

**STAT 110: Introduction to Descriptive Statistics**  
**Fall 2009**

**Section 3:** Tuesday & Thursday 9:30 – 10:45 a.m. in CSSC 011

**Instructor:**

David Hitchcock

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Office Hours: M 1:30-2:30 p.m., Tu 11:15 a.m.-12:15 p.m.,

W 1:30-2:30 p.m., Th 11:15 a.m.-12:15 p.m.,

or please feel free to make an appointment.

Course Web Page:

<http://www.stat.sc.edu/~hitchcock/stat110.html>

**Instructional Assistant:**

A.K.M. Fazlur Rahman (Fazlu)

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See Course Web Page for Tutoring Lab hours.

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**Description:** Introduction to Descriptive Statistics (3 credit hours) – Computational and graphical techniques for organizing and presenting statistical data. Sample mean and sample variance, cross tabulation of categorical data, correlation and simple linear regression, quality control charts, statistical software.

**Purpose:** To provide an integrated introduction to the basic statistical concepts encountered in mainstream and scientific media

**Textbook:** *Statistics: Concepts and Controversies* (7th Edition) by David S. Moore and William I. Notz, W.H. Freeman and Company, 2010 with StatsPortal\* for *Statistics: Concepts and Controversies*.

Note that an I-Clicker should be purchased with the text. A printed text can be purchased at the usual retail bookstores or an “e-book” can be purchased online directly from the publisher. Details of these options are found at the course web page: <http://www.stat.sc.edu/~hitchcock/stat110.html>

\*StatsPortal is an on-line supplement to the text which integrates a rich suite of diagnostic, assessment, tutorial, and enrichment features, enabling students to master statistics at their own pace. A link to the StatsPortal web site is given on the course web page at: <http://www.stat.sc.edu/~hitchcock/stat110.html>

**Calculator and Computer:** Each student will need a calculator (that takes a square root and raises a number to a power) and access to the internet to complete homework assignments. Computers are located throughout the campus. A computer account through the College of Arts and Sciences using the MATH/STAT (MS) domain will be set up for you. Two MS labs are available in LeConte, rooms 124 and 303A. Check these locations for hours. Through this account, you will be issued a reasonable amount of paper for printing at no charge.

**Attendance:** All students are expected to attend all classes. It is assumed that any information given out during class has been delivered to all students.

**Cell Phones & Laptops:** Please turn cell phones off or set to vibrate during class. Cell phones that ring during class are considered disruptive behavior. Also, do not have laptop computers open during class.

**Stat Tutoring Center:** There is a statistics tutoring center staffed with graduate students located in LeConte room 215A. Hours for this center will be announced and posted soon. Check the course web page for details.

**Expectations:** All students are expected to

- Attend class regularly and participate in in-class activities.
- Read the portions of the text as assigned.
- Make serious attempts at all of the assigned homework problems and in preparation for the exams.
- Use the resource of their fellow students, the tutoring room, and their instructional team to seek answers to questions that arise in class, in the readings, and on the homework

**Homework and Class Activities** (100 points): Homework covering the concepts taught in the class will be posted on the StatsPortal regularly throughout the semester. Students will submit their answers online and receive feedback on responses. A date and time for closing each assignment will be announced in class and appear on each assignment. No late assignments will be accepted. The StatsPortal system will be demonstrated in class. Technical problems with StatsPortal should be directed to StatsPortal tech support at 1-800-936-6899. You may discuss homework orally with other students, but each student must submit their assignment independently. In addition to my office hours, assistance on coursework is also available in the Statistics Tutoring Room in 215A LeConte.

We will also be using a “clicker system” to record responses during class. Each student will receive a point for participation per class and an additional point for each additional correctly answered question. These points will be combined with those received for homework (with a maximum of 100% for this homework/class activities component) to account for 20% of your grade. Clicker points will be recorded on the StatsPortal.

**Exams** (100 points each): The three in-class exams will be given on September 24, October 22, and November 19. All work on the exams must be independent. Typically, a makeup exam will **only** be allowed for documented **university-related** absences. Otherwise, the final exam score will replace the missed exam score.

**Final Exam** (100 points): The final exam for this course will be comprehensive and will be administered on Tuesday, December 8, at 2:00 p.m. All work on the final exam must be independent. If the score on the final exam is higher than the score of the lowest midterm exam, then it will be used to replace that midterm score.

**Grading Weights:**

In-Class Exams (3 @ 100 each)	300 points
Homework & Class Activities	100 points
Comprehensive Final Exam	100 points
<b>TOTAL</b>	<b>500 points</b>

**Grading Scale:**

A	90% – 100%	C	70% – 75%
B+	86% – 89%	D+	66% – 69%
B	80% – 85%	D	60% – 65%
C+	76% – 79%	F	0% – 59%

**Honor Code:** See the Carolinian Creed in the Carolina Community: Student Handbook & Policy Guide.

**Learning Outcomes:** By the end of the term, successful students should be able to do the following:

- Critically evaluate claims based on statistical reasoning from survey and experimental results and understand the basic principles of statistical design of experiments
- Understand, interpret, and communicate statistical reasoning from data using basic statistical terms, descriptive statistics, and charts and graphs when appropriate.
- Recognize and evaluate the relationship between two variables through linear regression and correlation and be able to explain why correlation does not imply causation
- Find information for making appropriate estimates of selected population parameters
- Understand and be able to describe simple principles of probability, including the application of the normal curve to social and physical phenomena.
- Interpret confidence intervals
- Understand the concept of statistical significance and that it does not always imply importance.