

Quiz (20% of grade; 40 points) – you have 60 minutes to complete this quiz.

- A. **Calculations (28 points).** Use **pencil only**, and do all of the questions below. Use the exam paper as your answer sheet and show all appropriate work. Use the following data set for all of the calculations, and circle your answers for the calculations unless instructed otherwise.

Twelve graduate students used the following numbers of online databases for their theses:

5, 0, 4, 3, 5, 1, 0, 6, 2, 1, 2, 4.

1. What was the unit of analysis? (2 points)

2. What was the variable of interest? (2 points)

3. Generate the frequency distribution for this data set using class examples as models; do not circle the frequency distribution. (5 points)

4. Calculate:
the mean (2 points)

the median (2 points)

5. What is the standard deviation of this data set? (5 points)

6. Generate the frequency polygon for this dataset; do not circle the polygon. (4 points)

7. What are the values of Q_1 , Q_2 , and Q_3 ? (6 points)

B. **Concepts (12 points).** Use **pen only**, and answer all of the questions below. Use the exam paper as your answer sheet, using the space provided as an indication of how long an answer should be.

1. To your mind, what is the primary distinguishing characteristic of positivism? (4 points)

2. What is the effect of outliers on the mean? Why is this effect important? (4 points)

3. What does the term "noise" mean in the error model of research? What is the researcher's obligation with regard to noise? (4 points)

Do not write below this line.