



21 Fall Semester

Statistics

MAT133.81

Number of Credits: 4

Days Class Meets: August 30-December 16, 2021

Meeting Times: Monday & Wednesday, 10:30 am – 12:20 pm

Location/Venue: Clyde Le Tarte Center, Hillsdale, Room 12

Instructor: Sara Main

Contact Phone: you can text me through the remind messaging: text 81010 and send message “@amstatsh”

Contact Email: mainsaral@jccmi.edu

Online Office Hours: [office hours](#)

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 (Statcrunch) 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(s)

A 2.0 in MAT 033, 131 or higher, or course placement by exam. (Note: Math 039 is NOT an acceptable prerequisite for Math 133)

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: The course goals and objectives incorporate specific General Education Outcomes (GEOs) established by the JC Board of Trustees, administration, and faculty. These goals are in concert with four-year colleges and universities and reflect input from the professional communities we serve. GEOs guarantee students achieve goals necessary for graduation credit, transferability, and professional skills needed in many certification programs. The GEOs and course objective addressed in this class is **GEO 3** – Demonstrate Computational Skills and Mathematical Reasoning.

Textbook

- MAT 133 **Coursepack** *Fa21 – Sp22*
- **Textbook:** *Student Activity Workbook for Statistics: Informed Decisions using Data 6th edition*, Author: Heather Foes et. al., Publisher: Pearson, ISBN-13: 978-0-13-582063-6
- **MyStatLab** (“MSL”) Student Access Code (<http://www.mystatlab.com>) – See Info Sheet on JetNet

☒ **Digital Format:** This text is available in a digital format to rent or purchase through the JC Bookstore. Please see the links posted on your class JetNet site.

Please review the cost of your required materials to determine the best option for you to purchase your materials.

Please note, your opt out selection is for your *entire* semester schedule. You cannot opt out/opt into individual courses. And you must opt out by the due date of your first class, which is the 3rd day after the start of your earliest course.

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Extras

- Computer with **webcam, microphone**, and consistent **internet access** (webcam may be external)
- **Scan-to-PDF Technology:** Free mobile apps or stand-alone scanner for submitting PDF files
- **Please note: Access to a computer with Internet is required for this section of Math 133.** We will be doing homework, projects, and possibly some quizzes online, outside of class.

Exam Process- Respondus

To protect the fairness and integrity of the exams, students will be required to take exams in person. In the case that we get moved to online due to Covid we will be using Respondus Lockdown Browser and Monitor. This is an online test proctoring software that requires a download to your computer. Training and practice of Respondus technology will be provided in advance of the first exam. A Mac or PC that has a webcam and microphone is required to use Respondus. If you do not have this technology, please contact your instructor right away. Students are expected to complete the Respondus Practice quiz on

time. This is to give our IT department time to help troubleshoot issues **before** exam 1 begins. Failure to complete the Respondus quiz on time may result in instructor-initiated drop.

Grading Procedure

Category #1: MyStatLab (MSL) Assignments These assignments must be done on a computer with internet access at MyStatLab (reachable through <http://www.mystatlab.com>). Assignments will be given due dates. Check MyStatLab and JetNet for particular due dates. Assignments completed after the due date will be assessed a 20% penalty on ONLY those problems completed late.

Category #2: Classwork

- **In-Class Activities & Assignments:** There will be frequent partner and group-based in-class activities and assignments. These may be scored for credit (participation, correctness or both). These may be individual or group assignments, closed or open notes at the instructor's discretion. Students may be able to choose their own partner/group or may have a partner/group assigned by the instructor.
- **Homework:** There will be frequent assignments to be completed outside of class, including worksheets, watching videos, filling out coursepack notes, etc.

Category #3: Projects These activities and worksheets are assigned either from the Student Activity Workbook or in separate sheets posted by the instructor. They may involve groupwork, active participation, working with applets, and working with [StatCrunch](#).

Categories #4 & #5: Midterm & Final Exams The Midterm Exam (Ch 1-6) and Final Exam (Ch 1-11) are proctored, closed-book tests that must be taken in class. In the event that we must move to online the midterm and final exam will be taken while being **monitored via a web camera**. In addition, you may be required to screen-share and/or scan your environment during the exam.

- **Note Sheets:** You will be able to use the "Exam Notes Packet" from the coursepack during both Exams. You may also make pages of notes on 8.5 by 11 paper to use on the exams (2 sheets of paper for the midterm, 4 sheets for the final exam – front and back of sheets is fine)
- **Timing:**
 - You will have the opportunity to take each of these exams during a normal class session
 - The Final Exam is during the last week of the course and cannot be taken early so do NOT schedule travel plans during that week or you will receive a ZERO on the final.

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 prerequisite course may result in you being dropped from that class.

Grading Scale

Grading Scale:		Grading Policy:
90 - 100%	4.0	MyStatLab: 10%
85 - 89%	3.5	Classwork: 12%
80 - 84%	3.0	Projects: 20%
75 - 79%	2.5	Midterm: 25%
70 - 74%	2.0	Final Exam: 25%
65 - 69%	1.5	
60 - 64%	1.0	
50 - 59%	0.5	
0-49%	0.0	

Failure

If a student is caught cheating or plagiarism (as described below), they may receive a failing grade in the course.

Academic Honesty Policy

Academic Honesty is defined as ethical behavior that includes student production of their own work and not representing others' work as their own, by cheating or by helping others to do so.

