

Syllabus for Math 133 Online (FA17)

Introduction to Probability and Statistics

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| Instructor: | Alana Tuckey |
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| Office: | 146 McDivitt Hall, JC Central Campus |
| Office Hours: | http://bit.ly/ScheduleAJT |
| Phone Number: | (734) 386-0523 (You can call or TEXT me at this number - be sure to let me know who you are and what class you are in!!) |
| YouTube Channel | https://www.youtube.com/user/tuckeyalanaj |
| MyStatLab: | http://www.mystatlab.com (where discussion boards, assignment uploads, tests, grades, and MyStatLab are located) <ul style="list-style-type: none"> ● Registration Instructions (including course ID): Click Here ● Getting Started with MSL Video 1: Click Here ● Getting Started with MSL Video 2: Click Here |
| Info and Links Page | A quick reference to important documents and videos is available here |
| Schedule | Schedule of assignments and due dates is available here |

Required Materials: MAT 133 Course Pack *Fall 2017 - Spring 2018* (available in the [bookstore](#)), MyStatLab Student Access, LARGE 3-ring binder, TI-84 Calculator **required** (Note: TI-83's cannot run the newest operating system, which puts students using them at a disadvantage, Ti-89 and 92 are NOT allowed), **Computer** with Internet access (access to MyStatLab and Excel).

Optional Materials: *Statistics: Informed Decisions Using Data 5th edition*, Author: Michael Sullivan, III, Publisher: Prentice Hall – **Textbook Zero Note:** This textbook is available online within MyStatLab.

Course Description: This course is an introduction to experimental design, data representation, basic descriptive statistics, probability theorems, frequency distributions and functions, binomial and normal probability distributions and functions, probability density functions, hypothesis testing, statistical inference, chi-square analysis, linear regression, correlation and application of the above in making informed, data-driven decisions in real-world contexts. Both graphing calculators and computer-based statistical software (Microsoft® Excel) will be used. If the prerequisite is more than two years old the recommendation is the course placement assessment be taken or the prerequisite be retaken to ensure the success of the student.

Prerequisite: A 2.0 in MAT 033, 130 or higher, or course placement by exam. (Note: Math 030 and Math 039 are NOT acceptable prerequisites for Math 133)

Math 133 Core Course Objectives: Students will be able to:

- Perform a hypothesis test involving means and proportions.
- Create, interpret, and apply graphical displays of data (histograms, bar charts, circle graphs, dot plots, and stem and leaf displays)
- Compute, interpret, and apply descriptive numerical measures (mean, mode, median, range, variance, and standard deviation)
- Compute and apply a linear regression line and Pearson product moment correlation coefficient.
- Compute, interpret, and apply probabilities involving discrete, binomial, normal, and *t*-distributions.
- Compute and apply confidence intervals for means and proportions.
- Use appropriate technology (such as a graphing calculator) to enhance the understanding of previous objectives.
- Knowledge and awareness of statistics in scientific issues and current events

Math 133 General Education Outcomes:

GEO 3 – Demonstrate Computational Skills and Mathematical Reasoning

Grading Information: A 2.0 or "C" is a passing grade. Only courses with passing grades count toward graduation. Other colleges transfer in only courses with passing grades. Many financial aid sources, including most employers, require passing grades. Additionally, earning less than a 2.0 in a class results in being unable to participate in the next level of courses in a discipline which requires this course as a prerequisite. Registering for the next course sequence without passing the pre-requisite course may result in you being dropped from that class.

| Percentage | Grade | <u>Assignments</u> |
|-------------------|--------------|------------------------------------------------|
| 90-100% | 4.0 | |
| 85-89.9% | 3.5 | MyStatLab Lecture Videos: 43 pts = 4.3% |
| 80-84.9% | 3.0 | MyStatLab Homework: 129 pts = 12.9% |
| 75-79.9% | 2.5 | Paper-and-Pencil Packets: 300 pts = 30% |
| 70-74.9% | 2.0 | Computer Projects: 120 pts = 12% |
| 65-69.9% | 1.5 | Exam 1: 100 pts = 10% |
| 60-64.9% | 1.0 | Exam 2: 100 pts = 10% |
| 50-59.9% | 0.5 | Cumulative Final Exam: 208 pts = 20.8% |
| 0-49.9% | 0.0 | Total Points: 1000pts = 100% |

