

STAT 1401: Elementary Statistics

Summer Semester 2021

Instructor – Joe DeMaio

A Course in the General Education Program

Program Description: Kennesaw State University's General Education program offers a comprehensive series of interrelated courses in the liberal arts and sciences for all KSU students. Whereas the major program contributes depth within a chosen specialization, the General Education Core Curriculum Areas A-E provide a breadth of understanding within a variety of disciplines. Together, the General Education Core Curriculum and the major degree program offer students the knowledge, skills, and perspectives to become informed and engaged citizens living in a diverse, global community.

STAT 1401 satisfies one of Kennesaw State University's general education program requirements. It addresses the Applied Math learning outcome. This learning outcome states:

Applied Math: Students will demonstrate an ability to effectively apply symbolic representations to model and solve problems.

For more information about KSU's General Education program requirements and associated learning outcomes, please visit

http://catalog.kennesaw.edu/preview_program.php?catoid=44&poid=5249

Course Description:

STAT 1401 – Elementary Statistics
3 Class Hours 0 Laboratory Hours 3 Credit Hours

Prerequisite: *MATH 1101 or MATH 1111 or MATH 1112 or MATH 1113 or MATH 1190*

This course in basic statistics includes descriptive statistics, probability, distributions, hypothesis testing, inferences, correlation, and regression.

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.

8. Students will be able to build confidence intervals to estimate population parameters such as means and proportions from statistical data.
9. Students will be able to perform hypothesis tests for population parameters and appropriately interpret the results.
10. Students will be able to successfully use technology to describe, analyze, and perform inferential statistics
11. Students will be able to apply statistical concepts to real-life scenarios.

Textbook and Online Resource Requirements:

Our resources are based on the text

Essential Statistics, Second Edition, by William Navidi and Barry Monk

The student is **required** to obtain Connect Math. Physical copies of the textbook are not required. Students will have access to an eBook through their Connect Math account.

STAT 1401 is part of a textbook program called Day One Access. After enrolling in the course, you should receive an e-mail from KSU University Stores with instructions on how to access the course content. The purpose of Day One Access is to make sure that you have access to the digital course materials on or before the first day of class at a highly competitive rate. Everyone enrolled will automatically have access to the digital course materials. Those who have not opted-out or dropped the class will receive a charge from the bookstore on their student account.

If you would like to know more about Day One Access, please visit
https://ksustore.kennesaw.edu/textbooks/day_one_access.php.

If you would like to know if a loose-leaf copy of the textbook is available or have any other questions or concerns, please email dayone@kennesaw.edu.

Again, if you choose to Opt Out of the discounted digital resources in the Day One Access program, your access to the resources will be removed and you will be responsible for purchasing access to the digital resources at full price on your own.

Professor: Dr. Joe DeMaio

Office: Clendenin 3011

Office Hours: N/A Covid Remote Learning

Phone: (770) 423-6568

e-mail: Do not email me through D2L (reply function does not work as it should). 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.

Grading

Tests will be conducted via Connect Math. 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. **Tests will be open book but closed everything else (people and internet).** The final exam will be cumulative. Cheating may result in the grade of an 'F' for the course.

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

For a Covid, Remote Learning Semester, videos from Connect Math replace lectures from Dr. DeMaio. **A student who does not watch lectures 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 be unable to watch and learn from pre-recorded videos, perhaps now is not the semester to take this course.

Effort is mandatory (if you want a good grade) despite the fact that there is no participation grade! Students with poor effort will be reminded of such during discussions of their grade or special requests.