PSY- 211: Applied Statistics in Psychology (3 CHs)

Course Description:

The course is designed to focus on applied statistical skills to support students in interpreting findings of quantitative research with confidence.

Course Objectives:

The course will facilitate students to:

- Develop a deep understanding of applied statistics in different quantitative research.
- Develop skills in the application of statistics in psychological research.
- Analyze and interpret quantitative data using statistical software.
- Expand skills for reporting quantitative data.

Course Learning Outcomes:

By the end of the course, students will be able to:

- Apply a variety of statistical analyses according to different research methods.
- Interpret test results by applying different statistical tests.
- Develop the skill to write and interpret results in a report.

Course Contents:

- Selection of Different Statistical Methods based on Research Designs.
- Inputting Data, Labeling, and Coding in SPSS
- Cleaning Data and Preliminary Assumptions
- The Measure of Central Tendency & Dispersion Generating Graphs and Charts
- Data Analysis by using Parametric Tests
- Data Analysis by using Non-parametric Tests.

Textbooks:

- Cresswell, J. W. (2012). Planning, conducting, and evaluating quantitative and qualitative research. Educational Research. https://doi.

org/10.4135/9781483349435, (10).

- Pallant, J. (2010). SPSS survival manual: A step by step guide to data analysis using IBM SPSS. Routledge.
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2013). Using multivariate statistics (Vol. 5, pp. 481-498). Boston, MA: Pearson.

Reference Books:

- Guilford, J. P., &Fruchter, B. (1985). *Fundamental statistics in psychology and education.* New York: West Publishing Co.
- Howell, D. C. (2004). *Fundamental statistics for behavioral sciences.*(4th ed.). Australia: Thomson, Brook.
- McClane, J. T. (2000).*A first course in statistics* (7th ed.). New York: Prentice-Hall

Moore, D. S., & McCabe, G. P. (1998). Introduction other practice of statistics. (3rd ed.). New York: Longmans