

SYLLABUS

PRE-PHD COURSEWORK PSYCHOLOGY (2023-2024, 2024-2025)

Mirza Khatun Pooji
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Nikhil
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P.G. Department of Psychology
RAMA DEVI WOMEN'S UNIVERSITY
Vidya Vihar, Bhubaneswar-751022, Odisha

P.G. DEPARTMENT OF PSYCHOLOGY

Rama Devi Women's University, Vidya Vihar, Bhubaneswar-22, Odisha

SYLLABUS FOR**Pre-Ph.D. COURSE WORK IN PSYCHOLOGY**

All the scholars of Ph.D. programme of this Department have to undergo Pre-Ph.D. Coursework of one semester duration. On successful completion of the course work, the scholars may be eligible for final registration for Ph.D. subject to recommendation of Department Research Committee (DRC). The syllabus structure for Pre-Ph.D. Coursework in Psychology is given below.

Papers	Course Title	Credits	Marks	Pass Mark	Remarks	Page No.
Paper-I	Research Methodology and Computer Application (Theory & Practical)	4	100	55%	Subject Specific	3
Paper-II	Psychological Assessment & Statistical Analysis (Theory)	4	100	55%	Subject Specific	6
Paper-III	Review of Related Literature (Practical)	4	100	55%	Common to all subjects	8
Paper-IV	Research and Publication Ethics (Theory & Practical)	4	100	55%	Common to all subjects	9
--	Total	16	300	55%	--	--

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PAPER-I:
RESEARCH METHODOLOGY AND COMPUTER APPLICATION

Credits: 04

Full Marks: 100 (Theory 75 + Unit-IV Practical 25)

LEARNING OUTCOMES:

On completion of the course, the scholars shall be able to-

- i. Comprehend concept of quantitative, qualitative and mixed research methodology.
- ii. Select and explain an appropriate method for a research study and conduct review of related literature.
- iii. Formulate hypotheses or pose research questions based on the objectives of the study.
- iv. Learn how to prepare research proposal and write research report.
- v. Select and develop appropriate research tools for the collection of data.
- vi. Understand and apply various quantitative and qualitative techniques of data collection, analysis and interpretation.
- vii. Identify and access various sources of computerized database for quantitative and qualitative methods of research.
- viii. Acquaint with the use of different software analysis of data.

COURSE CONTENTS

Unit-I: Introduction to Psychological Research and Quantitative Methods

- *Psychological Research*: Concept, types, approaches- Quantitative, Qualitative and Mixed research; Review of related literature; Population and sampling; Choice of instruments/tools; Process of data and analysis.
- *Preparation of Research Proposal*: Components; Objectives and hypotheses/ research questions; methodology.
- *Methods and Designs of Quantitative Research*: Survey Designs; Experimental Designs; Causal-Comparative Design; and Correlational Designs.

Unit-II: Qualitative Research Methods

- *General Process*: Selecting participants and sites; types of qualitative data, process of data collection; validating the accuracy of findings.
- *Grounded Theory Designs; Ethnographic Designs; Narrative Research Designs*: Concept, purpose, types, characteristics, steps in conducting these researches. Ethical issues and evaluation of these research designs.
- *Case Study Designs*: Concept, purpose, types, characteristics. Types of Case Study Designs-particularistic, descriptive, and heuristic. Process of Conducting Case studies. Ethical issues and evaluation of Case study design.

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Unit-III: Mixed Methods Designs

- *Mixed Method Designs*: Concept, purpose, and characteristics. Designs- Convergent Parallel, Explanatory Sequential, Exploratory Sequential, Embedded, Transformative, and Multiphase.
- *Steps in conducting Mixed Method Study*: Identifying problem; developing mixed method tools; data collection-quantitative and qualitative data; analyzing data separately, concurrently or both; report writing; ethical issues; evaluation of mixed method research.
- *Research designs*: Meaning, purpose and principles; Experimental designs – Post test only design, Pre-test post-test only design, Solomon 4 group design, factorial design, randomized block design, crossover design; internal and external validity of research designs; Quasi experimental research designs- Non-randomized control group and time series design.

