



General Business 303: Business Statistics Fall 2008

Lecture 1: 9:30 - 10:45 TR, Room 2120 Grainger
Professor: Patricia Mullins
Office: 4116 Grainger 262-6174
pmullins@wisc.edu
Office Hours: TR 10:45 – 11:30 & by appt.

Lecture 2: 2:30 - 3:45 TR, Room 2120 Grainger
TAs: Peng Shi and Chunyan Zhang
TA Office: Grainger
pshi@wisc.edu c Zhang46@wisc.edu
Office Hours: to be determined

***E-mail is the best way to reach both Professor Mullins and the teaching assistants. Please note that e-mail will be read only during university business hours, not evenings or weekends.

Required Text. Berenson, ML, Levine, DM, Krehbiel, TC. (2006). *Basic Business Statistics*, 10th Edition. New Jersey: Prentice Hall or equivalent custom edition.

A scientific calculator with a square root key is also required.

You must bring your calculator to class and to discussion.

Course Rationale. This is a course in the basic statistical concepts and methods common in business applications. The emphasis is on parametric techniques used to describe and compare samples and populations. The goal is to introduce you to a new way of thinking about data, and to help you gain an understanding of how to use, communicate, and interpret statistics. It is a foundation course required of all business majors because statistics is an integral part of the structure and functions of business. The knowledge and skills you acquire will help you in more advanced business courses and in your business career.

VISA. I wish to fully include persons with disabilities in this course. If you have a Verified Individualized Services and Accommodations (VISA) plan please submit a copy to me **by the end of the first week of classes**. This will let us know whether you need any special accommodations in the curriculum, instruction, or assessments of this course to enable you to fully participate. We will try to maintain confidentiality of the information you share with us.

Homework. It is necessary to read the chapters for the first time before we discuss them in class, and work out the assigned problems as you go through the material; although rarely the best method for studying, “cramming” is especially bad for learning statistics. Homework problems are due **in class** each week and are reviewed in discussion to help keep you on track with the material. If you read the assigned chapters and do the homework, you will be well prepared for both the class lectures and the exams. You are strongly encouraged to form a study group with other students to discuss concepts presented in class and to work on homework problems; however, the final homework product must be your own.

Academic misconduct will be dealt with according to university policy.

Homework assignments are drawn from odd-numbered problems in the book, and are due at the **beginning of class**. **Once class has started, homework is late and will earn a maximum of half the points.** See page six of this syllabus for assignments and due dates. You should also work through other problems in your book—the answers to even-numbered items are in the back of the text—to help you understand how statistical concepts are applied. Homework will concentrate on statistical problems demonstrating the application of statistical concepts.

In-Class Exercises. Twelve exercises will be completed in class, giving you experience working with a small group to solve a statistical problem. **There are no make-up in-class exercises because this is a group experience, so please do not request.** If you miss class on the day of an in-class exercise, you will get a zero. Signing someone else's name on the exercise is engaging in academic misconduct.

Quizzes. A short quiz will be given during most discussion sessions so that you can gauge your understanding of the material and practice for the exam. If you are late coming to discussion, you will not be able to make up the quiz or have extra time to complete it. You will receive feedback on the quiz during discussion. Quizzes will concentrate on statistical concepts.

Exams. There will be four multiple-choice exams in this class, all held as scheduled. **There will be no make-up exams. If you miss an exam you will receive a zero. If you have another exam scheduled at the same time as the fourth exam you must notify the professor by the end of the third week of the semester so alternate arrangements can be discussed.** All exams are secure, meaning that you will not receive them back. Exams will be reviewed in discussion and you will receive an item analysis indicating the questions you answered incorrectly. Any attempt to copy or otherwise reproduce exam questions will be treated as academic misconduct. Exams will have 40 questions each worth 2.5 points, and will concentrate on the material since the previous exam, although your knowledge is expected to accumulate. You will not be expected to memorize equations; you may bring a 3x5 note card to each exam. A set of statistical tables will be provided to you in class. Exams will concentrate on statistical concepts. There is no possibility for extra credit in this class; if you are struggling, make sure you **get help early in the semester** from the TAs and the professor. Our job is to facilitate your learning, but we can only do that if you seek our help.

E-mail. E-mail will be used extensively to communicate with you; it is assumed you check your e-mail daily. There are three important points to note:

1. E-mail usually will not be read by the professor and TAs during evening or weekend hours.
2. Information that is available in this syllabus or on the course Web site will not be repeated by e-mail.
3. For security reasons, **grade information will not be given by e-mail.**

The expansion addresses for this class are listed below, by lecture. Each list may be used by anyone wishing to send e-mail to all members of the class. Note that all e-mails to this address also go to Prof. Mullins and the TAs so make sure your messages are class-related.

genbus303-1-f08@lists.wisc.edu
genbus303-2-f08@lists.wisc.edu

Web site. Course Web site: <http://courses.bus.wisc.edu>

The Web site for this course will offer the syllabus and all of the PowerPoint lecture notes for you to download and print out. Solutions to some of the in-class exercises will also be posted. Solutions to homework problems will **not** be placed on the Web site; homework will be reviewed in discussion.

