Program	BS (4 Years)	Course Code	APSY-362	Credit Hours	3
Course Title	**Quantitative Data Analysis**				

Course Introduction

This course is basically quantitative data analysis through Statistical Package for Social Sciences (SPSS). This course aims to develop understanding of quantitative data analysis techniques commonly used and applicable to research hypotheses in the field of psychology, their applicability and how to run these analyses using SPSS. This will also cover basic features of SPSS and their step-by-step application and uses. This course will equip students with the ability to independently run the analysis appropriate for their research.

Learning Outcomes

On the completion of the course, the students will be able to:
1. Process research data, prepare variable view file, enter data, and select appropriate analysis as per type of data and hypotheses been formulated.
2. Interpret analysis output file, report results in form of tables and graphic form and interpret results in qualitative form in their research report, thesis and research article.

Course Contents

Introduction to Statistical Package for Social Sciences (SPSS)

Basic features of SPSS: Preparing Data for entering in SPSS; Preparing variable view file
Entering statistical data in data view file; Computing and recoding techniques

Calculating descriptive statistics (Including Mean, Median, Mode and Standard deviation)

Computing differences between two Means by t-test (Independent and matched samples)

Computing differences between Multiple Group using F-test (One-Way ANOVA)

Computing relationship between variables (Correlation)

Regression Analysis

Non parametric statistics
Spearman's Rank Order Correlation, Chi Square Test (Contingency Table and Proportions)
Yates Correction, Wilcoxan test, Mann Whitney -U test, Sign Rank test, Krushkal Wallis

The process and interpretation of SPSS output in form of table and graphical form per APA format.

Textbooks and Reading Material

2.1 Books
- Bryman, A. (2011). Quantitative data analysis with IBM SPSS 17, 18 and 19. London: Routledge.
- Coakes, S. J. (2010). SPSS version 17.0 for windows. Australia: John Wiley & Sons.
- Field, A. (2009). Discovering statistics using SPSS (3rd ed.). Los Angeles: Sage.
- Gelfand, H. (2010). Mastering APA style (6th ed.). Los Angeles: Sage.
- Kinnear, P. R. (2010). IBM SPSS statistics 18 made simple. New York: Psychology press.

- Maran, R. (1995).Windows 95 simplified. Foster City, C.A: IDG Books Worldwide, Inc.
- Maran, R., & Wing, K. (1997). Teach yourself word 97. Foster City, C.A: IDG Books worldwide, Inc.
- Nelson, K.Y. (1996). Windows 95 is driving me crazy. Berkeley, CA: Peach pit Press.
- Person, R. (1993).Using excel version 5 for windows. Indianapolis: Que Corporation.
- Rajathi, A., & Chandren, P. (2010). SPSS for you. India: MJM Publisher.

2.2 Journal Articles/ Reports
- Durbarry, R. (2017). Analysing quantitative data using SPSS. In *Research Methods for Tourism Students* (pp. 219-248). Routledge.
- Kafle, S. C. (2019). Correlation and Regression Analysis Using SPSS. *Management, Technology & Social Sciences*, 126.
- Ong, M. H. A., & Puteh, F. (2017). Quantitative data analysis: Choosing between SPSS, PLS, and AMOS in social science research. *International Interdisciplinary Journal of Scientific Research*, *3*(1), 14-25.
- Purwanto, A., Asbari, M., Santoso, T. I., Paramarta, V., & Sunarsi, D. (2020). Social and Management Research Quantitative Analysis for Medium Sample: Comparing of Lisrel, Tetrad, GSCA, Amos, SmartPLS, WarpPLS, and SPSS. *Jurnal Ilmiah Ilmu Administrasi Publik*, *10*(2), 518-532.
- Deng, S., Dull, J., Finn, J., & Khair, S. (2019). SPSS Data Curation Primer. *Data Curation Network*. Retrieved from https://conservancy.umn.edu/handle/11299/202812
- Koshmak, V., Hvatcev, A., Astahova, I., & Zuev, A. (2019, May). Samples Distinction by Parametric and Nonparametric Statistics in SPSS. In *Society. Integration. Education. Proceedings of the International Scientific Conference* (Vol. 5, pp. 374-382).

Note:- It is preferable to use latest available editions of books.

Teaching Learning Strategies

1. Lectures/Tutorials
2. Semester work
3. Class participation /Presentation
4. Assignments/Class Projects
5. Quizzes

Assessment

Sr. No.	Elements	Weightage	Details
1.	Midterm Assessment	35%	Written Assessment at the mid-point of the semester.
2.	Formative Assessment	25%	Continuous assessment includes: Classroom participation, assignments, presentations, viva voce, attitude and behavior, hands-on-activities, short tests, projects, practical, reflections, readings, quizzes etc.
3.	Final Assessment	40%	Written Examination at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.