# Ph.D. Course Work Common Syllabus

| Paper Name: Research Methodology | Paper Code: PHD-101/RM | Credits: 4 (4-0-0) |
|---|---|---|
| Evaluation (Maximum Marks = 100) | Internal = 30 | External = 70 |
| **Course Objectives** 1. To introduce the fundamental concepts, methods, and ethics of scientific research. 2. To develop skills in research design, data collection, analysis, and interpretation. 3. To enable students to formulate research problems and communicate findings effectively. | | |

| Unit | Contents | Lectures |
|:---:|---|:---:|
| I | Foundations of Research: Meaning, Objectives, Motivation, Utility. Concept of theory, empiricism, deductive and inductive theory. Characteristics of scientific method – Understanding the language of research – Concept, Construct, Definition, Variable. Research Process. Problem Identification & Formulation – Research Question – Investigation Question – Measurement Issues – Hypothesis – Qualities of a good Hypothesis –Null Hypothesis & Alternative Hypothesis. Hypothesis Testing – Logic & Importance. | 10 |
| II | Research Design: Concept and Importance in Research – Features of a good research design – Exploratory Research Design – concept, types and uses, Descriptive Research Designs – concept, types and uses. Experimental Design: Concept of Independent & Dependent variables. Qualitative and Quantitative Research: Qualitative research – Quantitative research – Concept of measurement, causality, generalization, replication. Merging the two approaches. | 10 |
| III | Sampling: Concepts of Statistical approach, Sample, Sampling Frame, Sampling Error, Sample Size. Characteristics of a good sample. Probability Sample – Simple Random Sample, Systematic Sample, Stratified Random Sample & Multi-stage sampling. Determining size of the sample – Practical considerations in sampling and sample size. Data Analysis: Data Preparation – Univariate analysis (frequency tables, bar charts, pie charts, percentages), Bivariate analysis – Cross tabulations and Chi-square test including testing hypothesis of association. | 15 |
| IV | Measurement: Concept of measurement– what is measured? Problems in measurement in research – Validity and Reliability. Techniques of Scientific Measurement. Interpretation of Data and Paper Writing – Layout of a Research Paper, Journals in Computer Science, Impact factor of Journals, When and where to publish? Ethical issues related to publishing, Plagiarism and Self-Plagiarism. Use of Encyclopedias, The art of Scientific Communication. | 12 |

| V | Use of tools/techniques for Research: methods to search required information effectively, Reference Management Software like Endnote/Zotero/Mendeley, Software for paper formatting like LaTeX/MS Office, Software for detection of Plagiarism. Presentation in Seminars and Conferences, Sponsored Research-basics, Major funding bodies for research, National- DST, UGC, CSIR, ICMR, DBT, SERB, ISRO, and DRDO, International- NSF, NIH, Horizon Europe and UNESCO. | **13** |
|---|---|---|
| | **Total** | **60** |

## Suggested Readings

1. Kothari, C. R., and Gaurav Garg. Research Methodology: Methods and Techniques. 4th ed., New Age International Publishers, 2019.
2. Creswell, John W., and J. David Creswell. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. 5th ed., SAGE Publications, 2018. https://us.sagepub.com/en-us/nam/research-design/book255675
3. Saunders, Mark, Philip Lewis, and Adrian Thornhill. Research Methods for Business Students. 8th ed., Pearson Education, 2019.
4. Bryman, Alan. Social Research Methods. 5th ed., Oxford University Press, 2016. https://global.oup.com/ukhe/product/social-research-methods-9780199689453
5. Flick, Uwe. An Introduction to Qualitative Research. 6th ed., SAGE Publications, 2018.
6. Walliman, Nicholas. Research Methods: The Basics. 2nd ed., Routledge, 2017. https://www.routledge.com/Research-Methods-The-Basics/Walliman/p/book/9781138693981
7. Kumar, Ranjit. Research Methodology: A Step-by-Step Guide for Beginners. 5th ed., SAGE Publications, 2022.
8. Neuman, W. Lawrence. Social Research Methods: Qualitative and Quantitative Approaches. 8th ed., Pearson, 2014.
9. Research Methods in Psychology. https://www.saylor.org/courses/psych301/
10. https://onlinecourses.nptel.ac.in/noc23_ge36/preview
11. https://onlinecourses.nptel.ac.in/noc22_ge08/preview

# Ph.D. Course Work Common Syllabus

| Paper Name: Research and Publication Ethics | Paper Code: PHD-102/RPE | Credits: 2 (2-0-0) |
|---|---|---|
| Evaluation (Maximum Marks = 100) | Active participation, group discussion and quizzes (25%); Practical: 40%; and End Semester written examination: 35 % | |

**Introduction:**

This course is designed to create awareness among doctoral students about research and publication ethics and different types of unethical practices and misconduct in publications. This course has total 6 units focusing on basics of philosophy of science and ethics, research integrity, publication ethics. Hands-on-sessions are designed to identify research misconduct and predatory publications. Indexing and citation databases, Open Access publications, research metrics (citations, h-index, Impact Factor, etc.) and Plagiarism tools will be introduced in this course.