Unit: IV- Computer Application (Practical Mode) [Practical]

- MS Word, MS Excel, and MS-Power Point: Creating presentations and adding effects. Working with Text, Working with Tables, Graphs and figures, Document preparation, and Formatting.
- Use of software for sample size calculation (Raosoft).
- Use of Spread sheet and SPSS for analysing educational data.
- Referencing Style (APA Style): Bibliography, Webliography.

Course Transaction Mode

The content will be transacted through face to face/ web based lectures, assigning activities/ assignments, presentation in seminar, peer teaching and self-learning mode. In addition to formal teaching learning activities students may be assigned classes of PG/ PG levels to teach students to get first and knowledge.

Suggested Readings

- APA Manual (7th Edition). Read and Follow for referece writing and others.
- Abdi, H., Edelman, B., Valentin, D., & Dowling, W.J. (2009). Experimental design and analysis for psychology. New Delhi: Oxford University Press.
- American Psychological Association (2010). Publication manual of the American Psychological Association (6th Ed.). Washington, DC: American Psychological Association
- Bogdan, R., & Taylor, S.L. (1975). Introduction to qualitative research methods. New Delhi: John wiley and sons.
- Craig, A.M. (2006). Action research-tecahers as researchers in the classroom. New Delhi: Sage Publications.
- Creswell, J.W. (2012). Educational research: Planning, conducting, and evaluating, quantitative and qualitative research (4th Ed.). New Delhi : PHI learning Pvt. Ltd.
- Ferguson, G.A. & Takane, Y. (1989). Statistical analysis in psychology and education (6th Ed.). New York: McGraw-Hill.
- Flick, U. (2012).An introduction to qualitative research. London: Sage Publication.
- Garrett, H.E. (1971). Statistics in psychology and education. New Delhi: Paragon International Publisher

- Guilford, J.P. & Fruchter, B. (1981). *Fundamental statistics in psychology and education*. New York: McGraw Hill
- Kerlinger, F. N., Lee, H. B. (2000). *Foundations of behavioural research*. New York: Thomson Learning.
- Mangal, S.K. (2008). *Statistics in Education and Psychology*. New Delhi: Prentice-Hall of India Private Limited
- Seigel, S. & Castellan Jr., N.J. (1988). *Non-parametric statistics for the behavioral sciences*. New York: McGraw- Hill.

PAPER-II:

PSYCHOLOGICAL ASSESSMENT & STATISTICAL ANALYSIS

Credits: 04

Full Marks: 100 (Theory)

LEARNING OUTCOMES:

On completion of the course the scholars will be able to:

- i. Describe concept of psychological test and types.
- ii. Justify the role of psychological scaling.
- iii. Explain and use various scaling methods in professional career.
- iv. Understand concept and types of assessment such as: Assessment for, of and as learning.
- v. Apply various alternative Psychological tests such as Individual, group, performance and their learning outcomes
- vi. Learn concept of general abilities and personality assessment.
- vii. Explain the use of normal probability of curve in analysing educational data.
- viii. Examine relationship between/among different variables in analysing educational data.
- ix. Calculate the significant difference between two sets of independent and correlated samples.
- x. Explain the use of Chi-square test in analysing educational data.
- xi. Use ANOVA and ANCOVA in analysing educational data.