Learn@UW. The grading scheme is posted, all points are recorded, and grades are assigned at Learn@UW. **THERE IS NO CURVE**, meaning that a predetermined percent of students do not receive certain grades. Your grade is calculated according to the points you earn, although you can be assured that you will not miss a grade by a few points. Login at: <https://learnuw.wisc.edu>
Username: your NetID; Password: your NetID password. All point totals will be updated on Learn@UW approximately one week after each exam. **Any confusion about points must be addressed in writing within one week of posting, after which time points stand as recorded.**

Classroom Etiquette. It is important that we be respectful of each other in every learning situation. It disturbs other students (and the instructor!) to be coming and going during class.

- Attendance is required at all lectures and discussion sections. Any student leaving before class is dismissed will be counted absent. (Of course if you fall ill, you are free to leave.)
- You are expected to be on time for class; tardiness is particularly disruptive in a large lecture room. On the other hand, if you have an unavoidable delay, it is better to come to class late than not at all.
- Confidentiality in returning exams, homework, and quizzes will be maintained as much as possible. Please seek out only your own work when retrieving these materials.

Discussion Sections. You must attend the discussion section for which you are registered. The TAs cannot be responsible for tracking your grades if you attend another section. Only in an extreme circumstance will the TA give you permission to attend another section for one time. Try to make optimal use of the discussion by bringing up any questions you may have about the course material. This is also your opportunity to get to know some of the other students in the class in a smaller group setting. Don't pass up this opportunity to find others to form a study group.

School of Business Learning Center. This is an academic support resource available to students enrolled in pre-business and business courses. For more information call 262-1186, visit the center at 2240 Grainger, or check their Web site: www.bus.wisc.edu/blc. Everyone who is registered is free to stop in and sign up.

Code of Conduct. In order for the class to run smoothly, for everyone to be treated fairly, and for maximum benefit to be afforded to all participants, certain standards of consideration and cooperation must be maintained. By enrolling in General Business 303, the presumption is made that your conduct and performance in this class will conform to the following agreements and acknowledgements:

- I will not ask for privileges that others do not ask for or receive.
- I am solely responsible for my actions and the quality of my performance in this class.
- I acknowledge the importance of class preparation and participation to the learning process.
- I will be in class and seated at the appropriate time because it is an unfair distraction to others to arrive late or leave early. I will remain seated during lecture.
- I will, during class, devote my attention and effort to learning.
- I acknowledge that there are no make-up exams, quizzes, or in-class exercises, and I accept the burden of resolving any conflicts in my schedule.
- I agree to abide by the University's rules concerning academic misconduct and I appreciate the serious consequences of a violation of these rules.

How to Succeed in Business Statistics. Many students are wary about studying statistics; some students feel they just are not good at any subject even remotely related to math. Couple that with a power lecture and it is easy to see why students approach this course with trepidation. Relax! Gen Bus 303 is organized to help you succeed.

Here's what you can do:

- Read each chapter and do the homework as you go along. Make notes on points you do not understand or that you want clarified.
- Come to class on time, prepared to ask questions and be an active listener. Bring your book and your calculator.
- Form a study group with other students in class and meet regularly to go over problems in the study guide and even-numbered problems in the text, and to discuss the statistical concepts being covered.

- Attend discussion sessions and be on time to take the quizzes.
- Keep a positive attitude, take an active role in learning statistics, and relate what you are learning to your daily life experiences.
- Contact the School of Business Learning Center and attend their GB 303 help sessions.
- Ask us for help if you need it. If we know who you are, we will do what it takes to help you succeed. **In general, the TAs will handle homework questions; the professor will help with concept clarification.**

Here's how the course organization helps:

- All lectures are based on PowerPoint presentations. You can download these files from the course Web site and print your own handout, three slides per page, to bring to class to structure your note taking. This will help you organize and review the information for each chapter.
- All exams are multiple choice. They are similar to the sample multiple-choice questions presented in lecture.
- In-class group problems help you learn from each other and prepare for exams. In addition, they introduce variety—and **fun**—into the 75-minute class time.
- Reading each chapter and working through problems before lecture means that you will be familiar with the material being discussed, so you can sit back and listen instead of furiously taking notes, you can get any confusion cleared up, and I can present more interesting material than the basic information you can get from the book. Class time can be used to actively engage and involve you in learning experiences.
- Weekly quizzes allow you to gauge your understanding throughout the semester, not just at exam time.
- Concentrating on Excel examples in class means that you will be able to interpret and understand common Excel statistical applications used in business. Employers want business graduates who have been exposed to statistical software. Keep your book for future reference.

Course requirements and their point totals are shown in the table below.