Course Structure

The course comprises of six modules listed in table below. Each module has 4-5 units.

| Modules | Unit title | Teaching hours |
|---|---|---|
| **Theory** | | |
| RPE 01 | Philosophy and Ethics | 4 |
| RPE 02 | Scientific Conduct | 4 |
| RPE 03 | Publication Ethics | 7 |
| **Practice** | | |
| RPE 04 | Open Access Publishing | 4 |
| RPE05 | Publications Misconduct | 4 |
| RPE 06 | Databases and Research Metrics | 7 |
| | **Total** | **30** |

## RPE 01: PHILOSOPHY AND ETHICS (3 hrs.)

1. Introduction to philosophy: definition, nature and scope, concept, branches
2. Ethics: definition, moral philosophy, nature of moral judgements and reactions

## RPE 02: SCIENTIFIC CONDUCT (5hrs.)

1. Ethics with respect to science and research.
2. Intellectual honesty and research integrity.
3. Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
4. Redundant publications: duplicate and overlapping publications, salami slicing
5. Selective reporting and misrepresentations of data.

## RPE 03: PUBLICATION ETHICS (7 hrs.)

1. Publication ethics: definition, introduction and importance
2. Best practices/standards setting initiatives and guidelines: CARE, COPE, WAME, etc.
3. Conflicts of interest
4. Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types
5. Violation of publication ethics, authorship and contributorship
6. Identification of publication misconduct, complaints and appeals
7. Predatory publishers and journals

PRACTICE

## RPE 04: OPEN ACCESS PUBLISHING (4 hrs.)

1. Open Access Publications and Initiatives
2. SHERPA/RoMEO online resource to check publisher copyright & self- archiving policies
3. Software Tools to Identify Predatory Publications
4. Journal Finder/Journal Suggestion Tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

## RPE 05: PUBLICATION MISCONDUCT (4 hrs.)

### A. Group Discussions (2 hrs.)
1. Subject specific ethical issues, falsification, fabrication, and plagiarism (FFP), authorship
2. Conflicts of interest
3. Complaints and appeals: examples and fraud from India and abroad

### B. Software tools (2hrs.)

- Use of plagiarism software, like, Turnitin, Urkund and open-source software tools.

## RPE 06: DATABASES AND RESEARCH METRICS (7 hrs.)

### A. Databases (4 hrs.)
1. Indexing Databases
2. Citation Databases: Web of Science, Scopus, etc.

### B. Research Metrics (3hrs.)

1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPR, Cite Score
2. Metrics: h-index, g-index, i10 index, altmetrics

## Essential Readings

- Suber, P. (2012). *Open Access*. Cambridge, MA, USA: MIT Press.
- Resnik, D.B. (2011). What Is Ethics in Research & Why Is it Important. National Institute of Environmental Health Sciences, I-10.
- National Academy of Sciences, National academy of Engineering and Institute of Medicine (2009). *On Being a Scientist: A Guide of Responsible Conduct in Research*: Third Edition, National Academies Press.
- Madalli, D.P. (2015). *Concepts of Openness and Open Access*. UNESCO Curriculum for Researchers, Module 2. Paris: UNESCO.
- Maclntyre, Alasdair (1967). A Short History of Ethics. London.
- Kanjilal, U. & Das, A.K. (2015). *Introduction to Open Access*. UNESCO Curriculum for Library Schools, Module 1. Paris: UNESCO.
- INSA (2019). Ethics in Science Education, Research and Governance, Edited by K. Muralidhar, A. Ghosh, & A.K. Singhvi. New Delhi: Indian National Science Academy. ISBN: 9788193948217.
- Das, A.K. (2015). *Research Evaluation Metrics*. UNESCO Curriculum for Researchers, Module 4. Paris: UNESCO.

- Das, A.K. & Mishra, S. (2014). Genesis of Altmetrics or Article-level Metrics for Measuring Efficacy of Scholarly Communications: Current Perspectives. *Journal of Scientometric Research*, 3(2): 82-92.
- Chaudhari, N. & Baliga, V. (2015). *Intellectual Property Rights*. UNESCO Curriculum for Researchers, Module 3. Paris: UNESCO.
- Chaddah, P. (2018). Ethics in Competitive Research: Do Not Get Scooped; To Not Plagiarized. ISBN: 9789387480865
- Bird, A. (2006). Philosophy of Science. Routledge.