COURSE CONTENTS

Unit-I: Introduction & Psychological Tests

- Nature and Scope of human assessment; Parameters of assessment
- Psychological scaling, Methods of scaling
- Principles of test construction and standardization- Item analysis, reliability, validity and development of norms
- Types of psychological tests- Individual, group, performance, verbal, nonverbal

Unit-II: Assessment of Ability & Classroom Assessment

- Assessment of general abilities- Intelligence, interest, interpersonal interaction
- Assessment of personality- Use of self-report inventories, interview, projective and non projective tests
- Classroom as assessment context, Traditional tests, Alternative assessment
- Grading and reporting of performance, Computer and assessment

Unit-III: Analysis and Interpretation of Psychological Data -I

- Normal Probability Curve (NPC): Its applications and Deviation from normality.
- Pearson's Product Moment and Spearman's Rank Order Correlation: Assumptions, computation and interpretation.
- Partial and Multiple Correlation; Linear Regression.
- Sampling Error, Standard Error, Level of significance, Confidence level, Degrees of freedom, One-tailed and two-tailed tests; Types of Errors in testing null hypothesis.

Unit-IV: Analysis and Interpretation of Psychological Data -II

- Significance of difference between Two Means- Small sample and large sample; Independent and Correlated Samples.
- Chi-square test: Assumptions and Computation.
- Analysis of Variance (ANOVA): assumptions, computation (one way, two-way) and interpretations.
- Analysis of Covariance (ANCOVA)- Assumptions, Calculation & interpretations.

Course Transaction Mode

The content will be transacted through face to face/ web based lectures, assigning activities/ assignments, presentation in seminar, peer teaching and self-learning mode. In addition to formal teaching learning activities students may be assigned classes of PG/PG levels to teach students to get first and knowledge.

Suggested Readings (Unit-I & II)

- Kerlinger, F.N. (1983). Foundations of Behavioral Research. New York: Surjeet Publication.
- Minium, E.W., King, B.M. & Bear, G. (1993). Statistical Reasoning in Psychology and Education. New York: John Wille
- Anastasi, A. (1988). Psychological Testing. New York: MacMillan
- Mishra, G.C. & Others (2018). Psychological Assessment. Kalyani Publisher, New Delhi

Suggested Readings (Unit-III & IV)

- Abdi, H., Edelman, B., Valentin, D., & Dowling, W.J. (2009). Experimental design and analysis for psychology. New Delhi: Oxford University Press.
- Ferguson, G.A. & Takane, Y. (1989). Statistical analysis in psychology and education (6th Ed.). New York: McGraw-Hill
- Garrett, H.E. (1971). Statistics in psychology and education. New Delhi: Paragon International Publisher
- Glass, G.V. & Stanley, J.C.(1970). Statistical methods in education and psychology. New Jersey: Prentice Hall.
- Guilford, J.P. & Fruchter, B. (1981). Fundamental statistics in psychology and education. New York: McGraw Hill
- Lichtman, M. (2006). Qualitative research in education-A user guide..London: Sage Publication.
- Mangal, S.K. (2008). Statistics in Education and Psychology. New Delhi: Prentice-Hall of India Private Limited
- McCall, R. (1993). Fundamental Statistics for the Behavioral Science. New York: Harcourt Brace

- Ravid, Ruth. (2000). Practical Statistics for Education. New York: University Press of America.
- Seigel, S. & Castellian Jr., N.J. (1988). Non-parametric statistics for the behavioral sciences. New York: McGraw- Hill.

PAPER- III:

REVIEW OF RELATED LITERATURE

Credits: 04

Full Marks: 100 (Practical)

Learning Outcomes:

After completion of the course the students will be able to-

- i. Conduct review of related literature
- ii. Identify the research gap and write the review in a synchronized manner
- iii. Select a research area of their interest
- iv. Identify variables relevant to the selected research area
- v. Summarize the findings of different research studies
- vi. Write a thematic paper on any contemporary issue in the subject
- vii. Present thematic paper

CONTENTS

Each student is required to select a problem on which she has to do intensive review of related studies under the supervision of a faculty member of the Department. She has to review adequate research studies related to the problem and prepare a report.

