CENTRAL UNIVERSITY OF KARNATAKA

(Established by an Act of the Parliament in 2009)

Department of Psychology

Curriculum for

PhD in Psychology coursework

Third revision on 19 June 2023

CONTENT

I: PREAMBLE

A: Context : The Department of Psychology has the active participation, association, and involvement of a multi-disciplinary group of psychologists, scientists, social workers, rehabilitation professionals, scholars, and researchers who could contribute to the field of behavioural sciences in a holistic perspective. The department, through education and research, aims to nurture manifold areas of behavioural sciences and attempt to improve the quality of life of individuals as well as society. This can be accomplished through (a) conducting and disseminating sound and innovative research; (b) training current and future policymakers; and (c) organizing training and development activities.

Research in the Department focuses on (a) the identification of individual and societal determinants of mental health (b) the development of behavioural and structural interventions to improve the quality of life; the (c) development of plans, policies, and strategies to reduce factors that hinder the maximum development of individuals; and (d) study of the individual and societal impact of health risk behaviours and developing intervention strategies to modify those behaviours. As part of its various programs to accomplish the aims and objectives of the department is offering doctoral-level research in psychology.

B: Objectives: The Ph.D. Programme offered by the Department of Psychology aims to provide academic support and supervision to provide a base for an independent, critical, and mature perception of one's own and others' research through studying theoretical and methodical subject areas. This programme will equip the student to demonstrates authority in his field and shows evidence of a command of knowledge in relevant field. An additional objective of our programme is to provide training in the translation of basic research to guide the formulation and evaluation of social interventions, programs and policies that have the potential to promote health and well-being. Through the programme students will get a thorough grasp of the appropriate methodological techniques and an awareness of their limitations. Students in our doctoral program acquire a strong foundation in theory, research methods, advanced statistics, as well as in the classic and contemporary issues of their respective fields. This programme prepares students to make a distinct contribution to knowledge which rests on originality of approach and/or interpretation of the findings and, in some cases, the development of new facts and demonstrates an ability to communicate research findings effectively in the professional arena and in an international context.

C: Unique Features : The department advocates an ecological approach to understanding and influencing the various factors that have a vital role in determining the mental health and well-being of individuals. Our intent is to enable students to take a creative, empirical, and ethical approach to various problems among diverse populations; to critically evaluate and contribute to the evolving body of scholarly literature in the science and practice of psychology; and to integrate the theoretical, applied, and scientific foundations of psychology.

D: Career Development : Doctoral research in psychology is in high demand, partly because of the high natural interest in the discipline and partly because such research leads to a variety of desirable educational and career options in various fields of psychology. Increasing connections with other disciplines and increasing recognition that the subject matter of psychology is central to the understanding of many social issues have broadened psychology's roles in society. Consequently, psychology has been evolving rapidly, and some of its new roles reflect the fact that the fundamental tools of psychologists provide powerful means of assessing and remediating many social problems.

E: Expected Outcome : Our program involves systematic and cumulative training in psychological research in order to prepare students for careers in practice, research, or academic settings. Our overarching goal is to prepare students to be competent professionals in psychology who may function in a variety of professional settings, including academic, research, clinical, and community.

II: REGULATIONS

1. **Name of the Course**: Ph.D. in Psychology
2. **Duration of the Course**: One semester.
3. **Eligibility:** As per University rules.
4. **Intake:** As per University rules.
5. **Attendance**: As per University rules.
6. **Medium of Instruction and examination:** English
7. **Course Structure and credit allocation**

The objective of introducing the Coursework as a pre-PhD requirement is to facilitate research. Researchers need to understand the nature of the complexities and challenges that they are likely to encounter. The idea is to introduce research scholars to a variety of methods of research, analysing data, interpretation, and techniques so that scholars may exercise their

discretion to choose the most appropriate tool or tools for investigating a particular topic/area/subject. Students/researchers would also need certain skills to represent, write-up, extricate and excavate the results of the data that they have accumulated. Training in the use of language, qualitative and quantitative methods of data presentation will be introduced. This is to enable scholars to present their research findings to meet stringent academic standards effectively. Coursework for a Ph.D. in psychology varies according to the area of concentration. Courses include:

