BABASAHEB BHIMRAO AMBEDKAR UNIVERSITY

(A CENTRAL UNIVERSITY)

DEPARTMENT OF YOGA

SCHOOL OF YOGA, NATUROPATHY AND COGNITIVE STUDIES

Ph.D. Course Work

(As per NEP-2020)

Session 2025 onwards

Babasaheb Bhimrao Ambedkar University (A Central University),

Vidya Vihar, Raebareli Road**,** Lucknow-226025 (UP), India

Babasaheb Bhimrao Ambedkar University, Lucknow

Department of Yoga
Ph.D. Course Work

S. No.	Course Code	Name of the Course		Credit	Sessional	End Semester
1	PHD-Y-101	Research Methodology	Core Course-I	4	30	70
2	PHD-Y-102	**A.** Application of Major Yogic Texts **B.** Introduction to Yoga Upanishads **C.** Insight into Indian Philosophy	Optional Course I	3	30	70
3	PHD-Y-103	**A.** Introduction to Computer Application and Systematic Review for Yoga Research **B.** Qualitative and Quantitative Analysis **C.** Emerging Trends in Research	Optional Course II	3	30	70
4	PHD-Y-104	Research and Publication Ethics	Core Course-II	2	15	35
Total				**12**	**105**	**245**

Semester- 1st

Ph.D. Course- Mode of Evaluation

There shall be one semester for Ph.D. course work. There shall e four papers of 12 credits.

Course work will be compulsory for Ph.D. scholars.

Core Course-I	Optional Course I	Optional Course II	Core Course-II
CCI (4 Credits) **PHD-Y- 101** Research Methodology	**OCI (3 Credits)** **PHD-Y- 102 A** **PHD-Y- 102 B** **PHD-Y- 102 C** A. Application of Major Yogic Texts B. Introduction to Yoga Upanishads C. Insight into Indian Philosophy	**OCI (3 Credits)** **PHD-Y- 103 A** **PHD-Y- 103 B** **PHD-Y- 103 C** **A.** Introduction to Computer Application and Systematic Review **B.** for Yoga Research Qualitative and Quantitative Analysis **C.** Emerging Trends in Research	**CCI (2 Credits)** **PHD-Y- 104** Research and Publication Ethics

Subject- Research Methodology

Paper Code- PHD-Y-101

Credit- 4

The course **Research Methodology** is a four-credit course, designed to cover the basics of research methodology and statistics. The course is offered for Ph.D.

Its aim is to help the students understand the research process from the quantitative and qualitative points of view. The point of view will be practical, emphasizing working with data using the statistical software.

Learning Objectives

Understand the methodology of medical and psychological research

Understand the basics of Statistics using medical and psychological data.

Learn to summarize data numerically and graphically.

Unit 1: Research Methodology – Basic Principles (15 hours)

Introduction to research methodology – definition of research, types of research, need for research related to Yoga

The research process – first steps:

1. Identifying the problem.
2. Reviewing literature.
3. Setting research questions, objectives, and hypotheses.

Literature review – Using PubMed, Google Scholar, Shodhganga,

Class exercise: Go through the research process from step with small research questions suggested by instructor.

Unit 2 :: Working with data (30 hours)

The research process continued – the next few steps:

Choosing the study design

Choosing the sampling design

Collecting data

Summarizing data

Testing hypotheses

Writing a report

Understanding two important terms: Population and Sample

Describing your sample: Descriptive statistics

Generalizing from sample to population: Inferential statistics

First Steps in Data Exploration

Types of data (Scales of measurement) – Nominal, Ordinal, Interval, Ratio

Types of variables – Independent, Dependent

Types of research design – Experimental design, Cross sectional study, Case study, Survey

Research Design – choosing an experimental design

Implementing the design in practice – potential problems.

Sampling methods - Simple Random Sampling, Systematic sampling, Stratified Sampling, Cluster Sampling, Collecting data.

Reading data from Excel files.

