



Indraprastha College for Women University of Delhi

WORK PLAN FOR ODD SEMESTER 2026

Course Name:	B.A. (Prog.) Psychology
Paper Title:	Fundamentals of Inferential Statistics (Tutorial)
Unique Paper Code:	2112204701
Semester:	VII
Faculty(s):	Dr. Nidhi Malik
Year:	2026

Work Plan			
Unit No.	Learning Objective	Lecture No.	Topics to be Covered
1-4	Tutorial Assessment	1	Overview of the paper, pedagogy and tutorial assessments
		2	Understanding of t-test
		3	Data Analysis, interpreting output, and presenting results for <i>t</i> -test (single mean)
		4	Data Analysis, interpreting output, and presenting results for <i>t</i> -test (independent groups)
		5	Data Analysis, interpreting output, and presenting results for <i>t</i> -test (dependent groups)
		6	Class Activity
		7	Revision of Unit 1; Discussion of Unit 1 Question Bank
		8	Class Activity
		9	Revision of Unit 2; Discussion of Unit 2 Question Bank
		10	Data Analysis, interpreting output, and presenting results for ANOVA
		11	Revision of Unit 3; Discussion of Unit 3 Question Bank
		12	Class Activity
		13	Data Analysis, interpreting output, and presenting results for Chi-Square
		14	Revision of Unit 4; Discussion of Unit 4 Question Bank
		15	Final Revision and Recap of All Formulae and Computations

Syllabus		
Unit	Contents	Contact Hours
I	Introduction to Inferential Statistics; Properties of Random Sampling Distribution of the Mean; Hypothesis Testing – t test – Calculation with raw scores and Assumptions (Single mean, Independent samples, Dependent samples); One-tailed and Two-tailed tests; p-Value; Errors in hypothesis testing; Power of test	5
II	Confidence Intervals for Single Mean and Difference between two means (Calculation); Relation between Confidence Intervals and Hypothesis Testing; Advantages of Confidence Intervals	3
III	Hypothesis testing – One-way Analysis of Variance (ANOVA); Basis of ANOVA, Calculation with raw scores, Assumptions, Comparison of t and F; Conceptual understanding of Post Hoc Comparisons	3
IV	Chi-Square Test – Logic and Assumptions, Calculation for Goodness-of-fit, Test for Independence between two variables; Nonparametric Tests - Uses and Applications; Comparison with Parametric Tests	4
	Total	15

Text Books/Suggested Readings:

S. No.	Name of Authors/Books/Publishers	Year of Publication/ Reprint
1.	Howell, D. C., (2013). <i>Statistical Methods for Psychology</i> . Wadsworth.	2013
2.	King, B.M., Rosopa, P.J., & Minium, E.W. (2018). <i>Statistical Reasoning in the Behavioral Sciences</i> . (7th Ed.). John Wiley.	2018
3.	Mangal, S.K. (2010). <i>Statistics in Psychology and Education</i> (2nd Ed.). PHI Learning.	2010
4.	Aron, A., Coups, E.J. & Aron, E.N. (2013). <i>Statistics for Psychology</i> (6th Ed.) Pearson Education.	2013
5.	Garrett, H.E. (2005). <i>Statistics in Psychology and Education</i> . Paragon International Publishers.	2005
6.	Mangal, S.K. (2010). <i>Statistics in Psychology and Education</i> (2nd Ed.). PHI Learning.	2010
7.	Veeraraghavan, V. & Shetgovekar, S. (2016). <i>Textbook of Parametric and Non- Parametric Statistics</i> . Sage.	2016

	Paper Components		
Credits	Lecture (L)	Tutorial (T)	Practical (P)
4	3	1	0
Assessment Scheme			
S.No.	Component	Marking Scheme	Total Marks

1	Internal Assessment - Assignment/Quiz/Project/Presentation - Class Test - Attendance		30
		12	
		12	
		6	
2.	Continuous Assessment (Tutorial) - Activity 1 - Activity 2 - Attendance		40
		20	
		15	
		5	
3.	Practical - Continuous Assessment - End term practical examination - Viva		NA
		NA	
		NA	
		NA	
4.	End Semester Examination		90