Sl.no	T= Theory P= Practical W=Workshop	CODE	Course type	Title	Credits	Duration (hr)	L+T+W+P	Duration of Exam (Min.)	IA (40 %)	End Sem. Exam- 60 %	Total
1	T&P	DPYCD 13001	DSC.1	Advanced Quantitative Research Methods	6	8	4+0+0 +2=6	180	60	90	150
2	T&P	DPYCD 13002	DSC.2	Advanced Qualitative Research Methods	6	8	4+0+0 +2=6	180	60	90	150
3	T	DPYTD 11003	DSC.3	Course related to Research Area	4	4	0+4+0 +0=4	150	40	60	100
4	W	DPYTG 13004	DSC.4	Research and Publication Ethics	2	2	0+0+2 +0=2	90	20	30	50
					18	22	L.8+T.4+W.2+P.4= 18				450

The aim of these courses is to get a thorough understanding of the theoretical and methodological aspects related to the specific area of the research. Based on these papers the researcher can sharpen and polish his knowledge and skills in that specific area of research. It will also help the researcher to get a deep theoretical understanding of the topic of the study. For all these papers the syllabus will be prepared by the student and his research supervisor.

8. Miscellaneous: All other matters not referred to specifically in these regulations shall be governed as per the Ordinances of the University as revised from time to time.

Programme Learning Outcomes (PLO):

After the course, the research scholars will be able to:

1. Recall and comprehend the fundamental and advanced principles, theories, current trends, and challenges within their area of expertise (Remember and Evaluate Level)
2. Evaluate existing scholarly literature to comprehend the patterns, gaps, and limitations in their research area using analytical and methodological skills obtained during their program, and analyse and assess the information critically (Analyse and Evaluate Level).
3. Apply a wide range of advanced and specialized skills to independently plan and execute research projects (Apply Level).
4. Publish research findings in peer-reviewed journals, present papers at academic conferences, and defend original research outcomes that advance the boundaries of their discipline or relevant professional practice (Create Level).
5. Effectively manage complex ethical and professional issues, make well-informed judgments regarding ethical codes and practices, and uphold integrity by avoiding unethical behaviours such as data fabrication and plagiarism. Demonstrate awareness of the ethical implications of research involving human participants (Apply and Analyse Level).
6. Effectively teach college-level courses in their specific area of expertise, utilizing both applied and creative approaches (Apply and Create Level).
7. Adopt a proactive, self-critical, and self-reflective approach based on research, while fostering professional relationships as appropriate (Apply Level)
8. Exhibit leadership skills and originality in addressing and resolving problems and challenges by effectively communicating and collaborating with others (Appy Level).
9. Collaborate with all stakeholders to generate, develop, and exchange research knowledge, aiming to influence and benefit society and the economy (Create Level).
10. Recognize the importance of lifelong learning and engage in continuous education by pursuing advanced degrees, and attending relevant courses, conferences, workshops, and training programs to stay updated with advancements in their field (Understand Level).

DSC.1, T&P, Credits 6

ADVANCED QUANTITATIVE RESEARCH METHODS

DPYCD13001

(i) Course Learning Outcomes:

After successfully completing the course, the research scholars will be able to:

1. Identify and explain the various approaches to research, methods of research, and types of epidemiological research designs (Remember and Understand Level).

2. Comprehend and interpret graphs and summary statistics presented in academic papers, reports, and studies and identify which estimates would be applied to solve a particular empirical problem (Understand Level).

