STAT 133 AUTUMN 2012: STATISTICS FOR THE BUSINESS SCIENCES

Stat 133 Coordinator and Lecturer Information

<table>
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<tr>
<th>Dr. Rumsey (Course Coordinator and Day Section Lecturer)</th>
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<tr>
<td>Office hours: Cockins Hall 227 / Times: T 9-10:30; F 10-11; or by prior apt.</td>
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<tr>
<td>Email: <a href="mailto:rumsey-johnson.1@osu.edu">rumsey-johnson.1@osu.edu</a></td>
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<tr>
<td>Tian Chen (Night Section Lecturer) / <a href="mailto:chen.1476@osu.edu">chen.1476@osu.edu</a> /</td>
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<td>Office hours: Cockins Hall 304C / Time: Tues 2-4pm</td>
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Course Description: Statistics 133 is an introduction to the fundamental concepts of probability, statistics, and data analysis. Topics include surveys and experiments, numerical and graphical summaries, discrete and continuous random variables, simple linear regression, relations in categorical data, sampling distributions for means, and introduction to confidence intervals. The prerequisites for this course are Math 132 and CS&E 200.

Course Goals
• Understand, reason, and solve problems using statistics. Particular focus on business applications.
• Analyze, interpret, critique and communicate statistical results.
• Use statistical software to analyze data for the purpose of answering questions and making decisions.
• Gain experience and understanding of the foundations of probability.
• Understand the concept of variability and how it applies to populations, data, and sample statistics.
• Develop a strong foundation for success in Business Management 2320.

To be successful
✓ Have a full set of your own lecture notes from this semester (not relying on podcasts or previous quarter notes.) They should be your number one (but not your only) resource.
✓ Understand the concepts presented in lecture (especially for success on MC/TF questions) and practice as many problems as you can from all the sources available to you.
✓ As you study, if you need to look at solutions, notes, or to get help from someone in order to work a problem, remember on the exam that won’t be possible. Be able to start and finish pbms on your own.
✓ Ask questions as soon as you have them. We are here to help!

Required Texts and Materials:
• The Practice of Business Statistics (THIRD EDITION), by Moore, McCabe, Duckworth, and Sclove
• Note that this same textbook is used in BM2320 also.
• The second edition is out of date and should not be used.
• Do not obtain any international versions of the book; they are not authorized by the publisher.

Technology:
• Calculators: A scientific calculator is required. You will be expected to bring one to all lectures and recitations. A graphing calculator is not required. No cell phone calculators or PDAs will be allowed on exams. (Cell phones must be turned off/vibrate and out of sight during exams.)
• Computer Software: MS Excel 2010
• Data Files from the textbook will be used in the class
  o These files are included on the CD that comes with your textbook, in Excel format.
  o OR you can access all textbook data sets through the Stat 133 Carmen website for free.

Stat 133 Website: http://carmen.osu.edu Please check the course website frequently as new announcements and information are added all the time. You are responsible for all information and updates posted:
• All course announcements, assignments, exam dates and locations and any changes/updates.
• Course syllabus and schedule, and reading assignments.
• Lecture outlines for every lecture. Please print off lecture outlines prior to lecture and bring them to lecture and recitation.
• Recitation problems for each recitation. Please print off and bring to recitation.
• Step by step instructions for analyzing data in Excel 2007, with modifications as needed for 2010 (see “How-To” section on Carmen)
• Solutions for recitations and exams will be posted as we go along
• List of big ideas for each section.
• Lecture podcasts for each section UNDER THE QUARTER SYSTEM. I may or may not have time to add more for this semester.
• Old exams and solutions UNDER THE QUARTER SYSTEM. I will do my best to modify them as the exams get closer.
• Exam review podcasts and outlines and other resources for this course.

