

Home

STAT 200	
Course Name:	Elementary Statistics
Sections:	13 through 16
Start Date:	January 14, 2008
Class Days:	TRF
Course Description:	<p>Statistics is the art and science of using sample data to make generalizations about populations. The topics covered in this course include:</p> <ul style="list-style-type: none"> - methods for collecting and summarizing data - methods for evaluating the accuracy of sample estimates - techniques for making statistical inferences <p>Users of statistics -- researchers, government agencies like the Census Bureau and the Bureau of Labor Statistics, companies like the automakers and drug industry, etc. -- make extensive use of the computer in applying statistical methods to their problems. So will you! This course will offer you plenty of practice in analyzing data from a variety of areas. As a result you should be well prepared for problem-solving involving statistics in the rest of your college courses, as well as gaining an understanding of the role of statistics in your daily life.</p>
Prerequisites:	2 units in algebra
Instructor:	<p>Dr. Andrew (Andy) Wiesner Department of Statistics 308 Thomas Building 863 - 5653 email using Communicate tab in ANGEL Office Hours: TR 10:30 - 11:30</p>
For TAs and their office hours please see "Teaching Assistants" in ANGEL	

Date	Objectives, Topic, and Notes	Reading and Homework Assignments
Weeks of Jan 14 & 21	What is Statistics? Data vs. Information	Chapter 1: Statistics Success Stories and Cautionary Tales Chapter 2: Turning Data into Information Lecture Notes: Weeks 1 and 2 HW: Homework 01 and 02
Week of Jan 28	Regression and Correlation	Chapter 5: Relationships Between Quantitative Variables Lecture Notes: Week 3 HW: Homework 03
		Chapter 6: Relationships Between Categorical Variables

Week of Feb 4	Categorical Variables	Lecture Notes: Week 4 HW: Homework 04
Week of Feb 11	Probability	Chapter 7: Probability Sections 7.1 through 7.5 Lecture Notes: Week 5 HW: Homework 05 MIDTERM I: Available Wed. 2/13 through Fri. 2/15 Refer to Exams section in syllabus for more details. Covers material Weeks 1 through 4
Week of Feb 18	Random Variables	Chapter 8: Random Variables Sections 8.1 through 8.4 Lecture Notes: Week 6 HW: Homework 06
Week of Feb 25	Random Variables	Chapter 8: Random Variables Sections 8.5 through 8.7 Lecture Notes: Week 7 HW: Homework 07
Week of Mar 3	Sampling Distribution	Chapter 9: Understanding Sampling Distributions: Statistics as Random Variables Sections 9.1 through 9.4, 9.6, 9.9 Lecture Notes: Week 8 HW: Homework 08
Week of Mar 17	Sampling & Confidence Intervals	Chapter 3: Sampling: Surveys and How to Ask Questions Chapter 10: Estimating Proportions with Confidence Lecture Notes: Week 9 HW: Homework 09 MIDTERM II: Available Wed. 3/19 through Fri. 3/21 Refer to Exams section in syllabus for more details. Covers material Weeks 1 through 8
Week of Mar 24	Means	Chapter 11: Estimating Means with Confidence Sections 11.1 - 11.3 Lecture Notes: Week 10 HW: Homework 10

Week of Mar 31	Hypothesis Testing	Chapter 12: Testing Hypotheses About Proportions Lecture Notes: Week 11 HW: Homework 11
Week of Apr 7	Testing Means	Chapter 13: Testing Hypotheses about Means Sections 13.1 through 13.3 Lecture Notes: Week 12 HW: Homework 12
Week of Apr 14	Testing Population Means	Chapter 13: Testing Hypotheses about Means Sections 13.4 through 13.6 Lecture Notes: Week 13 HW: Homework 13
Week of Apr 21	Using Statistics	Chapter 16: Analysis of Variance Sections 16.1 through 16.2 Chapter 17: Turning Information into Wisdom Sections 17.1 through 17.4 Lecture Notes: Week 14 HW: Homework 14 MIDTERM III: Available Wed. 4/23 through Fri. 4/25 Refer to Exams section in syllabus for more details. Covers material Weeks 1 through 14
Week of Apr 28	Overall Course Review	Complete final lab activity Review for Final
Week of May 5	Finals Week	Midterm IV: Available Mon. 5/5 through Wed. 5/7 Refer to Exams section in syllabus for more details. Covers material Weeks 1 through 15

Course Materials

Textbook: *Mind on Statistics*, (3rd Ed), by Utts and Heckard

Note: If interested, you may purchase the digital copy (less expensive up front and works as if you

were "renting" the book for a semester) instead of the hard copy. At the end of the semester you may resell your hard copy which results in an overall expenditure that is roughly the same.

If you have purchased the eText, you can [access your eText here](#).

Grading

- **Weekly Homework** (5%) - approx. 13 (Keep best 11)
- **Weekly Unit Quizzes** (5%) - approx. 13 (Keep best 11)
- **Weekly Mastery Quizzes** (5%) - approx 13 (Keep best 11)
- **Weekly Lab Activities** (5%) - approx. 14 (Keep best 12)
- **Exams** (80%) - Four midterms, Keep best 3 **No make up exams!**
- All grades will be kept in the ANGEL gradebook. To see your grades, click the Report tab and select Grades

F	D	C	C+	B-	B	B+	A-	A
0	60	70	77	80	83	87	90	93

Important University Dates

End of Drop/Add - Wednesday, January 23
 Filing Period for Final Exam Conflict - Feb 18 through March 2
 Spring Break - March 10 through March 14
 Late Drop Deadline - April 11
 Classes End - Friday, May 2
 Final Exam Period - May 5 through May 9

Correspondence

All email correspondence to me **MUST** be done using the ANGEL email (under Communicate tab in ANGEL). All other email risks going unanswered. NOTE: If you have your ANGEL email forwarded to another internet account then hitting reply to that email will **NOT** resend through ANGEL but instead in webmail. These, too, will not be answered. You will need to return to ANGEL and reply using the ANGEL email tools.