Supplementary Readings

- ICMR (2017). *National Ethical Guidelines for Biomedical and Health Research Involving Human Participants*. New Delhi: Indian Council of Medical Research.
- Indian Sociological Society (2020). *ISS Code of Ethics*. New Delhi: Indian Sociological Society.
- PSA (2019). *Draft National Policy on Academic Ethics*. New Delhi: Principal Scientific Adviser (PSA) to the Government of India.
- The InterAcademy Partnership (2022). *Report: Combatting Predatory Academic Journals and Conferences*. Trieste: The InterAcademy Partnership.
- UGC (2019). *Consortium for Academic Research and Ethics (CARE)*. New Delhi: University Grants Commission.
- UGC (2020). *Good Academic Research Practices*. New Delhi: University Grants Commission.
- UNESCO (2021). *UNESCO Recommendation on Open Science*. Paris: UNESCO.
- Das, A.K. (2008). *Open Access to Knowledge and Information: Scholarly Literature and Digital Library Initiatives - the South Asian Scenario*. New Delhi: UNESCO, ISBN 9788189218218.
- Das, A.K. (2015). *Scholarly Communications*. UNESCO Curriculum for Researchers, Module 1. Paris: UNESCO.
- Das, A.K. (2019). Research Integrity in the Context of Responsible Research and Innovation Framework. *DESIDOC Journal of Library & Information Technology*, 39(2): 82-86.
- Das, A.K. (2020). UNESCO Recommendation on Open Science: An Upcoming Milestone in Global Science. *Science Diplomacy Review*, 2(3): 39- 43.
- Mishra, S. & Das, A.K. (2015). *Sharing your Work in Open Access*. UNESCO Curriculum for Researchers, Module 5. Paris: UNESCO.

- Nisha, F., Das, A.K. & Tripathi, M. (2020). Stemming the Rising Tide of Predatory Journals and Conferences: A Selective Review of Literature. *Annals of Library and Information Studies*, 67(3): 173-182.
- Smith, I. (2015). *Open Access Infrastructure*. UNESCO Curriculum for Library Schools, Module 2. Paris: UNESCO.
- Bealt, J. (2012). Predatory Publishers Are Corrupting Open Access. *Nature*, 489(7415),179-179.

# Ph.D. Course Work Common Syllabus

| Paper Name: Computer Application | Paper Code: PHD-103/CA | Credits: 4 (4-0-0) |
|---|---|---|
| Evaluation (Maximum Marks = 100) | Internal = 30 | External = 70 |

**Course Objectives**

1. To introduce the fundamental concepts, architecture, and classifications of computers along with operating systems like Windows and Linux.
2. To develop proficiency in using Microsoft Office tools (Word, Excel, PowerPoint) for document preparation, data analysis, and presentations.
3. To familiarize students with internet usage, email communication, and basic networking concepts for effective digital connectivity and communication.

| Unit | Contents | Lectures |
|---|---|---|
| I | Definition and Characteristics of systems-Hardware & Software, Windows and Linux (Latest Version) Microsoft Tools- Definition and Characteristics of Computers: Classification of Computers; Application of Computers; Hardware; Software; Functional Units of a Computer System; Computer Architecture; Bit, Nibble and Byte. Windows: Introduction to Windows Operating System; Windows Features; Starting Windows; Parts of Windows Screen; Shortcuts in Winodows; Windows Applets; Windows : My Computer; Working with files and Folders; what is MS-DOS? Booting Process; The DOS Directory Structure; Referencing Group of files; Command Syntax; Types of Commands; Microsoft Word (Latest Version): Introduction to Microsoft Tools; Starting Word; Mail Merge. | 15 |
| II | Microsoft Excel; (Latest Version) Excel Features; Entering data into a Cell; Entering Numbers; Spreadsheets Operations; Freezing Window Panes; Excel Offers Several Methods for Selecting Cells; Erasing the Content of A Cell; Formatting Cells from the Home Tab; The Format Painter; Formulas and Functions; Using Logical Functions; Date and Time Functions; Math and Trigonometric Functions; Statistical Functions; Copying Formulas; Charts; Creating a New Embedded Chart; Type of Charts; Formatting Chart Elements from the Format tab. | 15 |
| III | Microsoft PowerPoint (Latest Version) What is Presentation? Introduction to PowerPoint; Starting PowerPoint; PowerPoint Views; Save a Presentation; Exiting PowerPoint; Working with Slides. | 10 |
| IV | Introduction to Internet and E-Mail Hardware requirement; to connect to the Internet; Types of Connections; Internet Service Providers; Internet Addressing; Resource Addressing; The World Wide Web; E-Mail. | 10 |
| V | Networking Concepts What is a Networks?; Uses of Computer Networks; Network Topologies; Network Hardware and Software. | 10 |

