

STT 315-002
Spring 2012

Instructor: Dr. Susan Simmons

Office: BR 211 B

Office Hours: MW 9:00-10:00 am, TTH 1:00-2:00 pm
or by appointment

Email: simmonssj@uncw.edu

Website: <http://people.uncw.edu/simmonssj>

Course Meeting Times: TTH Bear Hall 161 2:00-3:15 pm

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.

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 16 and March 29.

Final Exam: The final exam is Thursday, May 3rd at 3:00 pm.

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:

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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 16	Martin Luther King, Jr. Day, No classes
January 18	Last day for registration/Last day to drop
February 16	Exam 1
March 12-16	Spring break, No classes
March 29	Exam 2
April 5-6	Easter Break, No classes
April 30	Last day of classes
May 3	Final exam at 3:00 pm

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 discrete distributions

Understand, calculate and use moment-generating functions