Requirements	Points	Total Points	Proportion
4 Exams	100	400	.69
15 Homework assignments	3-8	70	.12
12 In-class group exercises	5	60	.10
10 Quizzes	5	50	.09
	TOTAL	580	

You will not miss a grade by five or fewer points. This means that if you have one emergency and must miss an in-class exercise, a quiz, or handing in homework on time, it will not affect your grade, so **DO NOT PROVIDE AN EXCUSE**. This class is graded on the total point method, which means that, conceivably, everyone could get an A. **IT IS NOT GRADED ON A CURVE**. Tasks are weighted according to their importance in demonstrating course objectives. **No one but you is responsible for your point total in this class.**

Reminder: As stated on page one of the syllabus, academic misconduct will be dealt with according to university policy (see <http://www.wisc.edu/students/saja/misconduct/UWS14.html>). You should be aware that the consequences are serious. Here are a few examples of academic dishonesty: copying or collaborating during an exam, discussing or divulging the contents of an exam with another student who will take the test, use of homework solutions from another student or semester, writing another student's name on an in-class exercise, keeping a copy of an exam, allowing someone to copy your homework, falsifying a grade on homework that was not turned in. This list is merely illustrative; it is not exhaustive.

Class lectures and required reading

<u>Date</u>	<u>Day</u>	<u>Chapter</u>	<u>Topic</u>
SEP 02	T		Introduction
04	R	1&2	Data collection; Presenting data in tables and charts
09	T	3	Numerical descriptive measures (eliminate 3.3)
11	R	3&4	Numerical descriptive measures; Probability (eliminate 4.3 and 4.4)
16	T	4	Probability
18	R	5	Discrete probability distributions (eliminate 5.4, 5.5, and 5.6)
23	T	6	Continuous probability distributions (eliminate 6.5)
25	R	6	Continuous probability distributions
30	T		Exam 1 – IN CLASS (Covers chapters 1, 2, 3, 4, 5, and 6)
OCT 02	R	7	Sampling distributions (Eliminate 7.6)
07	T	8	Confidence interval estimation (eliminate 8.7)
09	R	8	Confidence interval estimation
14	T	9	Hypothesis testing
16	R	9	Hypothesis testing
21	T		Exam 2 – IN CLASS (Covers chapters 7, 8, and 9 <i>plus*</i>)
23	R	10	Statistical inferences based on two samples
28	T	10	Statistical inferences based on two samples
30	R	11	Experimental design and analysis of variance (eliminate Levene's test)
NOV 04	T	11	Experimental design and analysis of variance
06	R	11	Experimental design and analysis of variance
11	T		Exam 3 – IN CLASS (Covers chapters 10, 11 <i>plus*</i>)
13	R	13	Simple linear regression analysis (eliminate 13.6)
18	T	13	Simple linear regression analysis
20	R	13	Simple linear regression analysis
25	T	14	Multiple regression (eliminate 14.5)
27	R		Thanksgiving Holiday—No class
DEC 02	T	14	Multiple regression
04	R	18	Process improvement using control charts (eliminate 18.6)
09	T	18	Process improvement using control charts
11	R	**	Chi-square tests **read course lecture notes , not book chapter
14	SUN 7:25 pm		Exam 4 – (Covers chapters 12**, 13, 14, 18, <i>plus*</i>)

The *plus** is included to remind you that each exam will focus on that section's material, but will also be comprehensive.

Homework Assignments and Due Dates – *Due at the Beginning of Class**

Chapter	Problems	Due Date
1	1.7, 1.9, 1.11	9/4
2	2.5, 2.17, 2.27 (b&d only), 2.33, 2.39, 2.43, 2.49	9/4
3	3.7, 3.17, 3.23, 3.41, 3.49	9/9
4	4.5, 4.9, 4.21, 4.29	9/11
5	5.5, 5.14, 5.15, 5.25, 5.26	9/18
6	6.7, 6.19 (a only), 6.25, 6.41	9/23
7	7.3, 7.5, 7.19, 7.29, 7.35	10/2
8	8.7, 8.17, 8.31, 8.39, 8.53, 8.59	10/7
9	9.15, 9.19, 9.33, 9.47, 9.57(a only), 9.69, 9.75, 9.77	10/14
10	10.9, 10.27 (a only), 10.39, 10.49 (a & c only)	10/23
11	11.5, 11.6, 11.25, 11.37 (d & e only)	10/30
13	13.9, 13.21, 13.23, 13.47, 13.61	11/13
14	14.3, 14.9, 14.11, 14.23, 14.25, 14.39	11/25
18	18.3, 18.19, 18.29	12/4
12	two problems on course Web site	12/11

Discussion Section Dates and Quiz Schedule

Date	Quiz number	Chapter(s) covered
SEP 5 & 8	1	1&2
12 & 15	2	3
19 & 22	3	4, 5
26 & 29	4	6
OCT 3 & 6		Exams returned
10 & 13	5	7, 8
17 & 20	6	9
24 & 27		Exams returned
NOV 31 & 3	7	10
7 & 10	8	11
14 & 17		Exams returned
21 & 24	9	13
DEC 1 & 5	10	14
8 & 12		Review for fourth exam

*****An important note:** Textbooks are not perfect, and the Berenson, Levine, and Krehbiel book is no exception. When the text varies from what is presented in class, **always follow the professor and the class notes.** The variation will be pointed out in class; this means that you are responsible for knowing the information imparted in each lecture.

“Tell me and I’ll listen. Show me and I’ll understand. Involve me and I’ll learn.”

Teton Lakota Indians

The above schedule and procedures in this course are subject to change in the event of extenuating circumstances.