Lecture Podcasts
• Lecture and exam review podcasts from Spring quarter 2007 are available on Carmen.
• The purpose of podcasts is to have THE BASIC INFORMATION from lectures available to review and to access in the event that you have to miss lecture. Podcasts are not to be a substitute for lecture, and they are only available for material up through and including confidence intervals (where the quarter system material ended.)
• In-class lectures this semester will contain information and announcements that DIFFER from the podcasts; depending on the section, the difference can be substantial and can make a difference on exam performance. Currently there are no podcasts for material after confidence intervals (due to the conversion to semesters.) You are responsible for all information from the in-class lectures.

Statistics Help Room: There is free help and study space available in Cockins Hall Room 130 most hours M-F. The busiest days are exam days. To avoid the rush, try to visit before exam day; even one or two days before the exam makes a big difference. For more information on the help room see http://www.mslc.ohio-state.edu.

Exam Information and Policies:
• Number of exams. There will be two midterm exams and one final exam (see course schedule and course website for details on where and when they are). The final exam will be comprehensive with MUCH more emphasis on those topics covered after the second midterm.

Exam Content: Exam questions will be multiple choice, true/false, and short answer/work it out problems with interpretation. Computer output will appear on exams and you will be expected to use the output to answer various questions. The main priority is to have a full set of lecture notes and study them very closely. Also be sure to work as many problems as you can from the resources available on Carmen (including all recitation activities and past exams.) MC/TF requires a higher level of understanding from short answer (work it out) problems. This is where your lecture notes from THIS SEMESTER (not just podcasts) will make a big difference.

• Old Exam Questions: Please note that old exam questions are not necessarily a reflection of your exam. Each semester we focus on slightly different things, and we write different and new exam questions. Use old exam questions as one study tool only; if you only study old exams and expect your exam to be the same, you will not be successful.

• Number of questions. There will likely be approximately 25-35 problems (including parts of problems) on each midterm and roughly 35-40 problems (including parts of problems) on the final exam. NOTE: Expect Midterm 2 and the Final Exam to be quite a bit more difficult than Midterm 1, because of the difficulty level of the material being covered in class.

Exam materials. No review/cheat sheets or any other outside materials are allowed on exams. We provide a copy of the Stat 133 formula sheet attached to each exam. The formula sheet is posted on the Carmen website. The same formula sheet will be used on every exam in this class. Statistical tables from the text will also be
provided on exams as needed; they are also available on Carmen. Calculators (but no cell phones, PDAs or iPods) may be used on the midterms and final exam.

- You MUST BRING your Buck-ID, pencils (no pens please), and a scientific calculator to each exam. Graphing calculators are OK. No iPods, cell phones, PDAs, or any other electronic devices are allowed in sight.

- When the time to finish the exam has occurred, you must put your pencils down and stop writing. Continuing to write on the exam after time has expired can result in a penalty of at least 10% of your exam score.

- Question policy during exams. In fairness to all students, we will no longer be able to answer questions during the exams. If you believe there is an error on the exam, you may bring it to our attention, or write a note to us on the exam. We will make every effort to make sure the questions are clearly written. Be sure to study all of the statistical terms and notation so you can recognize them in an exam question.

- Make up Exams: If you have an emergency and are going to miss an exam please notify Dr. Rumsey as soon as possible so arrangements can be made. Please also have documentation (doctor’s note, etc.) as to why you missed the exam. Your documentation must be approved prior to your being allowed to take a make up exam.

  IF YOU MISS AN EXAM FOR AN UNEXCUSED REASON, WE WILL HAVE TO DECIDE WHETHER YOU ARE ELIGIBLE FOR A MAKE UP, OR IF YOU WILL RECEIVE A ZERO. IF YOU ARE ALLOWED TO TAKE A MAKE UP EXAM, YOU WILL LOSE A CERTAIN PERCENTAGE OF THE TOTAL POSSIBLE POINTS FOR NOT HAVING AN EXCUSED ABSENCE AND WILL HAVE TO TAKE THE EXAM THE FOLLOWING MORNING.

