

## Psychology

### Unit Title: 1-2 Research Methods: Thinking Critically...

The following notes will be turned in at the end of each unit. A grading scale of 1-5 will be utilized in determining the quality of the notes. You may type or hand-write the notes. **Writing must be legible.**

Name:

Date:

#### OBJECTIVES:

1. Differentiate types of research (e.g., experiments, correlational studies, survey, research, naturalistic observations, and case studies) with regard to purpose, strengths, and weaknesses.
2. Describe how research design drives the reasonable conclusions that can be drawn (e.g., experiments are useful for determining cause and effect; the use of experimental controls reduces alternative explanations).
3. Identify independent, dependent, confounding, and control variables in experimental designs.
4. Distinguish between random assignment of participants to conditions in experiments and random selection of participants, primarily in correlational studies and surveys.
5. Predict the validity of behavioral explanations based on the quality of research design (e.g., confounding variables limit confidence in research conclusions).
6. Distinguish the purposes of descriptive statistics and inferential statistics.
7. Apply basic descriptive statistical concepts, including interpreting and constructing graphs and calculating simple descriptive statistics (e.g., measures of central tendency, standard deviation).
8. Discuss the value of reliance on operational definitions and measurement in behavioral research.
9. Identify how ethical issues inform and constrain research practices.
10. Describe how ethical and legal guidelines (e.g., those provided by the American Psychological Association, federal regulations, local institutional review boards) protect research participants and promote sound ethical practice.

**NOTES:** Create a question for each of the objectives. As you read each portion of the unit, take notes in conjunction with each of the questions.

Summary: *One to two sentences that provide your general idea of what this unit is about.*