| Total | 60 |
|---|---|

**Suggested Readings**

1. Rajaraman, V. Fundamentals of Computers. 6th ed., PHI Learning, 2018.
2. Sinha, P. K., and Priti Sinha. Computer Fundamentals. BPB Publications, 2010.
3. Balagurusamy, E. Programming in ANSI C. 8th ed., McGraw Hill Education, 2019.
4. Forouzan, Behrouz A. Data Communications and Networking. 5th ed., McGraw Hill Education, 2017.
5. Tanenbaum, Andrew S., and Herbert Bos. Modern Operating Systems. 4th ed., Pearson, 2014.
6. Stallings, William. Computer Organization and Architecture: Designing for Performance. 10th ed., Pearson, 2016.
7. Riley, David, and Kenny Hunt. Computational Thinking for the Modern Problem Solver. CRC Press, 2014.
8. Rouse, Margaret Z. Information Technology for Management. Wiley, 2020.
9. Evans, Alan, Kendall Martin, and Mary Anne Poatsy. Technology in Action: Introductory. 15th ed., Pearson, 2019.
10. NPTEL. Computer Science and Engineering, https://nptel.ac.in/course.html
11. GeeksforGeeks. Computer Science Portal for Geeks, https://www.geeksforgeeks.org/
12. Coursera. Computer Science Courses, https://www.coursera.org/browse/computer-science
13. TutorialsPoint. Computer Programming and IT Tutorials, https://www.tutorialspoint.com/index.htm
14. https://nptel.ac.in/courses/106106092

# Glocal School of Arts and Social Science
# Ph.D. Course Work Sociology- Elective

| Paper Name: Recent Trends in Indian Society | Paper Code: PHD-104/SO (I) | Credits: 4 (4-0-0) |
|---|---|---|
| Evaluation (Maximum Marks = 100) | Internal = 30 | External = 70 |
| **Course Objectives**<br>1. To develop a critical understanding of major transformations in Indian society in the post-independence and post-liberalization periods.<br>2. To analyze the impact of globalization, technological advancement, and policy reforms on Indian social structures.<br>3. To engage with recent debates and empirical studies on issues such as caste, gender, religion, migration, and environmental movements. | | |

| Unit | Contents | Lectures |
|---|---|---|
| I | Structural-functional, conflict, symbolic interactionism, Colonial legacy and post-independence reforms, Modernization, Westernization, Sanskritization, and Secularization. | 10 |
| II | Caste persistence, transformation, and politics; Class structure in urban and rural India; Affirmative action and reservations: Achievements and challenges; Emerging middle class and consumption culture.<br>Gender, Sexuality, and Identity Politics, Women and Men- workforce, and leadership, Gender justice, feminist movements, and legal reforms. | 10 |
| III | Rituals, practices, and beliefs; Debates on secularism and pluralism; Communal conflicts and identity politics. Role of religion in electoral and social mobilization. | 10 |
| IV | Globalization, Development, and Social Transformation; Economic reforms. Urbanization, migration, and displacement. Digital revolution, media, and youth culture. | 15 |
| V | Environmental movements and sustainability debates; Right to Education, Right to Information, and Right to Food. Farmers' protests, labor movements, and tribal rights. Civil society and grassroots activism. Public health and social resilience. | 15 |
| | **Total** | 60 |

**Suggested Readings**

1. Desai, M. (2007). State and Society in India: Essays in Dissent. Oxford University Press.
2. Uberoi, P., Patel, S., & Deshpande, S. (Eds.). (2010). Indian Sociology. Oxford University Press.
3. Jodhka, S. S. (2012). Caste. Oxford India Short Introductions.

4. Nanda, M. (2009). The God Market: How Globalization is Making India More Hindu. Random House India.
5. Menon, N. (Ed.). (2012). Sexualities. Zubaan.
6. Kumar, R. (2017). Education and Society in Post-Liberal India. Routledge.
7. Chatterjee, P. (2004). The Politics of the Governed. Columbia University Press.
8. Fernandes, L. (2006). India's New Middle Class. University of Minnesota Press.
9. Shah, G., Mander, H., Thorat, S., Deshpande, S., & Baviskar, A. (2006). Untouchability in Rural India. Sage Publications.