- If you’re late to an exam, had the wrong day on your schedule, or missed the exam for any unexcused reason, you might not be allowed to make it up and will receive a zero. If you are allowed to take a make-up, you will receive a penalty of at least 10% of the total points possible on the exam. Any missed exams with no communication to us within 24 hours (except for extreme emergencies) will receive a 0.

- No early final exams unless you are a graduating senior. No exceptions.

Midterm regrade requests: If you would like us to reconsider how we graded a problem on your exam, you may submit a regrade request within one week of when the exams were returned to students in recitation. We have a formal process that must be followed in order for us to consider a regrade request:

1. Check the solutions to the exam and compare to your exam and how it was graded. We will not regrade problems that were graded in accordance with the solutions.
   2. If you still have a question, use a separate sheet of paper and write down which problem(s) you want to be regraded and why. DO NOT WRITE ANYTHING ON YOUR EXAM.
   3. **Your reason has to be very brief-no more than a few words. In fairness to all students, Dr Rumsey will regrade problems based on what was originally written on the exam, not what is written on your regrade request. Long, drawn out arguments will NOT be considered.**
   4. Show your request to your TA. They will advise you regarding your request. They know how the problems were graded and what we were expecting.
   5. If you still want to send in a regrade request, attach your request to your exam and turn it in to your TA within one week after exams were returned to students in recitation.
   6. Once the deadline passes Dr Rumsey will take all regrade requests and make decisions all at once. Decisions are final. No requests will be considered once the deadline passes.
   7. If you submit several questions for regrades Dr Rumsey reserves the right to regrade your entire exam. Do not request regrades for every point missed.
   8. Regrade requests submitted after the deadline will not be considered. The deadline for regrades is always one week after the exams were returned in recitation.
Recitation Format:

- Recitation time will be spent working through problems and data analysis activities each day in groups to reinforce and practice the ideas from lecture, as well as answering your questions. Some problems and activities will involve using the computer.

- Recitation problem handouts for each section are posted on Carmen. You do not need to bring them to recitation. Additional problems will be provided in recitation for you to work on as well. You will work on the recitation problems in groups. Bring your lecture notes and calculator to each recitation.

- We can’t spend time in recitation re-teaching material; lecture time is used for that purpose. Your lecture notes are the main resource for referral in recitation. In fairness to all students and to make the most of our recitation time, anyone who does not bring completed lecture notes with them to recitation will automatically lose half of the recitation points for that day. If you miss a lecture, use the podcast.

Recitation Assignments

- There will be a selection of recitation problems from the handouts, and possibly other problems assigned by your TA at the beginning of the period.
- Questions will cover material from previous lectures.
- The work assigned during a recitation period must be completed and turned in by the end of that period.
- We cannot accept your work after recitation is over. Make sure you don’t accidentally take work with you.

- All recitation assignments are graded.
- You must be present in recitation to earn any recitation points.

You must bring your lecture notes to each recitation!

- You will lose 5 points for the first recitation assignment that you don’t bring your lecture notes with you, and 10 points for each recitation after that for which you don’t bring your notes.
- Lecture Notes requirements: Your lecture notes must be complete on all sections. You cannot simply sketch out a few lecture notes on a piece of paper; you cannot use someone else’s lecture notes as your own, and you cannot copy someone else’s lecture notes during recitation. You cannot for any reason turn in lecture notes after the lecture note check has been done. Any of the above situations is grounds for academic misconduct and will be reported to the Committee on Academic Misconduct by Dr Rumsey.

Being on time to recitation and staying the entire time is expected!

- If you are more than 3 minutes late to recitation (according to your TA’s watch) or if you leave early without an excuse that can be documented, you will lose 5 of the points the first time it happens, and 10 points each time it happens after that.
- If you will be late or leaving early because of a legitimate reason please let your TA know via email or in person prior to that class period.

We expect you to participate, work hard, and stay on task during recitation.

- If you are creating a distraction or disruption, not helping your group, are chatting about and working on things besides our work, or found to be texting/emailing, you will lose 5 points the first time it’s noted - 10 points each time after that.
- Previously worked recitation materials are not allowed and will be confiscated.