Plagiarism

Plagiarism is defined as the failure to give credit for the use of material from outside sources. Plagiarism includes but is not limited to:

- Submitting other's work as your own
- Using data, illustrations, pictures, quotations, or paraphrases from other sources without adequate documentation
- Reusing significant, identical or nearly identical portions of one's own prior work without acknowledging that one is doing so or without citing this original work (self-plagiarism)

Cheating

Cheating is defined as obtaining answers/material from an outside source without authorization. Cheating includes, but is not limited to:

- Plagiarizing in any form
- Using notes/books/electronic material without authorization
- Copying
- Submitting others' work as your own or submitting your work for others
- Altering graded work
- Falsifying data
- Exhibiting other behaviors generally considered unethical
- Allowing your work to be submitted by others

Incomplete

(Excerpt from JCC 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."

Accessibility

Jackson College understands that cultivating a broadly diverse community is crucial to our educational mission and to our foundational commitment to leadership and service. Jackson College is fully committed to ensuring our courses are accessible to everyone including those with disabilities. We are currently working to increase accessibility and usability of our course materials in order to meet or exceed the requirements of Section 508 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1991 and Web Content Accessibility Guidelines (WCAG) 2.0. For more information about Jackson College's efforts to ensure accessibility please visit the [Jackson College accessibility web page](#).

If you have an accessibility need in any of our classes please e-mail the Center for Student Success at JCCSS@jccmi.edu or visit the [Center for Student Success web page](#).

At the Center for Student Success (CSS), we are committed to providing all students the opportunity to achieve academic success by providing a variety of support services free of charge to Jackson College students. This includes, but is not limited to, peer and faculty tutoring, mental health referral, temporary assistance with transportation, various workshops/seminars, and the TRIO program.

In addition, the CSS staff is committed to adapting the College's general services to meet the individual needs of otherwise qualified students with disabilities, for the purpose of providing equal access to all programs and facilities.

Absence Policy

If for some reason you are not able to engage in weekly activities to count as attendance. It is your responsible for doing the following:

1. Contact me, your instructor regarding your absence as soon as possible to find out what you missed and what you need to do before the next class. (Having a peer contact in the class is very helpful for finding out this information as well!)
2. Watch the recording of class – if available.
3. Turn in all assignments that were given in class as well as those that were due as “homework” on time.

Please remember that student office hours are not a replacement for class time.

Help

Office Hours: Office hours are there for you to come get help. Please come and see me if you need questions answered. Remember, though, that office hours are not a replacement for attending class.

Center for Student Success: The Center for Student Success has tutoring available for free to students enrolled in Math 133. You can get help with take-home work, MSL homework, and more. Online, on demand tutoring is available.

MyStatLab: There are videos for all the “did you get it questions” as well as ungraded practice questions for each unit. These materials are found under the resources tab.

Each Other: Use your classroom groups as study groups and meet outside of class. The secret to success in higher education is working with your peers to master challenging mathematics.

Academic Advising

It is important to contact a Center for Student Success professional prior to the start of the semester in order to receive accommodations in a timely manner. While we will make every effort to coordinate accommodations in a timely manner, failure to self-identify prior to the start of the semester may delay notification to instructors and timeliness of acquiring accommodations. Accommodations do not automatically carry over to the next semester. Please e-mail JCCSS@jccmi.edu or visit the [Accommodations for Students with Disabilities](#) web page

Attendance- Participation Policy

Regular class participation and keeping up on the reading and assignments is strongly correlated with survival in college. It is my recommendation that you plan to do your assignments and take your exams BEFORE the last day they are due. If problems occur, there is time to fix them before the deadline.

In compliance with Federal Title IV funding requirements, as well as college initiatives, I will be monitoring student participation on a regular basis and officially reporting student activity throughout the term to assure compliance with college policy and federal regulations. It is imperative that you log in to the course and actively participate within the first couple of days of the term to validate your enrollment in the course. After that, not actively participating in class may result in you being withdrawn from the course. Being withdrawn from a course can have an impact on financial aid, billing, athletic eligibility, and housing status. As a college student you are responsible for how your participation impacts your academic progress; the accountability lies with you.

Caveat

Please note: The format and timing of this course may need to change due to unforeseen circumstances. In particular: school closings, instructor illness, weather, or other situations that may arise.

If you are taking an in -person class, you will be required to complete a Reintegration Video Training course in JetNet prior to being admitted to campus.

All COVID safety protocols in place are based on current guidelines and will be enforced while students are on campus.

Calendar

**This calendar is subject to change to fit the needs of the students and instructor.*

WEEK #	DATE	TOPIC
1	8/30-9/3	No Class/Sara Sick
2	9/6-9/10	1.1

	Labor Day Holiday (no class 9/6)	
3	9/13-9/17	Ch. 2
4	9/20-9/24	Ch. 3
5	9/27-10/1	1.2 / Ch. 4
6	10/4-10/8	Ch. 5
7	10/11-10/15	Ch. 6
8	10/18-10/22	Review & Midterm
9	10/25-10/29	Ch. 7
10	11/1-11/5	1.3-1.5 / Ch. 8
11	11/8-11/12	Ch. 9
12	11/15-11/19	1.6 / Ch. 10
13	11/22-11/26 Thanksgiving Break (no classes 11/24, 11/25)	Ch. 11
14	11/29-12/3	Ch. 11
15	12/6-12/10	Catch up
16	12/13-12/17	Review & Final Exam

Important Dates:

MONDAY 09/06/2021	LABOR DAY HOLIDAY-NO CLASSES
WEDNESDAY 11/24- SUNDAY 11/28/2021	THANKSGIVING HOLIDAY-NO CLASSES
SATURDAY 12/18/2021	END OF FALL SEMESTER