Univariate Statistics: Numerical summaries
Range, Mean, Median, Mode Understanding z-scores

Univariate Statistics: Graphical summaries

The frequency distribution: Histograms and Bar charts,

Other visualizations: Box plots

Outliers in data Problems with missing data.

Exercises: Write a small report of descriptive statistics for some real datasets.

Bivariate Statistics: Scatter plots, the Pearson correlation coefficient.

Introduction to Probability – why probability theory?

The frequency distribution revisited. Simple probability theory through the frequency distribution.

The hypothesis testing framework –The Normal distribution. Calculating probabilities for the normal distributions.

Practical matters: Sample statistics vs. Population parameters

Introducing the t-distribution. Real examples at last!

Understanding errors in hypothesis testing. Power of a study.

Unit 3.: Research Methods for Psychology (10 hours)

Working with qualitative data

Measurement tools: Observation, questionnaire, interviews

Reliability: Test-Retest Reliability, Split-half reliability and Cronbach's alpha, McDonald's omega, Internal Consistency, Inter-rater Reliability

Exercises: Calculating reliability coefficients for questionnaire data in R

Validity: Content Validity, Criterion Validity, Construct Validity, Face Validity, Convergent and Discriminant Validity.

Unit 4 : Working with common instruments (5 hours)

This Unit can be conducted any time during the Semester – can be an ongoing process.

Reference Books:

1. David Bowers - Medical Statistics from Scratch - An Introduction for Health Professionals
2. David E. Matthews, Vernon T. Farewell - Using and Understanding Medical Statistics
3. Hugh Coolican - Research Methods and Statistics in Psychology
4. McQeen-Knussen - Introduction to Research Methods and Statistics in Psychology
5. Petrie-Sabin - Medical Statistics at a Glance
6. Michael J. Campbell - Statistics at Square One
7. The Practice of Social Research – Babbie
8. Medical Research – R L Bijlani

Course Title: Application of Major Yogic Texts

Course Code: PHD-Y-102 A

Course Credit: 3

Learning Outcomes:

1. Apply its value in YOGA
2. Apply its value practically for the management of stress
3. Introduce its value and insights for persons with special needs
4. To give comprehensive knowledge about the therapeutic basis of yoga as mentioned in ancient classical texts such as Bhagavad-Gita.

Unit-1: Samadhi Pada and Sadhana Pada

- Introduction of Maharshi Patanjali, Definition of Yoga according to Patanjali.
- Concept of Chitta- Vriti, Chitta- Vritinirodhopaya, Abhyasa and Vairagya. Types and nature of Samadhi, Concept of ishvarchitta -prasadanam. Chitta- Vikshepas (Antrayas) & Sah-Vikshepas. Ritambharaprajna and Adhyatmaprasada.
- Concept of Kriya Yoga, Theory of Kleshes, Concept of Dukhavada, Viveka-Khyati, Karma and Rebirth, a brief introduction to Ashtanga Yoga, Concept of Yama, Niyama, Asana, Pranayam, Pratyahar and their usefulness in Chittavrittinirodhopayah.

Unit-II: Vibhuti Pada and Kaivalya Pada

- Concept of Vibhuti. Meaning of Antrang Yoga, Introducton of Dharana, Dhyan and Samadhi, Concept of Sanyama, Sanyam of Parinaamtraya, Sanyama of pratyayaya, Sanyama of kayaroop, Sanyama of Surya, Chandra Adhurva, Sanyam of Chakra Sanyam of Udana & Samana, Concept of Parkayapravesh & Astamaha Siddhi,
- Sources of Siddhis, Four types of Karmas, Expression, Smarti-Sanskar, Samadhi, Principle of Knowledge, Chittashakti, Concepts of Kaivalya.