The student is required to submit a report on the review carried out by her and need to give a power point presentation before the RAC. Assessment shall be made on the basis the following criteria:

- 1) Relevance of the reviews.
- 2) Finding the research gap.
- 3) Standard and quality of writing the review.
- 4) Style of presentation.
- 5) Answering the question

Distribution of Marks for Evaluation

- | | |
|----------------------------------|------------|
| 1) Report writing and submission | : 50 Marks |
| 2) Presentation | : 30 Marks |
| 3) Viva-voce Test | : 20 Marks |

Total:

100 Marks

PAPER- IV:

RESEARCH AND PUBLICATION ETHICS

Credits: 04

Full Marks: 100 (Theory-50) + (Practical-50)

BACKGROUND

This Paper has been incorporated in the Ph.D. course work under this University as per the UGC correspondence in December 2019 vide its 543rd Meeting held on 09 August 2019. The main aim of this course is to create awareness about publication ethics and publication misconducts. It is an interdisciplinary course with 02 credits (Theory) and 2 credits (Practical). The course transaction modes shall be classroom teaching, guest lectures, group discussions and practical sessions. The evaluation of the course will be through continuous assessment processes such as tutorials, assignments quizzes, etc.. Final examination will be conducted at the end of the course.

LEARNING OUTCOMES:

On completion of the course, the scholars will be able to:

- i. Understand the basics of philosophy of science and ethics, research integrity, publication ethics.
- ii. Identify research misconduct and predatory publications.
- iii. Comprehend indexing and citations, open access publications, research metrics (citations, h-index, impact factor etc).
- iv. Use plagiarism tools for a valid and ethical research report.

COURSE STRUCTURE

A: THEORY

Unit-I: Philosophy and Ethics

- Introduction to Philosophy: Definition, nature and scope, concept, branches.
- Ethics: definition, moral philosophy, nature of moral judgement and reactions.
- Intellectual honesty and research integrity
- Conflict interest

Unit-II: Scientific Conduct

- Ethics with respect to science and research
- Scientific misconduct: Falsification, Fabrication, and Plagiarism (FFP)
- Redundant Publications: Duplicate and overlapping publications.
- Selective reporting and misrepresentation of data.

Unit-III: Publication Ethics

- Publication ethics: Definition, introduction and importance
- Violation of publication ethics, authorship and contributorship
- Publication misconduct: Definition, concept, problems that lead to unethical behaviour, types, identification of publication misconduct, complaints and appeals
- Predatory publishers and journals

B: PRACTICAL

Unit-I: Open Access Publishing

- Open Access Publications and initiatives
- Online resource to check publisher copyright and self-achieving policies (SHERPA/RoMEO)
- Journal finder/ journal suggestion tools viz. Elsevier finder, Springer, Journal suggester etc.

Unit-II: Publication Misconduct

- Use of plagiarism software like Turnitin, Urkund and other open source software tools
- Software tools to identify predatory publications developed by SPPU
- Indexing databases

Unit-III: Database and Research Metrics

- Citation databases: Web of Science, Scopus. etc.
- Impact Factor of journal as per Journal Citation Report.
- Metrics: h-index, g-index, i10 index, altmetrics

Unit-IV: Group Discussion/Seminar

- Subject Specific ethical issues, FFP, authorship
- Conflict of interest
- Complaints and appeals: examples and fraud from India and abroad

REFERENCES

- Bird, A. (2006). Philosophy of Science. Rutledge.
- MacIntyre, A. (1967). A short history of ethics. London.
- P.Chaddah (2018). Ethics in competitive Research: Do not get scooped; do not get plagiarised.
- National Academy of Sciences (2009). On being a scientist: A guide to responsible conduct in Research (3rd Ed.), National Academics Press.
- Resnik, D.B. (2011). What is ethics in research & why is it important. National Institute of Environmental Health Sciences, 1-10.
- Beall, J. (2102). Predatory publishers are corrupting open access. Nature, 489 (7415), 179-179.
- Indian National Science Academy (INSA). Ethics in science education, research and governance (2019).

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Mina Kataria

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