

PSY – 306 Research Methods-I (Quantitative) (2 CHs)

Course Pre-requisite: None

Course Objectives

1. The course is designed to familiarize the students with various aspects of research processes from generation of research idea to data collection analysis and interpretation of findings by using quantitative research methods.

Course Learning Outcomes

2. The students will
 - a. Learn about various aspects of research process
 - b. Have a knowledge base of various quantitative methods of inquiry and sampling techniques.

3. Course Contents

- a. **Introduction**
 - (1) Scientific and non-scientific approaches to knowledge.
 - (2) The scientific method: definition, features, goals, and steps.
- b. **Identifying a research problem**
 - (1) Basic approaches
 - (2) Sources of research literature
- c. **Scientific theories and hypotheses**
 - (1) Formulation of a hypothesis
 - (2) Operational definitions
- d. **Sampling techniques**
 - (1) Basic terminology; representativeness and bias
 - (2) Probability sampling
 - (3) Non-probability sampling: Accidental\Incidental \grab; Purposive; quota; Self-Selected; Snowball; Convenience; Clinical Sampling
- e. **Co-relational research**
 - (1) The nature and logic of correlations
 - (2) Correlation versus causality
 - (3) Measures in co-relational research
 - (4) Interviews and questionnaires
- f. **Surveys:** Nature, goals, and, basic steps
- g. **Introduction to Experimental Research Methods**

4. **Text Book.** Balnaves, M., & Caputi, P. (2001). *Introduction to quantitative research methods: An investigative approach*. Sage

5. **Reference Books**

- a. Ellis, L. (1994). *Research methods in social sciences*. Madison: Brown and Benchmark Publishers.
- b. Goodwin, C. J. (2002). *Research in psychology: Methods and design*. (3rd ed.). New

- York: John Wiley & Sons.
- c. Kerlinger, F. N. (1986). *Foundations of behavioral research*. New York: Holt Rinehart & Winston, Inc.
 - d. Shaughnessy, J. J., Zechmeister, E. B., & Zechmeister, J. S. (2005). *Research methods in psychology*. (5th ed.). Singapore: McGraw-Hill.