

**Math 207 Section A**  
**General Statistics**  
**Fall 2006**

**Monday/Wednesday/Friday, 8:00-9:00, Olin 104**

**Instructor** Wesley Eddings  
**Office** Olin 108 (226-3024)  
**Email** [weddings@bsc.edu](mailto:weddings@bsc.edu)  
**Office Hours** Tuesday 9-11, Wednesday 1:30-3:30, Thursday 1:30-4:30, Friday 10:30-12

**Required Course Materials**

1. *Intro Stats* by Richard D. DeVeaux, Paul F. Velleman, and David E. Bock, Second Edition (ISBN 0321286715)

- You may substitute a used copy of the First Edition, ISBN 0201709104. Do not buy an Instructor's Edition. Try [www.addall.com](http://www.addall.com), [used.addall.com](http://used.addall.com), or [www.bookfinder.com](http://www.bookfinder.com) on the internet for discount prices on books.

2. A simple calculator
3. A stapler

**Course Catalog Description**

Statistical techniques with an emphasis on statistical inference; hypothesis testing, parameter estimation, analysis of variance, regression, correlation. Emphasis is placed on business problems.

**Course Prerequisite**

The prerequisite for this course is Math 115, Fundamentals of Algebra. Parts of this material—in particular, reading formulas, percentages, fractions, and equations of straight lines—are important for success in Math 207.

**Computing**

We will use the Windows version of Minitab 14, a statistical package designed for students. Minitab is easy to use, and I will help you learn as we go. Minitab is available in our classroom (Olin 104), the new computer classroom (Olin 105), the large lab upstairs (Olin 201), and Harbert 301.

You can rent your own copy of Minitab from [e-academy.com](http://e-academy.com) for the semester for \$29.99. (Or you can download a 30-day trial version for free.) Visit [www.e-academy.com/minitab](http://www.e-academy.com/minitab) for details. Renting Minitab is optional.

We will do a number of activities and simulations with Minitab in class. You are not permitted to surf the internet, send instant messages, read email, work on assignments for other courses, or engage in similarly distracting activities during class. You will sign a statement to this effect on the first day of class.

Data sets, handouts, and problem solutions will be stored on Blackboard. Be sure you are registered to receive course email through Blackboard.

**Extra Help**

Student tutors are available in the Mathematics Lab to help you with the course material. (The tutors will not solve your homework problems). I will announce the schedule in class. The Lab is sponsored by the Academic Resource Center (Room 127 in the Humanities Center, email [arc@bsc.edu](mailto:arc@bsc.edu), phone 226-7827). The Center will also provide individual tutoring in statistics.

Once a week or so I hold a statistics Study Hall where you can ask questions and work problems. The Study Hall is usually in Olin 101; I'll announce the times in class. You can drop in and leave at any time.

### **Class Attendance**

I expect you to attend all class meetings on time. If you are sick and cannot attend, please let me know in advance. Enter and leave as quietly as possible if you must arrive late or leave early. Turn off your cell phone before class begins. I may call on you by name to answer questions about the day's reading and lesson.

### **Homework**

I will collect and grade about one homework assignment per week (3-6 problems). The graded assignment will usually be made on Friday and will be due at the beginning of class the next Friday. Clear explanations are important; most questions in this course cannot be answered with numbers alone. Leave some space between problems, and do not write problems side-by-side: put problem 2 under problem 1. Each problem is scored from 0 to 3:

Score	Meaning
3	Mostly correct; may include minor errors
2	Substantially correct, but with something important missing or incorrect
1	Some progress toward a complete solution, but multiple major errors
0	No progress toward a complete solution

I will also assign 3-6 problems in each class that you should do before the next class. The daily assignments will not be collected for a grade, but some problems will appear on the quizzes.

I will drop your lowest score on the graded assignments, and I will deduct credit from late homework assignments according to the following schedule:

Lateness	Amount Deducted
0-1 hour after class	10%
1-12 hours after class	20%
12-24 hours after class	30%
24-36 hours after class	40%
36-48 hours after class	50%
48+ hours after class	100%

### **Quizzes**

We will have about one ten-minute closed-book closed-note quiz per week, at the beginning of class. All quizzes will be announced in advance; again, many problems will come from the uncollected daily homework assignments. There are no make-up quizzes, but I will drop your four lowest scores.

### **Exams**

There will be four 60-minute in-class closed-book, closed-note exams during the semester. (Part of the third exam may be take-home: details later). Each will be worth 12% of your final course grade, and each will be semi-cumulative: ideas from earlier in the course will still be needed later in the course. You may use your calculator (but not the computer) on each exam.

You will have three hours for the in-class final exam. The final will be given only during the scheduled time. The final exam is worth 20 percent of your course grade.