3. Distinguish between the concepts of correlation and regression and their application in various research settings and explain the advanced statistical estimates (Analyse level)

4. Use the software packages like Excel and SPSS for their own empirical analysis (Apply Level)

5. The students will be able to use statistical tools to conduct empirical research in the area of specialization (Apply Level)

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs)

	PL01	PL02	PL03	PL04	PL05	PL06	PL07	PL08	PL09	PL10
CL01	3	2	1	1	2	1				
CL02	2	2	1	1			1			
CL03	2	1	1				1	1		
CL04	1	1	2	1				1	1	1
CL05	2	1	2	1				1	1	

(ii) Broad Contents of the Course:

The Quantitative Research Methods course aims to provide students with a comprehensive knowledge of research methods and quantitative approaches. The focus of the course is on developing a deep understanding of quantitative research methods specifically. By the end of

the course, students will be able to effectively apply various quantitative techniques in a wide range of research contexts.

(iii) Skills to be learned:

The course places a strong emphasis on acquiring a solid foundation in quantitative methods. Graduates will be able to formulate and design a quantitative study and effectively collect and analyze quantitative data. The graduates will also be able to effectively communicate the research findings and follow ethical principles.

(iv) The detailed contents of this course, references, and suggested books:

Unit-I: Review of Basic Research Methodology and Statistics

a. ***Introduction to quantitative research methodology*:** Basic concepts: Empirico-analytical, objectivism, deduction, research paradigms (i.e., positivism, post-positivism, etc.); Definition and Need of quantitative research; Sources of research problems; Steps of quantitative research; Ethical guide for human research, Ethical principles in research with animals.
b. ***Basic quantitative statistics*:** Types of hypotheses, Errors in hypothesis testing; Descriptive statistics: Computing measures of central tendency and variability; Methods to control experimental variance, extraneous variance & error variance; Sample size estimation; Tests for normality; Data representation methods.

Unit -II: Research Designs

Meaning and purpose of research design, Characteristics of good research design; Important research designs: between and within group designs, pre-experimental designs-quasi experimental designs-true experimental designs, single-subject group experimental designs, factorial designs, correlational and non-experimental research designs, comparative design; survey research; case study.

Unit -III: Epidemiological Research

Definition, Characteristics, Purpose; Incidence and Prevalence; Experimental Studies: completely randomized block design, randomized block design, Latin square designs, Graeco-Latin square designs, Cross-over design; Observational studies: Descriptive studies, Analytical studies- Cohort studies, case-control studies; Cross-sectional vs Longitudinal studies; Ecological studies; Prospective studies vs Retrospective studies; Specific rates, Adjusted rates; Life table techniques

Unit -IV: Data Analysis in Quantitative Research

a. ***Correlation and Regression*:** Basic assumptions; Correlation methods: Karl Pearson's product-moment correlation, bi-serial, point-bi-serial, partial, canonical, and multiple correlations, Spearman's rank correlation; Regression tests: simple linear regression, multiple linear regression, non-linear regression, and logistic regression, mediation, and moderation analysis.

b. ***t-tests*:** Independent, paired & one sample test; Analysis of Variance: one-way, two-way, and repeated measures ANOVA, ANCOVA, MANOVA, MANCOVA; simple effects, main effect, and interaction effect; post-hoc testing: LSD, Tukey's HSD, Scheffe, Neuman–Keuls test, Protected 't-test: Some non-parametric tests: chi-square test, Mann-Whitney U test, Kruskal Wallis H and median test, Wilcoxon sign test, Friedman, Kendall's W

c. ***Other Analysis*:** Other analysis: cluster analysis, principal components analysis, path analysis; structural equation modelling; Meta-analysis; Statistical power of a test; Estimation of effect size; Analysis skills in SPSS, AMOS, & jamovi (open-source software)

Unit -V: Test construction

a. ***Introduction to test construction*:** Levels of measurement; Scaling methods; Theories-Classical test theory, item response theory; Steps in test construction; Standard error of measurement

b. ***Test development*:** Item writing: general guidelines, types of items; Item analysis: Item difficulty (method of judgment, empirical method), Item discrimination (test of significance, correlational technique), Item characteristic curve, Item validity (factor analysis- exploratory, confirmatory, discriminant analysis)

c. ***Test standardization*:** Reliability: test-retest-alternate forms-split half, Cronbach's alpha-KR 20-inter scorer reliabilities, content-criterion (predictive and concurrent)-construct (convergent and discriminant) validities, factors affecting reliability and validity; Norms development.