MyStatLab Videos:

- Available under the “Homework” link in MyStatLab.
- You watch the videos and fill out pages of notes in your coursepack. (Note: the videos are also available at <https://www.youtube.com/user/tuckeyalanaj/>)
- **Coursepack “Spot Checks”:** To keep and maintain points for watching the lecture videos:
 - Each student will be asked to show pictures of specific page(s) of the coursepack, completed by the student, periodically throughout the semester.
 - The pictures will be posted in MyStatLab, either in a Discussion Board or in Document Sharing - see assignment emails for specific details when posted.
- **Coursepack VIDEO WARNING!!** The [Center for Student Success Tutors](#) (a great, free tutoring service available on Central Campus) have been given the following instructions: **“If Math 133 students arrive with their coursepacks not filled out the students should be directed to a computer to watch the online lecture videos first. Only AFTER their coursepacks are filled out should they be receiving help on homework, paper-pencil packets, etc.”**
 - In other words, you must show up to the tutoring center prepared. Tutors are hired in the CSS to help with specific questions, but it is not their job to teach chapters of material - that is the job of the online lecture videos, your online textbook, all the extra helps available in MyStatLab such as PowerPoint slides and extra lectures, etc. Moreover, as the paper-pencil packets refer directly back to the notes in many places, not having them filled out is a recipe for disaster in the course. The tutors want to help you, but you absolutely must come prepared so that it is a productive use of both your time and theirs.

MyStatLab Homework:

- Available under the “Homework” link in MyStatLab
- **You have an unlimited number of tries to do the homework before you submit it** (up until the due date). Thus, all of your homework should receive full credit, if you keep trying until you get a perfect score.
- If you run into any problem that you can’t figure out, email me with the “Ask My Instructor” feature or post on the discussion board. I may even make a video to answer your question!
- Late homework can be submitted for a penalty of 5% per day.
- **Note:** Each section of homework has a requirement that you have watched all the lecture videos in MyStatLab first before attempting them - See “MSL Video Warning” above.
- There is also a YouTube [“Math 133 Online Miscellaneous”](#) playlist where tutorials for specific homework questions are posted for our course.

Paper-and-Pencil Packets: These packets of worksheets are assigned in order to ensure you're ready to take the paper-and-pencil exams.

- **Basic Process for Paper-and-Pencil Packets:**

1) Download the file from MyStatLab - Course Tools - Document Sharing - Select packet

2) Print the file on your printer

3) Work on and write on the paper copy using pen or pencil. If using pencil, be sure to write dark enough that the writing shows up in scans.

- The scans or documents MUST be **complete** and **legible** in order to receive full credit.
- Be sure to write cleanly and clearly and white-out/fully erase all mistakes.
- If you are going to **SCAN** the documents and submit electronically (see below), work in **PEN** (and white-out, where necessary) so that the scans are clear. If the work is too faint or too messy as to be illegible it will receive NO CREDIT.
- Do NOT type these packets.
- Show all work, where appropriate, to receive full credit.
- Use the TI-84 calculator for calculations.

4) Submit the document following the instructions below.

5) The Packets will be graded approximately within a week and the marked copies will be scanned and emailed back to you to aid your studying and learning.

- **Submission Option #1 = Scanning and Uploading:**

- Scans must be **complete** and **legible** (and not too faint - use pen and white-out) in order to receive credit! Be sure to include all pages and have them stapled in the correct order.
- The scan file must be in **pdf format** (There are many free apps to do this with your phone including Office Lens, CamScanner, Genius Scan, etc. If your scanner makes JPG files you can use <http://jpg2pdf.com/> to change them to the proper format)
- The file must be submitted by the due date. It must be in ONE single file upload. (Websites such as <https://www.pdfmerge.com/> may be helpful)
- Be sure to submit under the **CORRECT** category area in Document Sharing on MyStatLab. If they are not in the correct category area, they will receive a ZERO.
- There cannot be any symbols in the file name (#, -, !, \$, %, etc. are no good for uploading online!)

