STAT 2332: Probability and Data Analysis
Spring Semester 2022
Instructor – Joe DeMaio

Class Information									
CRN:	13570	STAT 2332	**Title:**	Probability and Data Analysis	**Sec:**	11	**Div:**	LOWR	**Dept:** DSA
Spring Semester 2022	**Status:**	A	**Hours:**	3 (Lec 3, Lab 0, Oth 0)	**Current Enrl:**	40	**Max Enrl:**	40	
Time:	**1:** 1400-1515	**Days:**	T R	DeMaio, Joseph	**Building/Room:**	Clendenin Building- 1005			
Part of Term:	Full Term	**Start Date:**	JAN-10-2022	**End Date:**	MAY-10-2022				

CATALOG COURSE DESCRIPTION

Prerequisite: A grade of "C" or better in MATH 1190
This course is a foundational, calculus-based introduction to statistics and probability. The following conceptual themes will be developed through the process of statistical investigation: exploratory data analysis (univariate and bivariate), fundamentals of experiment design and sampling, planning and conducting a study, exploring random phenomenon using probability and simulation, and the fundamentals of statistical inference. Technology is integrated into each theme, and the statistical software package used will be chosen by the instructor.

Expected Learning Outcomes:

1. Students will be able to use statistical vocabulary and notation appropriately.
2. Students will be able to identify appropriate methods for collecting data.
3. Students will be able to distinguish the difference between qualitative and quantitative data and recognize when each is appropriate.
4. Students will be able to describe and graphically represent statistical data
5. Students will be able to correctly interpret statistical graphical displays.
6. Students will be able to identify measures of center and variation and use them appropriately to describe distributions.
7. Students will be able to compute basic probabilities and correctly use computations for application. Do various computations for random phenomenon that follow binomial, hypergeometric, geometric, and Poisson experiments.
8. Apply the Central Limit Theorem to applications involving sampling distributions of means and sample proportions.
9. Students will be able to build confidence intervals to estimate population parameters such as means and proportions from statistical data.
10. Students will be able to perform hypothesis tests for population parameters and appropriately interpret the results.
11. Students will be able to successfully use technology to describe, analyze, and perform inferential statistics
12. Discuss the relationship between two quantitative variables (scatter plot) or the association between two-categorical variables (contingency table).
13. Students will be able to apply statistical concepts to real-life scenarios.

Professor: Dr. Joe DeMaio
Office: Clendenin 3011
Office Hours: 3:30 PM - 4:30 PM TT and by appointment
Phone: (770) 423-6568
e-mail: Do not email me through D2L (reply function does not work). Send email to me directly at jdemaio@kennesaw.edu
Web Page: http://facultyweb.kennesaw.edu/jdemaio/
Calculator: The TI-83/84 calculator is required for this course.
Textbook: Kokoska, 3rd edition

Grading

There will be three tests and a final exam. Each counts 25% towards your final grade. Letter grades will be assessed on a 10-point scale. However, tests will have more than 100 possible points available so extra points are available to be earned. You will be allowed to use a single 3" x 5" index card of notes on each test. Notes in any other form will not be allowed and will be confiscated. The final exam will be cumulative. Cheating may result in the grade of an 'F' for the course! I do not report grades to students over the phone or through e-mail. I will not give your test to a friend. You must come to class or my office to pick up a test if you are not in class when I return them.

I do not drop nor do I replace any grades!
I do not give make-up tests! (Unless there is a good reason and you must contact me prior to 48 hours after the test)
There are no extra credit projects!
I do not make deals at the end of the semester for grades!

Homework

There will be homework problems for each section covered. This homework will not be taken up and graded. It is to give you a point of reference from which to work. Test problems are often slight variations of homework problems if not the exact problem. The only way to succeed in this class is by doing all of the assigned homework! Merely, attending class will not be enough. A student will encounter a large number of techniques and examples in this course. It is vital to know and understand these new concepts. Successive lectures will assume the knowledge of previously stated techniques and examples. One must keep up with this material on a day-to-day basis! Because homework problems are not graded, you are allowed and strongly encouraged to work together on homework problems. I believe that it is very beneficial to regularly work problems in small groups of two to four people. This will decrease your chances of getting stuck on a problem and give you someone, other than your instructor, with whom to discuss homework problems. Obviously however, you must also be able to work problems without guidance for testing situations and when presenting at the board.

Homework is mandatory (if you want a good grade) despite the fact that there is no homework grade!

Attendance

Every mathematics class is a building process from day one (actually, even from grade one). A student who misses classes has seriously compromised his or her knowledge of the material and will begin to feel an effect on their final grade. Attendance and class participation are important elements to incorporate into your study habits. I will distribute a sign-in sheet to document attendance at the beginning of each class. During the summer term I may, from time to time, distribute a second sign-in sheet after the break. Signing for another student will be treated as an honor code violation.

A student who misses a class is responsible for all material missed. Due to time constraints your instructor cannot re-present the lecture in a one-on-one setting. If circumstances dictate that a student will miss numerous class meetings, perhaps now is not the semester to take this course.

Attendance is mandatory (if you want a good grade) despite the fact that there is no attendance grade.

Important Dates

Spring Academic Calendar - Office of the Registrar (kennesaw.edu)
Feb. 3 (R) Test 1
March 3 (R) Test 2
April 14 (R) Test 3
May 10 (T) Final Exam 1:00-3:00 Spring 2022 Final Exam Schedule - Office of the Registrar (kennesaw.edu)

Course Delivery

KSU may shift the method of course delivery at any time during the semester in compliance with University System of Georgia health and safety guidelines. In this case, alternate teaching modalities that may be adopted include hyflex, hybrid, synchronous online, or asynchronous online instruction.

COVID-19 illness

If you are feeling ill, please stay home and contact your health professional. In addition, please email your instructor to say you are missing class due to illness. Signs of COVID-19 illness include, but are not limited to, the following:

· Cough

· Fever of 100.4 or higher

· Runny nose or new sinus congestion

· Shortness of breath or difficulty breathing

· Chills

· Sore Throat

· New loss of taste and/or smell

COVID-19 vaccines are a critical tool in "Protecting the Nest." If you have not already, you are strongly encouraged to get vaccinated immediately to advance the health and safety of our campus community. As an enrolled KSU student, you are eligible to receive the vaccine on campus. Please call (470) 578-6644 to schedule your vaccination appointment or you may walk into one of our student health clinics.

For more information regarding COVID-19 (including testing, vaccines, extended illness procedures and accommodations), see KSU's official Covid-19 website.

Face Coverings

Based on guidance from the University System of Georgia (USG), all vaccinated and unvaccinated individuals are encouraged to wear a face covering while inside campus facilities. Unvaccinated individuals are also strongly encouraged to continue to socially distance while inside campus facilities, when possible.

Department of Student Conduct and Academic Integrity (kennesaw.edu)

Withdrawal Dates & Refund Percentages - Office of the Registrar (kennesaw.edu) (As of 1/5/2022 this website has not been updated to reflect spring 2022).