Unit -VI: Research Report

a. ***Manuscript preparation*:** Guidelines for academic writing; Writing a quantitative research proposal: The title, the abstract, introduction, summary of rationale, aim and research questions, method, method sub-sections, Application of advanced quantitative methods to research projects, presentation, and discussion of research findings (results and discussion), conclusion, references, appendices.

b. ***Manuscript Publication:*** Finding the right journal; Completing the journal submission checklist; Editorial process; Post Publication Process

Text books

1. Coolican, H. (2018). *Research methods and statistics in psychology*. Routledge.
2. Cooper, H. M. (2020). *Reporting quantitative research in psychology: How to meet APA style journal article reporting standards*. American Psychological Association (2nd ed) American Psychological Association.
3. Goodwin, K. A., & James, G. C. (2016). *Research in psychology: Methods and design* (8th ed). John Wiley & Sons, Inc.
4. Kaplan, D. W. (2004). *Handbook of quantitative methodology for social sciences* (1st ed). Sage Publications.
5. Kerlinger, F. N., & Lee, H. B. (1999). *Foundations of behavioural research*. Wadsworth Publishing.
6. Wagner, W. (2012). *Statistics for research methods and social science statistics* (5th ed). Sage Publications.

Suggested Reading

1. *APA style handbook for in-text citations and references: Based on APA guidelines*. Lulu.com (7th ed).
2. Breakwell, G. M. et al. (2006). *Research methods in psychology* (3rd ed). Sage Publications, Inc.
3. Broota, K. (2006). *Experimental Design in behavioral science*. Wiley Eastern Ltd.
4. Field, A. (2005). *Discovering statistics using SPSS* (2nd ed). SAGE.
5. Giles, D. C. (2014). *Advanced research methods in psychology*. Routledge.
6. Gravetter, F. J., & Wallnau, L. B. (2004). *Statistics for the behavioral sciences. Belmont*. Thomson Wadsworth.
7. Gregory, R. J. (2004). *Psychological testing: History, principles, and applications*. Pearson Education.
8. Levitt, H. M. (2020). *Reporting qualitative research in psychology: How to meet APA style journal article reporting standards*. American Psychological Association.
9. Manual, A. P. A. Simplified for easy citation: Concise APA style guide for students. Lulu.com (7th ed).
10. Maydeu, A., & Millsap, R. E. (2009). *The sage Handbook of Quantitative Methods in Psychology*. Sage Publications.
11. Mertler, C. A., & Vannatta, R. A. (2005). *Advanced and multivariate statistical methods. Practical application and interpretation* (3rd ed). Pyrczak Publishing.

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DSC.2 , T&P, Credits 6

ADVANCED QUALITATIVE RESEARCH METHODS

DPYCD13002

(i) Course Learning Outcomes:

After successfully completing the course, the research scholar will be able to:

1. Provide a comparison of key qualitative research designs and their distinctive features and explain the stages involved in both scientific research and qualitative research methods (Understand and Analyse Level).

2. Outline the relationship between question design and various research methods such as surveys, focus groups, and interviews and effectively use appropriate data collection methods (Understand and Apply Level).

3. Manage complex ethical and professional issues, making well-informed judgments, upholding integrity, and demonstrating awareness of the ethical implications of research involving human participants (Understand and Apply Level).

4. Utilize advanced software, such as NVivo and Atlas X, to support the management of research data and facilitate efficient data analysis. Leverage the software's features to enhance data organization, coding, and analysis processes (Apply Level).

5. Present the findings of qualitative research in a professional and academic manner, both orally and in written formats. Communicate the results effectively, ensuring clarity, coherence, and relevance (Apply and Create Level).