- **Submission Option #2 = Submitting Physical Originals:**

- Be sure to include all pages and have them stapled in the correct order.
- You can submit the original documents at any of the following locations:
 - **My office** (146 McDivitt Hall - Central Campus) - During Office Hours or if I'm not there, you can just shove it under my door.
 - **Extension Campus Main Office** (Lenawee, Hillsdale, North Campus main desk) and they will send it to me via campus mail. The office staff can also scan the document and email it to me. They must stamp them as received by the required due date and they will mail it to me via campus mail.

Computer Projects: These projects are assigned in order to ensure that you're learning to think statistically (i.e., critically) and finding where statistics is applied in the real world. Look at these as your opportunity to **really** learn about statistics, not just crunching numbers. These will be done using Excel and the TI-84 Calculator as well as a lot of good, old-fashioned thinking and writing.

- There will be 2 large computer projects posted for the course under (under Course Tools - Document Sharing)
- Your computer projects should be done **entirely** by you and should **reflect your own thought patterns** and ways of doing the assignment. **You should not use any part of anyone else's spreadsheet or work.** (See the Academic Honesty Policy below for repercussions).
- **Warning!!** Tutors can NOT help with these projects. Think of them like take-home exams.

Exams: There are THREE **proctored** exams for our course: Midterm Exam #1 (Ch 1-4), Midterm Exam #2 (Ch5-7) and a **Final Exam** (ALL chapters).

- **Notes allowed:**
 - For each Midterm Exam you will be allowed a single sheet of notes (8.5 by 11 paper size, both sides filled out) of your own creation (hand-written, typed, etc.)
 - On the Final Exam you will be allowed four sheets of notes (8.5 by 11 paper size, front and back) of your own creation.
 - Note sheets should be collections of important ideas, calculator references, and key topics, organized by the student. Notes that are “scans” of entire pages of the coursepack or sample midterm are **NOT acceptable** as your note sheets. A single box here or there scanned from the coursepack is fine, but entire pages or sections are **not allowed**.
 - **If you want your notes from the midterms back to use on the final,**
 - Place your name clearly somewhere on the notes.
 - If you want the original notes (especially true for students not using JC's Testing Center) you should make copies of your notes and take those copies into the exam testing lab so that the originals are left at home for later use.
 - If any problems or information from the exams is written on the notes during testing, the notes will **not** be mailed back.
 - In general, final exam notes are not mailed back except by special request.
- **Exam Notes Packet** (located in the coursepack)
 - On both Midterm Exam #2 and the Final Exam you will be given the entire “Exam Notes Packet” from the back of the coursepack in **addition** to the notes you bring.
- You must have a **calculator** (Ti-84 with the 2.55 OS required) for testing.

- **Exam Proctor Locations:**

- **JC Testing Lab:** All students will be taking their exams in the Testing Lab in 121 Bert Walker Hall on JC's Central Campus unless a different proctor location has been requested and instructor-approved (see below).
 - **Testing Lab Info and Hours:** <http://www.jccmi.edu/library/testinglab.htm>
 - The tests will be placed in the center one week before the due date, and you may take them whenever the lab is open over the course of that week.
 - You will be asked to show a valid federal or state ID (i.e, a driver's license).
 - To make sure you have enough time, arrive **at least three hours BEFORE the testing lab closes**, otherwise you may not have enough time to take your exams.
- **Different Proctor Location:** Students wishing to take their exams at a different location than JC's Central Campus Testing Lab must submit a formal request to the instructor. This is done by downloading, filling out, and emailing the [Testing Center Selection Form](#) to the instructor by the date on the official Course Schedule. Note that the request must be approved by the instructor.

