AGSC 135
Computer Applications in Research I
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First Examination Study Guide

Prepared By

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- Define the term statistics
- Define the term descriptive statistics
- Define the term statistical inference
- Understand the difference between descriptive statistics and statistical inference
- Understand the common misuses of statistics, including bias, faulty generalizations, faulty deduction, non-comparable data, error in semantics, oversimplification, and spurious accuracy
- Understand the difference between qualitative and quantitative variables
- Understand the difference between discrete and continuous variables
- Understand the basic algebra of summation
- Understand the different ways of presenting data
- Know the difference between histograms and frequency polygons
- Know when to use relative frequency polygons
- Understand the difference between the less-than and more-than cumulative frequency distributions
- Know how to work with measures of central tendency of data, including arithmetic mean, midrange, median, and mode (questions will focus on ungrouped data)
- Understand how the mean, mode, and median compare for symmetrical and skewed distributions
- Know how to utilize measures of dispersion, including range and standard deviation
- Have a basic understanding of MS Excel (as covered in the class), such as knowing the difference between a workbook and worksheet, understanding the difference between relative and absolute cell referencing, and understanding how data, formulas, and functions are entered in MS Excel