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs)

	PL01	PL02	PL03	PL04	PL05	PL06	PL07	PL08	PL09	PL10
CL01	3	1	1			2	1			
CL02	3	1	3			2	2			1
CL03	2		3				2			
CL04	1		3		3				1	1
CL05	1		3	3				2	1	1

(ii) Broad Contents of the Course:

The Qualitative Research Methods course aims to provide students with a comprehensive knowledge of research methods and qualitative approaches. By the end of the course, students will be able to effectively apply various qualitative techniques in a wide range of research contexts. The course covers a broad range of topics starting with foundations, paradigms, data collection methods, data analysis, and ethical issues.

(iii) Skills to be learnt:

The graduate will be able to describe 'qualitative research' methods, and explain the concept of 'epistemology' and the epistemological assumptions of realist and constructionist/relativist methodologies. The graduate will evaluate and utilise the suitable data collection and analysis method for a qualitative study and follow ethical guidelines.

(iv) The detailed contents of this course, references, and suggested books:

Unit -I: Foundations of Qualitative Research

Basic concepts: ontology, epistemology, axiology, methodology, primacy of data, contextualization, triangulation; Research paradigms- Constructivism, transformative, pragmatism traditions in qualitative research; Background of qualitative methods in psychology, Need for qualitative research in psychology, Characteristics and steps of qualitative research; Issues with reliability & validity of qualitative research, Issues of power, reflexivity, subjectivity, reflectivity, voices and silence in qualitative research

Unit -II: Major Paradigms and Approaches in Qualitative Research

Traditions of qualitative research: naturalism, post-modernism, emotionalism, ethnomethodology; Interpretive paradigm: Phenomenology, Symbolic Interactionism, Hermeneutics; Critical paradigm: Psychoanalytic, Marxist, Feminist; Ethnography; Grounded theory; case study research; Participatory action research; Historical Research; Descriptive research.

Unit -III: Qualitative Data Collection Methods

Interview: Structured interview, semi-structured interview, unstructured interview, in-depth interview; Observation: direct vs indirect, participant vs non-participant, disguised vs undisguised, human vs mechanical, field vs laboratory; Focus Groups; Narrative inquiry; Projective tests; Other methods: texts, audio-visual materials, life-history, conversations, sociometry, role plays, diary method, key informants, games, and simulation.

Unit -IV: Analysing Qualitative Data

Characteristics and applications; Coding of qualitative data: different types and levels of coding; Content analysis: semiotics, qualitative content analysis; Thematic analysis; Tape analysis; Conversation analysis; Typology; Taxonomy; Constant comparison; Analytic induction; Logical analysis; Matrix analysis; Event analysis; Micro analysis; Metaphor analysis; Domain analysis; Hermeneutical analysis; Discourse analysis; Heuristic inquiry; Narrative analysis; Interaction analysis; Dilemma analysis; Inductive analysis; Illustrative method; Analogies; Meta-analysis of Qualitative studies.

Unit -V: Ethics and Evaluation of Qualitative Research

Ethics in qualitative research: Protection from harm, respect for individual dignity, right to self-determination, right to privacy, confidentiality, informed consent, right to withdraw, researcher safety, deception, debriefing, use of incentives, honesty, and integrity in the research process.

Methodological rigor: congruence, responsiveness to social context, appropriateness, adequacy, transparency; Interpretive rigor: Authenticity, Coherence, Reciprocity, Typicality, and Permeability.

Unit -VI: Writing Research Report

Structure of Research Report; Various styles of report writing; Oral presentation–Principles for effective oral presentation; Writing up the qualitative research report: The title, the abstract, introduction, summary of rationale, aim and research questions, the method, method subsections, analysis results, discussion, conclusion, references, appendices.

References

1. Bazeley, P., & Jackson, K. (2019). *Qualitative data analysis with NVivo* (3rd ed). Sage Publications.

2. Biber, SN, & Leavy, P. (2011). *The practice of qualitative research*. SAGE.

3. Camic, P. M. (2021). *Qualitative Research in Psychology expanding perspectives in methodology and design* (2nd ed). APA Publishing.

4. Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.

5. Kiyimba, N., & Reilly, M. (2015). *Advanced Qualitative Research, A guide to using Theory*. Sage Publications Ltd.

6. Mason, J. (2012). *Qualitative researching*. SAGE Ltd

Suggested Reading

1. Berg, B.L. and Lune, L (2012) Qualitative Research Methods for the Social Sciences. (8th ed). Pearson.

2. Birch, M. et al. (2002). *Ethics in qualitative research*. SAGE.

3. Bloor, M., & Wood, F. (2006). Keywords in Qualitative Methods: A Vocabulary of Research Concepts. Sage Publications. *London* 2. Creswell, JW. (2007). *Qualitative enquiry and research design: Choosing among five approaches*. SAGE.

4. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa.

5. Denzin, N. K., & Lincoln, Y. S. (2003). *The landscape of qualitative research* (2nd ed). SAGE.

6. Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *The sage handbook of qualitative research* (3rd ed). Sage Publications.

7. Flick, U. (2018). Designing qualitative research. *Designing Qualitative Research*, 1–200.

8. Maxwell, J. A. (2012). *Qualitative research design: An interactive approach*. SAGE.

9. Neuman, W. L. (2011). *Basics of social research: Qualitative and quantitative approaches, 2/E*. Pearson Education.

10. Smith, J. A. (2008). *Qualitative psychology: A practical guide to research methods*. SAGE Publications.

11. Tracy, S. J. (2013). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. Wiley-Blackwell.

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DSC.3 , T, Credits 4

COURSE RELATED TO RESEARCH AREA

DPYTD11003

(i) Course Learning Outcomes:

After successfully completing the course, the research scholars will be able to:

1. Outline the basic concepts and explain advanced theories in the area of specialization (Remember and Understand Level).
2. Critically evaluate the scientific literature in the area of specialization and identify the trends, innovations, and gaps (Evaluate Level).
3. Analyse the various assessment methods used in the area of specialization and elucidate their suitability and limitations (Analyse Level).
4. Identify the various interventions used in the area of specialization and critically evaluate them (Understand and Evaluate Level).
5. Design a study in the area of specialization using appropriate methodology and assessment tools (Create Level).

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs)

	PL01	PL02	PL03	PL04	PL05	PL06	PL07	PL08	PL09	PL10
CL01	3		1			1				
CL02	2	3	1	1		1	2		1	1
CL03	2	3	1			1	2			1
CL04	3	2	1			1	2			1
CL05	1	1	3	2	2			2	1	1

(ii) Broad Contents of the Course:

This paper will introduce the basic and advanced level theories in the area of specialisation. It throws light on the current empirical evidence in the area and the predominantly used assessments and interventions in the field.

(iii) Skills to be learned:

The course will help the graduate learn to critically evaluate the existing literature, tools, and interventions and effectively use them in their studies.

(iv) The detailed contents of this course, references, and suggested books:

UNIT I: Theoretical bases

UNIT II: Empirical bases

UNIT III: Assessment and data analysis

UNIT IV: Interventions and evaluation

References: based on the research area

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DSC.4 , T Credits 2

RESEARCH AND PUBLICATION ETHICS

DPYTG13004

(i) Course Learning Outcomes:

After successfully completing the course, the research scholar will be able to:

1. Outline and explain the publication ethics and misconduct, including plagiarism, authorship, data fabrication and falsification, duplicate publication, and conflicts of interest (Remember and Understand Level).
2. Summarise the philosophy of science, research ethics, and the importance of research integrity (Remember and Understand Level)
3. Identify research misconduct and predatory publications (Analyse Level).
4. Differentiate between indexing and citation databases, open-access publications, and research metrics (Understand Level)
5. Utilize plagiarism detection tools to identify instances of plagiarism (Apply Level)

Mapping of Course Learning Outcomes (CLOs) with Program Learning Outcomes (PLOs)

	PL01	PL02	PL03	PL04	PL05	PL06	PL07	PL08	PL09	PL10
CL01	3		1			1				
CL02	2	3	1	1		1	2		1	1
CL03	2	3	1			1	2			1
CL04	3	2	1			1	2			1
CL05	1	1	3	2	2			2	1	1

(ii) Broad Contents of the Course:

This paper will introduce the philosophy of science and ethics, research integrity, and publication ethics. The course will also provide hands-on training on using various databases, plagiarism tools, and other research-related software.