Academic Misconduct:

- Academic misconduct will not be tolerated and will be dealt with procedurally in accordance with University Rule 3335-31-02. (This policy can be found at http://oaa.osu.edu/procedures/1.0.html.)
- Academic Misconduct, EVEN ON HOMEWORK can result in receiving an F in the class, one full grade lower in the class, and/or academic probation.
We will automatically submit suspicious papers that were supposed to represent your own individual work. Make sure this doesn’t happen to you! To be perfectly clear, here are our academic integrity policies:

**Academic Integrity Policies:**

- **Group activities in recitation** can be done together and the same answers can be turned in by all in the group.
- **Homework**
  - May be worked on together but your final answers have to be your own, written in your own words.
  - Homework showing any work that is copied verbatim or close enough to be considered suspicious will automatically be reported to the OSU Committee on Academic Misconduct – no questions asked.
  - For your protection from being suspected of academic misconduct, never let anyone have access to the work you plan to turn in.
  - TAs are trained to look for and report suspicious papers to Dr. Rumsey.
  - If found guilty, academic misconduct on homework almost always results in receiving 1 full letter grade lower in the class as well as being on academic probation with OSU.
- **Exams:**
  - You are absolutely not allowed to make your work accessible by anyone, have any conversations with anyone else (even about calculators!) or look at anyone else’s paper for any reason.
  - You are also not allowed to use or have access to any review materials during the exam.
  - Report any suspicious activity to either a TA or lecturer during the exam.
  - Any suspected academic misconduct on exams will be automatically reported to the OSU Committee on Academic misconduct.
  - If found guilty this can result in receiving an E for the class, as well as academic probation, and possibly even dismissal.

**Maintain an Environment of Mutual Respect:**

- You can expect fair, consistent, and respectful treatment from the entire Stat 133 teaching team.
- Similarly, we expect all students to treat their fellow students, their TAs and their lecturers with respect in your behavior, attitude and communications, be they in-person discussions or email.
- Any student not adhering to this policy in lecture, recitation, or outside of class will be reported to Dr. Rumsey.
- Problems, if not resolved, will be reported to the student’s academic advisor in the Fisher College of Business. In serious cases, charges may be filed with the OSU Office of Student Judicial Affairs if the infraction warrants.
- To see the OSU Code of Student Conduct, go to: [http://studentlife.osu.edu/pdfs/csc_12-31-07.pdf](http://studentlife.osu.edu/pdfs/csc_12-31-07.pdf)

**Make Up Recitation Policy**

- We do not have make-up recitations. We do drop a certain number of recitation and/or homework grades (see grade components section of the syllabus.)
- If you are ill, go on a trip, or miss a recitation or miss a homework deadline for any other reason except for university business or extended illness or extended emergency situations, the missed recitation or HW will receive a 0. (No make-up work in these cases.) Save your dropped scores for when you really need them.
- If you have an extended illness or emergency and this illness causes you to miss more than the allowed number of dropped recitations, obtain documentation and see Dr. Rumsey immediately. Notification and documentation at the time of illness or within a week of returning will be required. No later.
- If you will be absent on university approved business (e.g. athletes) or are observing a religious holiday, please make arrangements with your TA in advance to turn in the work you will be missing.
- **Student athletes** bring a letter to your TA and your lecturer the first week of class telling when you will be gone so arrangements can be made to keep you up to date and complete your work in a timely manner.
- We cannot add additional dropped recitations. Save the dropped recitations for when you really need them.
Keep track of your grades!!
✓ It is your responsibility to check the Carmen website for your recitation score each week as well as your exam scores.
✓ If something is wrong or your score is missing you must notify your TA within one week of that recitation or exam.
✓ We can’t address problems regarding missing grades at the end of the semester. NO EXCEPTIONS.