After an exam is returned, you will have one week to register grievances about grading. If I have added your points incorrectly, you need only show me your exam, but if you believe one or more parts were graded

unfairly, you must submit your claim in writing after reading the posted solution for your problem. I will take all written submissions seriously and will make the adjustments I believe are justified. No complaints will be heard if more than one week has passed since the exam was returned.

### **Final Paper**

On the first day of class you will write a one-page essay on what you think the course will be about and what you hope to learn. (The essay counts for 1% of your grade; making an honest effort to answer the question earns full credit). I will take up the essays, make copies for myself, and return the originals in mid-November. Then you will write a final paper, 2-3 pages long, explaining what you have learned in the course and how your understanding has changed. The final paper counts for 9% of your course grade. A good paper will use specific examples and make a persuasive case that your understanding of statistics has or hasn't changed. You will not be graded on your opinion of the course. I will make copies of the final papers and return the graded originals before the end of the semester.

### **Evaluations**

We will complete the BSC evaluation forms near the end of the semester. I also hand out minute papers at the end of some classes, an evaluation in the middle of the term, and a comment card (advice for future Math 207 students) at the end of the term.

### **Grading**

Homework Exercises (lowest dropped)	11%
Quizzes (lowest four dropped)	11%
First Day Paper	1%
Final Paper	9%
Exams 1-4 (weighted equally)	48%
Final Exam	20%

Class participation and the final exam will be used to make borderline decisions.

### **Weather Emergencies**

During a tornado warning we will leave the classroom and go to the circle-shaped hallway next to the first floor faculty offices.

### **Academic Honesty**

**Cheating is a serious offense.** You are welcome to discuss the assignments and material with other students. (I will let you know in advance if any homework assignment is to be done completely on your own). I encourage you to study in small groups. But you must write up individually anything you hand in, unless I announce otherwise. Copying from a classmate's work or any other source is not allowed. You are expected to conform to the BSC Honor Code:

As a member of the student body of Birmingham-Southern College, I realize my responsibility to the traditions of the institution, to my fellow students and to myself. I recognize the significance of the Honor System, and I pledge that I will not lie, cheat, or steal as a member of the Birmingham-Southern College community.

If you have witnessed, been the victim of, or willingly or unwillingly participated in an Honor Code violation, please talk to me immediately. The Honor Code mandates immediate, honest disclosure of such violations. A student found in violation of the Honor Code on an exam or assignment will receive a zero grade for that portion of the course or for the course as a whole and may be subject to further disciplinary action at the discretion of the Honor Council.

## Accommodations for Disabilities

If you have a physical, psychological, medical, or learning disability that may affect your ability to carry out assigned work in this course, please contact the Academic Accommodation office at 226-4989. Sara Hoover, the Director of Personal Counseling, will work with you to determine appropriate accommodations. I will grant accommodations only when the appropriate College offices have been notified. All information is confidential.

### Tentative Course Schedule (do each day's reading before class)

#### August

Date	Topic	Reading
W30	First Day	none

#### September

Date	Topic	Reading
F1	Characteristics of Data/Categorical Variables	1-3
W6	Quantitative Data	4
F8	Describing Distributions Numerically	5
M11	Standard Deviation and Normal Model	6
W13	Standard Deviation and Normal Model	6
F15	Catch-Up and Review	Chapters 1-6
<b>M18</b>	<b>Exam One</b>	<b>Study for exam</b>
W20	Scatterplots	7
F22	Linear Regression	8
M25	More on Regression	9
W27	Randomness	11
F29	Surveys and Statistical Sampling	12

#### October

Date	Topic	Reading
M2	More on Sampling	12
W4	Experiments and Observational Studies	13
F6	More on Studies	13
M9	Introduction to Probability	14
W11	More on Probability	15
F13	Catch-Up and Review	Chapters 7-9, 11-15
<b>M16</b>	<b>Exam Two</b>	<b>Study for exam</b>
W18	Sampling Distribution Models	18
M23	Sampling Distribution Models	18
W25	Sampling Distribution Models	18
<b>F27</b>	<b>Exam Three</b>	<b>6, 18</b>
M30	Confidence Intervals for Proportions	19

#### November

Date	Topic	Reading
W1	More on Confidence Intervals	19
<b>F3</b>	<b>Registration (no morning classes)</b>	<b>none</b>
M6	Significance Tests for Proportions	20
W8	More on Significance Tests	20
F10	Comparing Proportions	22
M13	More on Comparing Proportions	22
W15	More on Statistical Significance	21
F17	Catch-Up and Review	Chapters 18-22
<b>M20</b>	<b>Exam Four</b>	<b>Study for exam</b>
M27	Inferences About Means	23
W29	More on Inference About Means	23

#### December

Date	Topic	Reading
F1	Comparing Means	24
M4	More on Comparing Means	24