Lecture Notes

Posted on the ANGEL website

Policies

You are encouraged to work together on the homework, quizzes and activities. **Working together is defined as working only with students in Sections 13 through 16 of STAT200. This means, for example, if you have a tutor they are not permitted to assist you on taking and completing these assignments.** For the homework, quizzes and activities, your best **11** scores in **Homework and Quiz** categories and best **12** scores in **Activities** category will count toward your final grade. Because of this policy please read the following carefully!!!

Homework

- ALL homework will be completed and submitted using the TNOW online package. No paper copies will be accepted!
- The grading of homework is simple - either you get a 0 or 100. If you attempt **to answer** each question honestly, then you will receive a 100; otherwise a 0.
- Submission dates for all homework will be Friday at midnight of that week.
- **No late homework will be accepted.**

Unit Quizzes

- Unit Quizzes **cannot** be made up.
- Will be assigned weekly starting Thursday, January 24.
- Must be completed from the lab on the days they are assigned (usually Thursday).
- All unit quizzes will be delivered using the ANGEL quiz tool.
- Must be submitted during your regularly scheduled lab time.
- Unit quizzes will pertain to content covered during that week.
- If you miss a quiz, you will have the opportunity to take it but a grade will not be recorded.

Mastery Quizzes

- Mastery Quizzes **cannot** be made up.
- Will be assigned weekly starting the week of January 21.
- Must be completed online during the scheduled time. This scheduled time will typically be from **noon on Wednesday** until **midnight on Sunday**.
- All mastery quizzes will be delivered using the ANGEL quiz tool.
- The quizzes will be timed (typically 35 to 50 minutes).
- Once you begin the quiz you the timer begins and will not stop. Your quiz will automatically be submitted after the time expires.
- Mastery quizzes will consist of questions from that week PLUS previous weeks up until a midterm is given. That is, the master quizzes will be cumulative only for the content that will be covered on the subsequent midterm.
- **Minitab will not be required for Mastery Quizzes**; you may take these quizzes from any computer with access to the internet and ANGEL
- CAUTION: Since these quizzes will be delivered online the issue of technical problems may arise, for example ANGEL may not be unavailable or your internet connection might be interrupted. In the case where the problem is ANGEL availability, the deadline will be extended. However, if your internet connection is the problem then on time completion is the student's responsibility. This problem is most common for those students who do not plan accordingly; that is, they wait until the last few hours or minutes prior to the deadline until they take the quiz.

Lab Activities

Must be submitted from the lab computers during your regularly lab time (usually Tuesday). If the activity is not submitted, submitted from a computer other than the scheduled lab location, or submitted outside your scheduled lab time, then the activity will be graded as a zero.

Exams - Must Bring PSU ID

- ALL EXAMS WILL BE DELIVERED ONLINE AND BE TAKEN IN THE COMPUTER TESTING CENTER LOCATED IN POLLACK BUILDING.
- You will schedule a time to take your exam by going to the website:
<https://clc.its.psu.edu/eTesting/Students>

- Each exam will consist of 30 questions and you will have 60 minutes to complete the exam.
- Note that all exams are cumulative!
- The exams will be available on the days listed above in the Weekly Outline.
- No Calculators are allowed. [Any problems requiring math will be easy.]
- Exams are open book **no notes**. For each Exam you may bring **ONE** blank page to use as scratch paper. If found using materials other than your text you will receive a **zero** for that exam and it will count as one of your 3 best scores.
- No midterm make-ups are available. If you miss a midterm your score will be recorded as a zero. - Keep in mind that of the four exams only your best 3 scores will be used. So if you do well on the first 3 you do not have to take the fourth exam.

Some Suggestions

In the past, students have found their understanding of the material and performance on assessments improved tremendously if they completed the reading assignments (book and lecture notes) prior to the initial weekly lab meeting.

As explained in the first paragraph above under **Policies**, since your "best 12" scores will be recorded you have "extra" assignments in the quizzes, activities, and homework portions. Often during a semester personal issues arise (sickness, family emergencies, etc.) which may require you to miss an assignment resulting in a "0" for that particular task. So please do not "waste" these extra chances.

Each semester a small number of students wait until the end of the semester until they realize that they are on the verge of failing. At such times they have a tendency to ask "What can I do to improve my grades?" My answer will be "Nothing." As you can tell from the work outlined in this syllabus we will be very busy. Because of that, to allow someone the opportunity to improve their standing because they failed to act properly during the semester would usurp the efforts of students who put forth a semesters worth of work.

Academic Integrity

Please visit: <http://www.science.psu.edu/academic/Integrity/index.html> for details concerning academic integrity guidelines that are adhered to by this course.

Technical Support

If you experience any problems with access to the online class materials, except for the homework, please contact ANGEL Support via email: angelsupport@psu.edu.

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