

Stat 11 Quiz 1

Month DAY, 2023

Academic Integrity

You are not allowed to receive or share any information during the quiz. To ensure compliance with the academic integrity policy outlined in the syllabus, I am asking you to read the following statement carefully before beginning this exam.

I certify that all work is my own and that I will not discuss the content of this exam with anyone in or outside of class. I have not received any hints about the content or the question format of this exam. I understand that if I do have prior knowledge of what to expect on this exam, I will not continue with the exam and may ask to be given the opportunity to make up these points elsewhere. I understand that either giving or receiving help on this exam constitutes serious academic misconduct and may be reported to the College Judiciary Committee, and will result in a full letter grade reduction from my final grade in the course.

To certify that you have read and agree to the policy, please sign your name below.

Signature: _____

Instructions

Do not flip this page until instructed to do so. The purpose of this quiz is to assess your understanding of the material we have covered thus far. This is not a perfect measure of your knowledge and does not predict your future statistical success.

In general, you must show all work and/or explain your reasoning in order to get full credit or partial credit. You do not need to write in complete sentences for any of these questions but make sure that your handwriting is legible and your work is clearly labeled with your final answer clearly marked. You do not need a calculator but you may use one if you'd like. For any calculation problems, simply writing out the formula to find the answer will suffice.

First and Last Name: _____

For Questions 1-5 suppose you are working with a team of scientists who want to study XX to determine XX.

Q1)

Identify variable names and types and observational units

Q2)

Use correlation to explore what kind of relationship between which variables. interpret the slope

Q3)

Use box plot to visualize which variables

Q4)

Histogram and/or trend line to visualize which variables

Q5)

Info from a mathematical summary statistic that isn't found in visual displays above.

Q6)

Is study a sample survey, observational study, or experiment. How can you tell? Are statistical conclusions generalizable and/or causal and how can you determine this.

Q7)

Distinguish random from arbitrary with justification

Q8)

Identify (or create) sample statistics and population parameters and RV for certain setting

Q9)

Something about LLN

Q10)

Something about Gambler's fallacy

Sources

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