# Glocal School of Arts and Social Science
# Ph.D. Course Work Sociology- Elective

| Paper Name: Basic Concept of Sociology | Paper Code: PHD-104/SO (II) | Credits: 4 (4-0-0) |
|---|---|---|
| Evaluation (Maximum Marks = 100) | Internal = 30 | External = 70 |
| **Course Objectives** <br> 1. To understand key sociological concepts such as society, group, system, and culture. <br> 2. Analyze classical and contemporary sociological theories. <br> 3. Explore historical and cultural foundations of Indian society and its institutions. | | |

| Unit | Contents | Lectures |
|---|---|---|
| I | Sociology and its Basic Concepts: Nature, Scope and Significance; Development of Sociology; Basic Concepts: Society, Group, Community, Association, Social System, Social Structure; Status and Role; Socialization and Culture. | 15 |
| II | Sociological Theories-I: Nature and Types; Theory Construction; Sociological Perspectives; Classical Theories: Positivism and Antipositivism; Structural-Functionalism; Conflict Theories | 10 |
| III | Sociological Theories-II: Exchange Theory; Everyday Life Approach; Critical Theory; Structuralism and Post-Structuralism | 10 |
| IV | Historical Background of Indian Society & Basic Social Institution: Traditional Hindu Social Organization – Purushartha, Samaskara. | 15 |
| V | Theory of Karma; Diversity and Unity in India; Basic Social Institutions – Family; Marriage and Kinship | 10 |
| | **Total** | 60 |

**Suggested Readings**

1. Ritzer, George. Sociological Theory. 9th ed., McGraw-Hill, 2017.
2. Abraham, Francis, and John Henry Morgan. Sociological Thought. Macmillan India, 1985.
3. Bottomore, Tom. Sociology: A Guide to Problems and Literature. Vintage Books, 1971.
4. Singh, Yogendra. Modernization of Indian Tradition: A Systemic Study of Social Change. Rawat Publications, 2000.
5. Dube, S. C. Indian Society. National Book Trust, 2005.
6. Srinivas, M. N. Social Change in Modern India. Orient BlackSwan, 1995.
7. Uberoi, Patricia. Family, Kinship and Marriage in India. Oxford University Press, 1993.

# Glocal School of Arts and Social Science
## Ph.D. Course Work Sociology- Elective

| Paper Name: Gender and Society | Paper Code: PHD-104/SO (III) | Credits: 4 (4-0-0) |
|---|---|---|
| Evaluation (Maximum Marks = 100) | Internal = 30 | External = 70 |
| **Course Objectives** 1. Critical understanding of gender as a social construct across time, space, and cultures. 2. To study intersections of gender with caste, class, race, religion, and sexuality in shaping social relations and power structures. 3. To equip researchers with theoretical and methodological tools to analyse gender-based issues. | | |

| Unit | Contents | Lectures |
|---|---|---|
| I | Concept and construction of gender and sex, Patriarchy and gender roles, Masculinities and femininities, Gender identity and socialization, Gender and religion. | 15 |
| II | Theories of gender: Liberal, Radical, Marxist, Socialist, Postmodern, and Ecofeminism. Gender and family structure, education & work. | 10 |
| III | Gender, caste, class, race, and ethnicity, Queer theory and LGBTQ+ identities. Gender and disability. | 10 |
| IV | Gender, Law, and Public Policy, Gender justice and constitutional rights Laws relating to gender: marriage, inheritance, domestic violence, workplace harassment, State policies and Role of civil society and NGOs. | 15 |
| V | Feminist epistemology and methodology, Ethics in gender-based research Gender-sensitive data collection and analysis. | 10 |
| | **Total** | 60 |

**Suggested Readings**

1. Butler, Judith. Gender Trouble. Routledge.
2. Connell, R.W. Masculinities. University of California Press.
3. Chatterjee, Partha (Ed.). The Nation and Its Fragments.
4. Agarwal, Bina. A Field of One's Own: Gender and Land Rights in South Asia.
5. Mohanty, Chandra Talpade. Feminism Without Borders.
6. Nivedita Menon. Seeing Like a Feminist. Zubaan.
7. Jackson, Stevi & Sue Scott (Eds.). Gender: A Sociological Reader.
8. Sumi Madhok. Rethinking Agency: Developmentalism, Gender and Rights.
9. Abrahm, F. Modern Sociological Theory, Oxford University Press, New Delhi.
10. Aron, Raymond. Main Currents in Sociological Thought (Vol. I & II), Penguin; 1965/67
11. Bottomore, T.B. Sociology: A Guide to Problems and Literature, George Allen and Unwin, Delhi; 1972