STT 315-001
Fall 2013

Instructor: Dr. Susan Simmons **Office:** BR 211 B
Office Hours: TR 11:00am-1:00 pm, MW 9-10 **Email:** simmonssj@uncw.edu
or by appointment
Website: http://people.uncw.edu/simmonssj

Course Meeting Times: TTH Bear Hall 208 9:30-10:45 am

Required Text: *Mathematical Statistics with Applications, 7th Edition* by Wackerly, Mendenhall, and Scheaffer

Student Solution Manual (if desired): *Student Solutions Manual for Mathematical Statistics with Applications*, by Wackerly, Mendenhall, and Scheaffer

Course Topics:
Probability
Discrete and continuous random variables probability distributions
Mathematical expectations and variance
Bivariate discrete probability functions
Central limit theorem
Introduction to the theory of estimation and hypothesis testing
Use of the statistical package R

Grading:

Homework/Quizzes	25%
Exams (2)	25% each
Final Exam	25%

A	90 – 100%	D	60 - 69.9%
B	80 – 89.9%	F	below 60%
C	70 – 79.9%		

It is possible to get pluses and minus.

Homeworks: Homework will be assigned on a regular basis. Since adequate time is given to complete each homework assignment, homework is expected to be turned in on time. Late homework assignments may receive penalty points (or not be accepted).

Attendance: Attendance in the classroom is expected. Excessive absences may result in a grade penalty.

Exams: There will be two in-class exams given on September 26 and November 5.

Final Exam: The final exam is Tuesday, December 10th at 8:00 am.

Academic Honor Code: All members of UNCW's community are expected to follow the academic Honor Code. Please read the UNCW Honor Code carefully (as covered in the UNCW Student Handbook). Academic dishonesty in **any** form will not be tolerated in this class.

Disability Services: Students with diagnosed disabilities should contact the Office of Disability Services (962-7555). Please give me a copy of the letter you receive from Office of Disability Services detailing class accommodations you may need. If you require accommodation for test-taking please make sure I have the referral letter no less than three days before the test.

Harrassment Policy: UNCW practices a zero-tolerance policy for violence and harassment of any kind. For emergencies contact UNCW CARE at 962-2273, Campus Police at 962-3184, or Wilmington Police at 911. For University or community resources visit http://uncw.edu/wrc/crisis.htm

The UNCW Statement on Diversity in the University Community:

As an institution of higher learning, the University of North Carolina Wilmington represents a rich diversity of human beings among its faculty, staff, and students and is committed to maintaining a campus environment that values that diversity. Accordingly, the university supports policies, curricula, and co-curricular activities that encourage understanding of and appreciation for all members of its community and will not tolerate any harassment or disrespect for persons because of race, gender, age, color, national origin, ethnicity, creed, religion, disability, sexual orientation, political affiliation, marital status, or relationship to other university constituents. Students with Disabilities information and resources available at http://www.uncw.edu/stuaff/disability/

Zero Tolerance Policy:

UNCW practices a zero tolerance policy for violence and harassment of any kind. For emergencies contact UNCW CARE at 962-2273; Campus Police at 962-3184; or Wilmington Police at 911. For University or community resources visit: http://www.uncw.edu/safe-relate/campusResources.htm. Violence prevention information and resources available at http://www.uncw.edu/safe%2Drelate/. We will focus several class discussions on the importance of reducing violence and increasing tolerance in schools and at UNCW.

Cell Phones, PDAs, Laptops:

Please silence your cell phone and do not make calls, access applications or text during class. If you have a personal, urgent matter for which you need to be on call, please let me know in advance. In addition, please do not have active any PDAs or laptops/netbooks/iPads open and active unless the activity warrants. We will use these devices in selected activities and they are permissible then.

Important dates

August 21	Classes begin
August 28	Last day for registration/Last day to drop
September 2	Labor Day, No classes
September 26	Exam 1
October 10-11	Fall break, No classes
November 5	Exam 2
November 27-29	Thanksgiving break, No classes
December 4	Last day of classes
December 10	Final exam at 8:00 am

Student Learning Outcomes

Students should be able to:

Understand the difference between statistics and parameters
Calculate sample mean and sample standard deviation
Use the empirical rule
Construct appropriate graphs for data
Understand counting techniques
Understand sample space
Understand Bayes rule and conditional probability
Identify discrete distributions and how to find means and variances of each distribution
Identify continuous distributions and find means and variances of each distribution
Find probabilities, means and variances from pmf and pdf
Find probabilities from bivariate discrete and continuous distributions
Find marginal and conditional distributions and probabilities from bivariate distributions
Understand, calculate and use moment-generating functions
Understand Tchebysheff's inequality