

Raja Mahendra Pratap Singh University, Aligarh



Syllabus

Pre – Ph. D. Course Work

Psychology

**(For both University Campus and Affiliated Colleges
of the University)**

Raja Mahendra Pratap Singh University, Aligarh

Ph.D. Course Work Syllabus

Paper – I: Research and Publication Ethics (RPE)

Credits: 2 Total Units: 4

Marks: 50

Course Type: Compulsory for all Ph.D. Scholars

Course Objectives

- To introduce research scholars to ethical principles in academic research.
- To develop awareness regarding publication ethics and research misconduct.
- To provide knowledge about plagiarism detection tools and citation practices.
- To familiarize scholars with quality research publications and indexing databases.

Unit – I: Philosophy and Ethics of Research

- Meaning, objectives and significance of research
- Ethics in scientific research
- Moral philosophy: ethical theories and principles, values in research
- Scientific conduct: honesty, integrity, objectivity and transparency
- Ethical issues in research involving human participants, animals and environment

Unit – II: Research Misconduct and Publication Ethics

- Definition and types of research misconduct: fabrication, falsification and plagiarism
- Redundant publications: duplicate publication and salami slicing
- Authorship ethics and criteria for authorship
- Responsibilities of authors, reviewers and editors
- Conflict of interest in research and publication

Unit – III: Publication Practices and Journal Quality

- Types of research publications: research articles, review papers, conference papers, books and book chapters
- Quality parameters of journals: Impact factor, citation index
- Indexing databases and platforms: Scopus, Web of Science, Google Scholar, DOAJ
- Predatory journals and publishers: identification and prevention
- Open access publishing models

Unit – IV: Plagiarism and Citation

- Meaning and types of plagiarism
- Academic integrity and plagiarism policies
- Plagiarism detection tools: Turnitin, Urkund

Suggested Practical / Assignments

- Identification of Predatory Journals
- Demonstration of plagiarism checking using available software
- Preparation of reference list using reference management tools
- Writing a short research article with proper citation and referencing

Suggested Readings

1. Bird, A. (2006). Philosophy of Science. Routledge.
2. Resnik, D. B. (1998). The Ethics of Science: An Introduction. Routledge.
3. Shamoo, A. E., & Resnik, D. B. (2015). Responsible Conduct of Research. Oxford University Press.
4. National Academy of Sciences (2009). On Being a Scientist: A Guide to Responsible Conduct in Research.
5. Day, R. A., & Gastel, B. (2012). How to Write and Publish a Scientific Paper. Cambridge University Press.

Evaluation Scheme

Internal Assessment / Assignment / Seminar: 15 Marks

End Semester Examination: 35 Marks

Raja Mahendra Pratap Singh University, Aligarh

Ph.D. Course Work Syllabus

Paper II: Research Methodology

Credits: 4 Units: 4

Total Teaching Hours: 60 Maximum Marks: 100

Course Objectives:

- To develop a comprehensive understanding of research concepts and scientific enquiry
- To familiarize research scholars with different Research design used in psychological Research and the involved measurement issues.
- To prepare research scholars for identifying appropriate statistical tools for data analysis
- To understand and apply actual statistical approaches used in research work

Course Outcomes:

After completing the course the student should be able to:

Understand basic concepts of research and different types of Research design

- Develop Data analytics skills using statistical techniques
- Understand and interpret results
- Write a scientific report

Unit – I:

Types of research: quantitative research; qualitative research; mixed methods research, research problems and hypothesis, levels of significance; errors in statistical decisions, sampling techniques.

Unit – II:

Research design: Experimental, Correlational, Factorial and Mixed Designs.
Constructing the Measures for Research: Rating scales, Interview schedules, Questionnaires, Ability tests, Experimental tasks. Important issues in data screening.

Unit – III:

Group comparison: t-test, ANOVA (Independent Samples, Repeated Measures, and Mixed Designs), MANOVA. Post-hoc analyses. Multivariate Analysis: Importance and Uses. Qualitative data analysis: thematic analysis, grounded theory analysis, and phenomenological analysis.

Unit – IV:

Regression Analyses: Regression Equation and Coefficients - Calculation and Interpretation. Simple and Multiple regression Analysis: Purpose, assumptions and interpretation. Factor Analysis: Assumptions, Deriving factors and factor naming. Exploratory and Confirmatory Factor Analysis.

Suggested Readings

1. Broota, K.D. (2020). Experimental design in behavioral Research. New Delhi: New Age International Private Ltd.
2. McGuigan, F.J. (1993). Experimental psychology: Methods of research (6th Ed.). New Jersey: Prentice-Hall Inc.
3. Kerlinger, F.N. (2017). Foundation of behavioral research. New Delhi: Surjeet Publication.
4. Gravetter, F.J. and Forzano, L.B. (2018). Research methods for behavioural sciences. (6th Ed.) cengage
5. Agrestic, A. (2017). Statistical methods for the social sciences (5th Ed.). USA: Pearson Publication.
6. DeCoster, J. (1998). Overview of Factor Analysis. Retrieved from <https://www.stathelp.com/notes.html>
7. Thompson, B. (2004). Exploratory and conformity factor analysis: Understanding concepts and applications. ISBN 978-1-59147-093-9.
8. Howell, D.C. (2017). Fundamental statistics for the behavioural sciences (9th Ed.). USA: Cengage Learning.
9. Lune, H., & Berg, B. L. (2011). Qualitative Research Methods for the Social Sciences (8thed.). Pearson Education Limited.

