills that can then be used in a variety of ways
* Students will demonstrate a knowledge of probability and statistical distributions
* Students will develop a working knowledge R statistical package

**Software/Technology**

A TI calculator is handy but not required. You will need to download R statistical package. We will do this together on the first day of class.

**Student Expectations for Zoom classes**

* Web cameras must be on for the entire class
* Microphones off unless you have a question
* No animated virtual backgrounds
* No texting or chatting among students during class
* Participation is required for each class (i.e. answering the stat of the day question, asking a question about the material or asking questions during class)

**Homework**

Unless otherwise instructed, written homework will be due each Friday by 5pm in my office. Programming homework will be submitted electronically. Programming will simply be graded on whether code runs or not and performs the intended function. I will not debug your code for you once it is turned in. Please turn in the written homework as a PDF, preferably using Latex, into Canvas.

Feel free to work in groups to complete the homework, but turn in your own individual handwritten assignment. Copying someone’s solution word for word will be considered an Honor violation. Each assignment should include your name, assignment number, and the problems in the order they are given. Solutions will be posted the Monday following the Friday due date. Once solutions are posted, homework will no longer be accepted. Late homework will be accepted until the following Monday for a penalty of 20%. If there is a valid reason for missing a deadline (Covid-19 diagnosis or other illness), an alternative assignment will be provided and must be completed by the specified due date.

**Tests**

Test 1: Feb. 19th

Test 2: March 26th

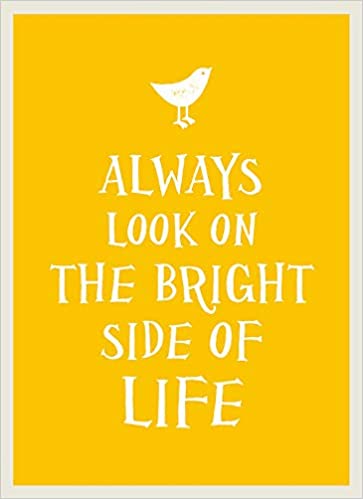
Final Exam: Apr. 10th

**Grading**

* Homework and Quizzes: 20%
* Test 1: 25%
* Test 2: 25%
* Final Exam: 30%

**Course Policies**

1. In the words of Monty Python:



Sure, we have another semester of Zoom, but at least you don’t have to trek to class in the snow!

2. I will try my best to answer your questions by email in a timely fashion. Please make your questions as detailed as possible in case I don’t have my textbook handy.

3. Check the website/Canvas frequently as I plan on uploading videos with hints that will help with your homework.

4. Washington and Lee makes reasonable academic accommodations for qualified students with disabilities. All undergraduate accommodations must be approved through the Title IX Coordinator and Director of Disability Resources, Elrod Commons 212, Washington and Lee University, (540) 458-4055. Students requesting accommodations for this course should present an official accommodation letter within the first two weeks of the term and schedule a meeting with me to discuss the types of accommodations needed.

5. Please let me know well in advance if there is a conflict for one of our test dates. I am willing to adjust dates on tests for valid medical or religious reasons, but I need to know in advance. Having too much work is not a valid reason.