(iii) Skills to be learned:

The course would help the Graduate learn to critically evaluate ethical issues and make ethical decisions. The graduate will also be able to conduct self ethically.

(iv) The detailed contents of this course, references, and suggested books:

Unit 01: Philosophy and Ethics

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

Unit 02: Scientific Conduct

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 misrepresentation of data

Unit 03: Publication Ethics

1. Publication ethics: definition, introduction, and importance
2. Best practices/standards setting initiatives and guidelines: COPE, WAME, etc.
3. Conflicts of interest
4. Publication misconduct: Definition, concept, problems that lead to unethical behaviour 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

Unit 04: Open Access Publishing

1. Open access publications and initiatives
2. SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies
3. Software tool to identify predatory publications developed by SPPU: UGC-CARE list of journals
4. Journal finder/journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

Unit 05: Publication Misconduct

1. Group discussions: (a) Subject specific ethical issues, FFP, authorship;(b) Conflicts of interest, (c) Complaints and appeals: examples and fraud from India and abroad,
2. Software tools; Use of reference management software like Mendeley, Zotero etc. and anti-plagiarism software like Turnitin, Urkund

Unit 06: Databases and research metrics

1. Databases; Indexing databases; Citation databases: Web of Science, Scopus etc.

2. Research Metrics: Impact factor of journal as per Journal Citation Report, SNIP, SJR, IPP, CiteScore, Metrics: h-index, g-index, i-10 index, altmetrics

References

1. Bird, A. (2006). Philosophy of Sciences. Routledge
2. MacIntyre, Alasdair (1967). A Short History of Ethics. London
3. National Academy of Sciences, National Academy of Engineering, and Institute of Medicine (2009)., National On Being a Scientist: A guide to responsible conduct in Research: third edition, National Academies Press
4. P. Chandah. (2018). Ethics in Competitive Research: Do not get Scooped; do not get a plagiarized.

Suggested Reading

1. Comstock, G. (2014) *Research ethics: A philosophical guide to the responsible conduct of Research*. Cambridge: Cambridge University Press.
2. Dutta, S. (2022) *Research and Publication Ethics in Social Science*. 2nd ed. New Delhi, New Delhi: Bharti Publications.
3. Gastel, B. and Day, R.A. (2022) *How to write and publish a scientific paper*. 9th ed. Santa Barbara, CA: Greenwood.
4. Iphofen (2020) *Handbook of Research Ethics and scientific integrity*. Springer International Publishing.
5. Macintyre, A. (2022) *Short history of ethics: A history of moral philosophy from the Homeric age to the... twentieth century*. S.l.: UNIV OF NOTRE DAME PRESS.
6. Pan, R. K., & Fortunato, S. (2014). Author Impact Factor: tracking the dynamics of individual scientific
7. Pratt, V. (2015) *The Philosophy of the Social Sciences*. London: Routledge.

https://libguides.graduateinstitute.ch/metrics/author_impact
https://en.wikipedia.org/wiki/H-index
https://slideplayer.com/slide/12121609/
https://ucsd.libguides.com/c.php?g=704382&p=5000890
https://subjectguides.uwaterloo.ca/calculate-academic-footprint/YourHIndex

https://explore.researchgate.net/display/support/RG+Score

https://list.ly/list/1v7P-top-10-academic-publishers-in-the-world

https://pitt.libguides.com/researchvisibility

https://paperpile.com/g/academic-research-databases/

https://guides.library.uwm.edu/ResearcherID/ResearcherIDs_Setup

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