Show your work:
✓ You need to show your justification for all problems turned in for a grade in this class except MC/TF.
✓ Even pbms you consider to be ‘easy’ require work to show us how you figured out the answer.
✓ Answers (even correct ones!) without work may not receive credit.
✓ This policy helps to curb cheating for your protection.

Grade Components: Your final course grade will be based on the following components:

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<th>Component</th>
<th>Points</th>
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<tr>
<td>Recitation and HW: 27 Rec (starting day 2) and 3 HW: 10 points each; drop 5 lowest.</td>
<td>250 pts</td>
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<tr>
<td>Absences due to anything other than extended illness or university business receive a 0 – no exceptions. Please do not ask! Save the drops for when you really need them.</td>
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<tr>
<td>Midterm 1</td>
<td>250 pts</td>
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<tr>
<td>Midterm 2</td>
<td>250 pts</td>
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<tr>
<td>Final Exam (Comprehensive; MUCH more weight on material after midterm 2)</td>
<td>250 pts</td>
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<tr>
<td>Total Points Possible</td>
<td>1000 pts</td>
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Grading Scale:
✓ We fully expect final course grades to be assigned based on the grading scale below. A curve has never been needed in the past.
✓ If we decide a curve is needed it will be given at the end.
✓ We do not drop/replace the lowest midterm score.
✓ We do not give extra credit.
✓ The grade cutoff points listed below are FIRM. Many people end up close to cutoffs, but moving cutoffs only creates more people being close to the new cutoffs, etc.
✓ Remember that every point counts. Attending every recitation and turning in all in-class assignments is critical since they are worth 25% of your final grade. Earning the grade you desire is your responsibility.

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<th>Grade</th>
<th>Cutoff Points</th>
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<tr>
<td>A</td>
<td>930 – 1000</td>
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<tr>
<td>A-</td>
<td>900 – 929</td>
</tr>
<tr>
<td>B</td>
<td>870 – 899</td>
</tr>
<tr>
<td>B-</td>
<td>830 – 869</td>
</tr>
<tr>
<td>C</td>
<td>770 – 799</td>
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<tr>
<td>C-</td>
<td>730 – 769</td>
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<tr>
<td>D</td>
<td>670 – 699</td>
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<tr>
<td>D-</td>
<td>600 – 669</td>
</tr>
<tr>
<td>F</td>
<td>below 600</td>
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Email Correspondence:
✓ In order to protect your privacy, all course e-mail correspondence must be done through a valid OSU name.number account.
✓ All emails sent to Dr. Rumsey MUST include the name of your TA, or they will be returned.
✓ If you have not activated your OSU email account, you can activate your account at https://acctmgt.service.ohio-state.edu/cgi-bin/KRB1EntryAdd.

Cell phones, PDAs and iPods:
✓ Cell phones must be either turned off or put on vibrate during class, as cell phones ringing during class disrupt the learning process.
✓ Additionally, no cell phone calculators, iPod, PDAs, or any other electronic devices will be allowed during any exams in the course.

Addressing Issues of Differing Abilities:
✓ Any student who feels they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss your specific needs.
✓ Students with documented disabilities should also contact the Office of Disability Services (ODS) in 150 Pomerene Hall (phone: 292-3307) to coordinate reasonable accommodations for the course.
✓ ODS forms must be given to the course coordinator (Dr. Rumsey) as early in the semester as possible to be filled out and returned to you.
✓ Do not wait until the week of an exam, as the forms will not be able to go through the system that quickly.

Section Changes, Unpaid Fees: The instructor and TA will not under any circumstances sign paperwork regarding section changes. See Patty Shoults in the Statistics Office (404 Cockins Hall) for the policy on section changes. If your fees are unpaid, you should not be attending class. Anyone with unpaid fees at the time of the midterm will not be allowed to take the midterm exam. In fact, you will be dropped from the course. However, if there is a valid reason for your fees being unpaid (e.g., financial aid hasn’t gone through), submit this in writing (with documentation of the reason) to me as soon as possible so that we allow you to take the midterm exam and do not drop you from the course.