A Note about Grades: Grades are available under "Gradebook" in MyStatLab

Only the MyStatLab Videos and Homework are automatically added to the grades here. All "Other" assignments such as Paper-Pencil Packets, Projects, and Exams will have to be hand-graded and typed in. Therefore, the "Gradebook" in MyStatLab is not always current. I will send out emails when a batch of "by hand" grading has been completed so that you can check your grades then.

Extra Credit: Your grade is based on your work, not on extras, therefore there is no extra credit.

Discussion Board Posts:

- Discussion Boards are where we will talk to each other and ask and answer questions related to the course delivery and content.
- We may also post some "Coursepack Spot Checks" on the boards and discuss them.
- Frequent, active participation of good quality on the boards throughout the semester can earn you back up to 20% of the points you missed on Paper-Pencil Packets at the end of the semester - depending on participation level.
- **As Bill and Ted would say, remember to be "Excellent to Each Other" on discussion boards, in emails, etc. That is, refrain from swearing and keep comments and criticism respectful. That is, you must follow the [Core Rules of Netiquette](#).**

Academic Honesty Policy: You are *encouraged* to talk to each other, but **all your work must be your own**. In other words, "group-work" is a great way to learn material, but anything you submit for a grade must be done entirely by you - reflecting your own thought processes, not that of someone else. For example, discussing how to do a problem from a Computer Project is great, but each person should **open their own Excel file and do the work themselves**. Also note that **COPYING is CHEATING!** If I suspect you of academic dishonesty, I will follow JC's Academic Honesty Policy and take appropriate action up to and including assigning a **failing grade** for the paper, report, exam, or the course itself (whichever I deem necessary). The policy can be seen here: <https://www.jccmi.edu/policies/>

Incompletes Policy: (Excerpt from JC Policy) "A student may request an incomplete from the instructor. The incomplete will be granted only if the student can provide documentation that his or her work up to that point is sufficient in quality, but lacking in quantity, due to circumstances beyond the student's control. Furthermore, a written plan for making up the missing work within one semester must be completed by the student. Final determination of whether an incomplete will be given is the instructor's decision." The policy can be seen here:

<https://www.jccmi.edu/policies/>

Note: Requesting an "Incomplete" grade is not a valid strategy for avoiding failure

A few more important comments:

1. **How many hours a week will this class take?** As it is a 4-credit, 12-week course in a regular semester so it is expected that you will spend **at least 16 hours a week on this class**. Past students have warned me to tell you that this is a course that really will take that much time.
2. **Getting Help with Statistics IN MyStatLab!!** There are tons of videos, powerpoint lectures, and other items ALREADY loaded into MyStatLab under "Multimedia Library". Don't be afraid to use them! Also we have a **FREE tutoring center** on Central Campus - info [available here](#) (Please note "Coursepack Video Warning" from earlier in the syllabus).
3. **Getting help WITH MyStatLab!!** If you need help with MyStatLab, contact their technical support team at 1-800-677-6337 or visit www.mystatlab.com and click the "Support" tab.
4. **You are responsible for your own learning!!** This is a difficult course to take online, but not insurmountable. Remember to stay on top of your schedule. Nothing is worse than waiting till the last minute and having something go wrong. You are also expected to **check your email** at least a few times a week for updates and communications.
5. **Due Dates!!** Please note that all assignments are due at 11:59 PM on their respective due dates. Exceptions and/or extensions on assignments will not be granted unless there are extremely extenuating circumstances. The determination of whether or not an extension will be granted **rests solely with the instructor**. Please note that the instructor may require documentation (including doctor's notes, obituaries, etc.) in order to make informed decisions. The schedule of assignment due dates is available under "Info and Links" in MyStatLab.
6. **Lack of participation may cause you to be dropped from the course!!** If you do not log in to either MyStatLab for a period of 1 week (or longer), you may be dropped from the course. If extenuating circumstances occur, you need to contact me **as soon as possible** to see if accommodations can be made. Do not wait to get in touch for weeks and then expect to be let back into the course, instead get in touch with me as soon as possible. Simply not doing anything for weeks at a time is not appropriate and may result in the instructor withdrawing you from the course.