**Quiz Intro-2**

Part I – Individual Quiz (Before Class)

Part II – Group Quiz (During Class)

1. What are the four types of responses (2 pts)?

Ratio, interval, ordinal, nominal.

1. What does it mean that responses should have reliability and validity (2 pts)?

They are repeatable and relevant.

1. What is the difference between an observational study and an experimental design (2 pts)?

Experimental you start with one set of subjects or material. You assign treatments.

Observational you start with populations, conditions are built in and you sample from populations.

A main difference isn’t how you compute them but how you interpret the computations.

1. What does an experimental design compare and what does an observational study compare (2 pts)?

Experimental compares treatments, Observational compares populations.

1. What does it mean that material should be uniform and representative (2 pts)?

The what is being tested is the same besides the differences are what you create as the experimenter.

They must be able to represent the whole population you are testing for. Sort material into groups.

**End of Part I**

1. Were you in class on time (2 pts)?

Yes

1. Determine the Response, conditions and material for problem #2 Exercise set A, page 109 (2 pts.).

Response – hatch rate of trout eggs

Conditions – Temperature of water

Material – trout eggs.

1. A study is conducted to measure the success of a weight loss program. Give 3 potential response variables that could be measure: one that has poor validity, one with okay/good validity, and one with the best validity? Categorize each measure into one of Stevens’ 4 types of measurements. (4 pts.)

Measure how safe and healthy a state’s environment is?

Poor- # of calls to animal control- ratio

Decent- Amount of healthy people in the state- ratio

Best- Air quality, Population density- Ratio

1. pg125 #6 (2 pts.)

confounding disease with doctor’s own bias.

1. pg127 #1 (2 pts.)

Group of Friends

Random Sample

Representative because it represents the whole student body.