

Nazrul Road, Kalla More, P.O. – Kalla C. H. Asansol – 713340, Dist.-Paschim Burdwan, West Bengal

## PhD Coursework Curriculum and Syllabus

(As per Regulations relating to M.Phil, Ph.D.and Integrated M.Phil-Ph.D Programmes, KNU, 2016)

### Curriculum

Paper	Course Type	(L-T-P)	Credit	Total Marks
Research	Core	3-1-0	4	10+40=50
Methodology				
Literature review	Core	0-1-2	2	30+20=50
Submission and	7. 60			
Presentation		2		
Statistics and	Core	3-1-0	4	10+40=50
Computer Applications		OT DE		
In Behavioural	15	AAA		
Sciences	-			
SPSS analysis	Core	0-1-2	2	30+20=50
	Total	Total	12	200

**Syllabus** 

PHDAPSY101: Research methodology

**Course Objectives:** 



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- 1. To develop deep understanding of research philosophy.
- 2. To develop critical thinking.
- 3. To acquaint research candidate with research ethics.

#### **Learning Outcome:**

- 1. Candidate will be skilled in critical thinking and reviewing literature on the basis of scientific merits.
- 2. Candidate should be able to adopt ethic based methodology.

### **Unit-1 Quantitative Methods:**

Basic Laboratory Experiment, Randomized Experiment; Multiple level of Independent and Dependent variables, Factorial Design; Cross sectional design versus Longitudinal design.

### **Unit-2 Qualitative Methods:**

Qualitative Data collection, Transcription; Grounded Theory; Thematic Analysis; Phenomenology; Case Study.

Unit-3 Critical Thinking: Introduction to Critical Thinking, Argument Basics, Fallacies, Inductive Arguments, Causal Arguments, Evaluating Arguments.

## **Unit-4 Psychological Test Construction:**

Item Analysis; Reliability; Validity; Concept of triangulation.



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### **Unit-5 APA style guidelines:**

Ethical issues in psychological research; Manuscript style.

#### References:

- 1. American Psychological Association. (1994). *Publication manual*. Sixth Edition. Washington. DC: American Psychological Association.
- 2. Howitt, D., & Cramer, D. (2014). Introduction to research methods in psychology (4thed). Pearson Education.
- 3. Leavy, P. (Ed.). (2014). The Oxford handbook of qualitative research. Oxford library of psychology.
- 4. Singh, A. K. (2017). Tests, measurements and research methods in behavioural sciences. Bharati Bhawan Publisher
- 5. Vaughn, L., & MacDonald, C. (2013). The power of critical thinking. Oxford University Press.

#### **PHDAPSY102: Literature Review**

## **Course Objectives:**

- 1. To give candidate exposure of different types of review.
- 2. To make candidate be able to apply his or her learned skill of research methodology in evaluation of literature.
- 3. To develop scientific writing skill.

### **Learning Outcomes:**



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- 1. Candidate should be able to write review.
- 3. Candidate should be able to write scientific proposal.
- 2. Candidate can venture to assist in review of journal articles.

**Practicum:** Submission and presentation of Review of Literature in expected area of research (min. 3000 words)

## PHDAPSY103: Statistics and Computer Applications in Behavioural Sciences

### **Course Objectives:**

- 1. To make candidate familiar with advanced statistical method.
- 2. To enhance candidates skill in applying different statistical methods for same data.

## **Learning Outcomes:**

- 1. Candidate should be able to understand the reasoning behind statistical methods.
- 2. Candidate should be able to practically perform calculations.

**Unit-1: Parametric tests: Concept and SPSS analysis-** "t" test, one-way and two-way analysis of variance, post-hoc tests, analysis of covariance, repeated measures analysis of variance.



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Unit-2: Non-parametric tests: Concept and SPSS analysis- Assumptions; One-sample tests (sign test, Mc Nemer test); two-sample test (Mann Whitney U test, Wilcoxon rank sum test); Kruskal Wallies test, and Friedman test and chi-square test.

Unit-3: Multivariate analysis: Concept and SPSS analysis - Introduction, Multiple regression and logistic regression.

Unit-4: Factor analysis, cluster analysis, discriminant functional analysis (with SPSS)

Unit-5: Graphical representations: SPSS chart builder; Graphing means, relationship and interaction effect.

#### References:

- 1. Burns, R. P., & Burns, R. (2008). Business research methods and statistics using SPSS. Sage.
- 2. Field, A. (2009). Discovering statistics using SPSS. Sage publications.
- 3. Kothari, C. R. (2003). Research Methodology. New Delhi: Wishwa Prakshan.
- 4. Siegal, S. & Castellan, N.J. (1988). Non-parametric statistics for the behavioral sciences.

McGraw Hill: New Delhi

PHDAPSY104: SPSS analysis

### **Course Objectives:**

- 1. To make candidate familiar with computer applications for statistics
- 2. To foster deep and wide learning of SPSS environment.
- 3. To teach candidate preparing research results as per scientific journal demands.



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## **Learning Outcome:**

- 1. Candidate will be acquainted with current generation computer applications for statistics.
- 2. Candidate will be able to perform statistical analysis using SPSS for variety of data.
- 3. Candidate can get opportunity assistant statistical consultant in scientific journals.

**Practicum:** Solving, presenting result table as per APA style and interpreting the given problem using SPSS.