Evaluation Scheme

Internal Assessment / Assignment / Seminar: 30 Marks

End Semester Examination: 70 Marks

Raja Mahendra Pratap Singh University, Aligarh

Ph.D. Course Work Syllabus

Paper III: Subject Specific Course – Psychology

Credits: 4 Units: 4

Maximum Marks: 100

Course Objectives

The objective of the course is to provide advanced knowledge of fundamental and modern areas of psychology relevant to doctoral research. It aims to develop analytical, theoretical and experimental skills necessary for conducting independent research in the areas of psychology.

Unit – I: Clinical Psychology

- Child Psychopathology: Specific areas; Child Abuse, Families of Children with Disability.
- Adult Psychopathology: Specific areas; Suicide, Sexual Abuse.
- Cognitive Behavioral Therapies, Biofeedback

Unit – II: Positive Psychology

- Indian versus Western perspective on positive psychology
- Lifestyle choices and mental health
- Happiness, Gratitude, Joy and Well-Being
- Mindfulness, Meditation and Spirituality
- Importance of yoga

Unit – III: Psychology and Information Technology

- Use of media – advantages and disadvantages to individual
- Internet and Social Media Addiction
- Use of AI – offering new tools, Methodologies for research, Assessment and therapy

Unit – IV: Community Psychology

- Unemployment, alcoholism and drug dependence
- Poverty, beggary and problems of women
- Specific Social Issues: Child maltreatment, elderly, homelessness
- Techniques of Community Intervention: Crisis intervention, consultation

Suggested Readings

1. Gazzaniga, M.S., Ivry, R.B., & Mangum, G.R. (2018). Cognitive Neuroscience: The biology of the mind. (5th edition). New York: W.W. Norton.
2. Pressman, S.D., Jenkins, B.N. & Moskowitz, J.T. (2019). Positive affect and Health: What do we know and where Next should we go? Annual Review of Psychology, 70(1), 627–650.
3. Webb, L.M. & Wright, K.B. (2010). Computer-Mediated Communication in Personal Relationships. New York: Peter Lang Publishing.
4. Chandel, N. K., et al. (2003). Psychological Implications of Information Technology. New Delhi: Deep & Deep Publications.
5. DiMatteo, M. R., & Leslie, R. M. (2017). Health Psychology. India: Pearson Education.
6. Roberts, M. C., & Ilardi, S. S. (2003). Handbook of research methods in clinical psychology. Blackwell Publishing.

Evaluation Scheme

Internal Assessment / Assignment / Seminar: 30 Marks

End Semester Examination: 70 Marks

Raja Mahendra Pratap Singh University, Aligarh

Ph.D. Course Work Syllabus

Paper – IV: Computer Application

Credits: 2 Units: 5

Maximum Marks: 50

Course Objectives

- To provide fundamental knowledge of computer to research scholars.
- To provide the knowledge of applications required for documentation and presentation.
- To provide the knowledge of digital tools used in literature survey and scientific writing.
- To provide the knowledge of Origin software
- To provide the knowledge of Research Writing

Unit – I: Fundamentals of Computer and Operating Systems

- Introduction to Computers: Components, Types and Applications
- Hardware and Software Concepts
- Operating Systems: Windows and Linux Basics
- File Management and Data Storage
- Computer Networks and Internet Basics
- Cyber Security Awareness and Safe Computing Practices

Unit – II: Office Applications for Academic Work

- Word Processing using MS Word
- Formatting, Tables, Templates
- References and Endnotes/Zotero
- Preparation of Research Reports, Thesis and Articles using Word Processors
- Spreadsheet Applications using MS Excel
- Data Entry and Management
- Basic Statistical Functions
- Graphs and Charts
- Presentation Tools using MS PowerPoint
- Inserting Figures, Charts and Multimedia
- Effective Academic Presentations

Unit – III: Computer Applications in Research

- Literature Search using Academic Databases
- Use of Digital Libraries and Online Resources
- Use of Internet Tools for Research Collaboration
- Open Access Journals and Repositories

- Use of AI and Digital Tools in Academic Research
- Online Submission of Research Papers and Thesis
- Use of LaTeX for Scientific Documentation (Basic Introduction)

Unit – IV: Data Analysis

- Introduction to SPSS, R, Jamovi, JASP, NVivo, ATLAS.ti

Unit – V: Research Writing

- Guidelines for effective writing, Writing Research Proposal, Report Writing, in APA style: Title, Abstract, Introduction, Review of literature, Method, Results, Discussion, References, Appendices. Writing research papers: Quantitative, Qualitative, Mixed methods.

Suggested Readings

1. Peter Norton – *Introduction to Computers*
2. Alexis Leon & Mathews Leon – *Introduction to Computers*
3. V. Rajaraman – *Fundamentals of Computers*
4. Kogent Learning – *Office 365 / Microsoft Office Step by Step*
5. Wayne Winston – *Microsoft Excel Data Analysis and Business Modeling*
6. Leslie Lamport – *LaTeX: A Document Preparation System*
7. S.P. Gupta – *Statistical Methods* (for basic data analysis)
8. APA – *Publication Manual of the American Psychological Association* (7th Ed.).
9. University Grants Commission – *Research and Publication Ethics Guidelines*

Evaluation Scheme

Internal Assessment / Assignment / Seminar: 15 Marks

End Semester Examination: 35 Marks