



ADD ON COURSE

2023-2024

**DEPARTMENT OF PHYSIOLOGY
TAMRALIPTA MAHAVIDYALAYA**

ORGANIZES

ADD ON COURSE

ON

**Data Analysis
using SPSS**

3rd June – 8th June, 2024



SPSS is a software package used for statistical analysis. It is statistical software that accepts raw data and converts into some relevant statistics that can be used for further analysis. It is termed as Statistical Product and Service Solutions widely known as Statistical Package for the Social Sciences. It is a comprehensive tool for analyzing statistical data. SPSS is compatible in accepting data of different file format and use them to generate tabulated reports, charts, and graphs including descriptive and inferential statistics.



SPSS

Online

Online

Online

COURSE OUTCOME

Understanding of Data Analysis Concepts: Students gain a solid understanding of fundamental concepts in data analysis such as descriptive statistics, inferential statistics, hypothesis testing, correlation, regression analysis, and multivariate analysis.

Proficiency in SPSS Software: By the end of the course, students will be proficient in using SPSS to perform various data analysis tasks.

Data Preparation and Cleaning: Students will learn how to prepare and clean datasets for analysis in SPSS.

Descriptive Statistics: Students should be able to generate and interpret descriptive statistics such as measures of central tendency, variability, and distributional characteristics using SPSS.
predictions.

Inferential Statistics: Students understand how to use inferential statistics techniques such as t-tests, analysis of variance (ANOVA), chi-square tests, and non-parametric tests to draw conclusions from data using SPSS.

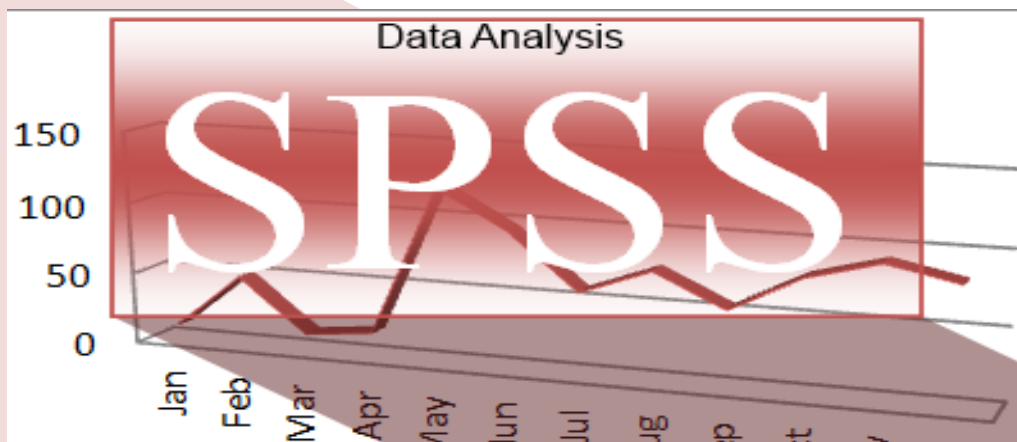


Correlation and Regression Analysis: Students learn how to conduct correlation and regression analyses using SPSS to explore relationships between variables and make predictions.

Interpretation and Reporting: Students should develop the ability to interpret the results of their analyses and effectively communicate their findings in written reports or presentations. This includes understanding how to interpret SPSS output and incorporating it into research or decision-making processes.

Critical Thinking and Problem-Solving: The course fosters critical thinking skills by challenging students to apply their knowledge of statistics and SPSS to solve real-world problems and make data-driven decisions.

Ethical Considerations: Students will be aware of ethical considerations in data analysis, including issues related to data privacy, confidentiality, and responsible use of statistical methods.



COURSE DURATION

TOTAL TIME: 30 Hours
Total Theory: 15 Hours
Practical: 10 Hours
Class Presentation: 4 Hours
Assessment: 1 Hour



Undergraduate Students

**Last day
to apply!**



Course Modules

Module 1: Introduction to SPSS

Module 2: Descriptive Statistics

Module 3: Inferential Statistics Part 1

Module 4: Inferential Statistics Part 2

Module 5: Correlation and Regression Analysis

Module 6: Multivariate Analysis

Module 7: Advanced Topics

Module 8: Interpretation and Reporting

Module 9: Hands-on Projects

Module 10: Ethical Considerations and Best Practices

**Data Management and
Statistical Analysis
using**

SPSS



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