STT 315-002
Spring 2016

Instructor: Dr. Susan Simmons **Office:** OS 2007 J
Office Hours: MTWRF 8-9 am, TR 10:30-11:30am **Email:** simmonssj@uncw.edu
or by appointment
Website: http://people.uncw.edu/simmonssj

Course Meeting Times: TTH OS 2009 11am - 12:15pm

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
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 are NOT ACCEPTED. If you turn-in your homework via email, it must be in ONE pdf document and clearly legible (otherwise it will 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 February 18 and March 31.

Final Exam: The final exam is Tuesday, May 3rd at 11:30 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

January 11	Classes begin
January 18	Martin Luther King, Jr. Day, No classes
January 19	Last day for registration/Last day to drop
February 18	Exam 1
February 26	Last day to withdraw
March 7-11	Spring break, No classes
March 24-25	Easter Break, No classes
March 31	Exam 2
April 27	Last day of classes
May 3	Final exam at 11:30 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 joint discrete distributions
Understand, calculate and use moment-generating functions