Course Code	UCA20S04L	Course Name	STATISTICAL PACKAGE FOR SOCIAL SCIENCES	Course Category	S	Skill Enhancement Course	L	T	P	C
							0	0	2	1

Pre-requisite Courses	Nil	Co-requisite Courses	Nil	Progressive Courses	Nil
Course Offering Department	Computer Applications	Data Book / Codes/Standards	Nil		

Course Learning Rationale (CLR):	*The purpose of learning this course is to:*	Learning
E1CLR-1 :	To define a variety of statistical variables	1
CLR-2 :	To enter basic data into SPSS	
CLR-3 :	To learn basic SPSS functions and its tools	
CLR-4 :	To Present data using relevant tables, graphical displays and summary statistics.	
CLR-5 :	To conduct descriptive and basic inferential statistics	
CLR-6 :	To carry out statistical analysis that can test hypotheses	

Course Learning Outcomes (CLO):	*At the end of this course, learners will be able to:*	Level of Thinking (Bloom)	Expected Proficiency (%)	Expected Attainment (%)	Program Learning Outcomes (PLO) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		1	2	3	Fundamental Knowledge	Application of Concepts	Link with Related Disciplines	Procedural Knowledge	Skills in Specialization	Ability to Utilize Knowledge	Skills in Modeling	Analyze, Interpret Data	Investigative Skills	Problem Solving Skills	Communication Skills	Analytical Skills	ICT Skills	Professional Behavior	Life Long Learning
CLO-1 :	Understand the basic analyses workings of SPSS, and its tools	3	80	70	L	H	-	H	L	-	-	H	L	L	-	H	-	-	H
CLO-2 :	Summarize data using graphs and descriptive statistics,	3	85	75	M	H	L	M	L	-	-	H	M	L	-	H	-	-	H
CLO-3 :	Analyzing data to compare significance of difference between two or more groups: parametric and nonparametric methods.	3	75	70	M	H	M	H	L	-	-	H	M	L	-	H	-	-	H
CLO-4 :	Evaluating association between disease (outcome) and one or more exposures	3	85	80	M	H	M	H	L	-	-	H	M	L	-	H	-	-	H
CLO-5 :	Carry out inferential statistical analysis using SPSS	3	85	75	H	H	M	H	L	-	-	H	M	L	-	H	-	-	H
CLO-6 :	Use SPSS to produce scientifically sound research reports	3	80	70	L	H	-	H	L	-	-	H	L	L	-	H	-	-	H

Duration (hour)		06	06	06	06	06
S-1	SLO-1	Introduction to SPSS	Introduction to Various Graphical representation of Data and Editing of Graphs	Introduction to Measures of Central Tendencies	Calculation of Regression Trend-Trend Line	Introduction to Non-Parametric Test
	SLO-2	Understanding Interface - Data View, Variable View and Output View				
S-2	SLO-1	Defining Variables in a New Data Set	Constructing Simple Bar diagram	Calculation of Mean, Median and Mode, Geometric mean	Introduction to Test of Significance for Single and two Sample	One –Way Chi-square test (test for Homogeneity)
	SLO-2	Entering Data in a New Data Set and Saving a New Data Set				
S-3	SLO-1	Sorting and filtering data	Constructing Multiple Bar Diagram	Introduction to Methods of	Understanding Large Sample Test	Two–Way Chi-square test (test for

	SLO-2	Replacing Missing Values		Dispersion	(Z-Test)	Attributes)
S-4	SLO-1	Creating a New Data Set From Other File Format	Constructing Sub divided Bar Diagram	Calculation of Standard Deviation, Quartiles, Skewness & Kurtosis	Test for Mean, Test for Proportion & Test for Standard Deviation for Z-test	Introduction to Test of Homogeneity of Means for more than 2 samples
	SLO-2	Opening a data file and viewing its contents				
S-5	SLO-1	Construction of Frequency tables	Constructing Histogram	Introduction to Correlation Coefficient:	Understanding Small Sample Test (t-Test, F-test)	One –Way ANOVA
	SLO-2	Univariate Frequency tables				
S-6	SLO-1	Bivariate Frequency tables	Constructing Pie Diagram	Calculation of Karl Pearson's Correlation Coefficient	Test of Mean & Test of Variances for Small sample	Two–Way ANOVA
	SLO-2	CrossTabulation		Calculation of Spearman's Rank Correlation Coefficient		

Learning Resources	1. Vijay Gupta, (1999), "SPSS for Beginners", VJBooks Inc.	2. Melanie C. Page, Sanford L. Braver and David P. MacKinnon, (2003), "Levine's Guide to SPSS for Analysis of Variance", 2nd Edition, Lawrence Erlbaum Associates Publishers.

Learning Assessment

Level	Bloom's Level of Thinking	Continuous Learning Assessment (50% weightage)								Final Examination (50% weightage)	
		CLA – 1 (10%)		CLA – 2 (10%)		CLA – 3 (20%)		CLA – 4 (10%)#			
		Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice
Level 1	Remember Understand	20%	20%	15%	15%	15%	15%	15%	15%	-	30%
Level 2	Apply Analyze	20%	20%	20%	20%	20%	20%	20%	20%	-	40%
Level 3	Evaluate Create	10%	10%	15%	15%	15%	15%	15%	15%	-	30%
	Total	100 %		100 %		100 %		100 %		100 %	

CLA – 4 can be from any combination of these: Assignments, Seminars, Short Talks, Mini-Projects, Case-Studies, Self-Study, MOOCs, Certifications, Conf. Paper etc.,

Course Designers		
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