Unit-III Introduction: Hath Yoga

- Introduction: Hath Yoga-Its definition & objectives. Origin & tradition of Hath Yoga
- General introduction of Basic Hath Yogic text [8:39 pm, 27/03/2024] Sarthak Sharma: Essentials of Hath Yoga: Importance of Place. Environment & Season for Hath sadhana. Aids & Obstructions to Hath sadhana. Prohibited & conductive food in Hath sadhana
- Meaning, Definition, Objectives, Techniques, Benefits and Cautions: Shatkarma, Asanas Pranayama Mudra & Bandhas
- • Meaning, Definition, Objectives, Types, Techniques, Process and Benefits: Pratyahara, Dhyana, Samadhi and Nadanusandhan
- Spiritual Energy, Prana & Nadi, PanchKosha Chakras Kundalini shakti, Techniques of awakening Kundalini Shakti

Unit-IV Introduction of Bhagavad-Gita

Introduction of Geeta. Historical Background of Bhagavad-Gita. Concept of Yoga in Geeta. Characteristics of a Yogi.

- Relevance of Scope: Essentials of Bhagavad-Gita the meaning of the terms- Atmaswrupa, Stithaprajna. Bhagwad Geeta- A Discovery of Life: Varna & Ashram Vyavastha
- Detachment Nature & Definites Diversity of no Self-control Blessings of Self-control. The Man of Perfection- the concept of Sthitipragya.
- Classification of Karma, Concept of Svadharına, Concept of Loksangraha, Philosophy of Nishkama karmayoga
- The techniques of realizing meditation, Pre meditational care Concentration, techniques of concentration, Conditions for meditation, the supreme state of Yoga: Concept of Salvation.

Suggested Readings:

1. B.K.S. Iyengar-Light on Pranayama, Harper Collins Publisher New Delhi, 2012
2. B.K.S. Iyengar-Light on yoga, Harper Collins publisher New Delhi, 2012
3. Bachaspati- Yoga Sutra tatvavaishardiShastri,
4. M.L. Gharote- Health Ratnavali, Kaivalyadham SMYM samiti, Lonavala, 2009
5. Sharma BR: Jotsna (Comentory of Hatha Yoga Pradeepika) Kaivalyadhama, Lonavala, 2013
6. Swami Vivekananda: Rajayoga, Advaita Ashram, Calcutta, 2000.
7. Vijay pal- Patanjala Yoga Vimarsha Shastri
8. Acharya Shankar (Translation) - Sri Mad Bhagwat Gita
9. Goyanka, G- Sri Mad Bhagwat Gita
10. Holy Geeta: Swami Chinmayananda, Central Chinmayananda Mission Trust, 1992, Mumbai.
11. LokManya Tilak- Sri Mad Bhagwat Gita
12. SatyaVrat-Shiddhalankar- Sri Mad Bhagwat Gita
13. Swami Ranganathananda: Message of Upanishads, Bharatiya Vidya Bhavan, Bombay, 1985

Course Title: Introduction to Yoga Upanishads

Course Code: PHD-Y-102 B

Course Credit: 3

Course Objective:

1. To study the basics and applied part of Yoga in different Yoga Upanishads

UNIT 1: Shandilya Upanishad [15 hrs]

Brief Introduction to *Shandilya Upanishad, Ashtanga Yoga:* Types of *Yama,*Types of *Niyama,* Types of *Asana,* Concept and Types of *Nadi & Prana,* Stages of *Pranayama,* Concept &Types of *Pratyahara,* Concept &Types of *Dharana,* Concept & Types of *Dhyana. Concept of Samadhi.*

UNIT 2: Jabaldarshanopanishad [15 hrs]

Brief Introduction to *Jabaldarshanopanishad, Ashtanga Yoga: Yama* (10 Types), *Niyama* (10 Types), *Asana* (9 Types), Types of *Prana* & *Nadi,* Types of *Pranayama, Pratyahara, Dharana, Dhyana* (Its Types) *& Samadhi.*

UNIT 3: Trishikhibrahmanopanishad [15 hrs]

Brief Introduction to *Trishikhibrahmanopanishad,* Concept & Types of *Yamas* and *Niyamas,* Concept & Types of *Asanas,* Types of *Nadi,* Types of *Prana* &*Pranayama,* Concept of *Pratyahara, Dharana, Dhyana, Samadhi.*

UNIT 4: Yogchudamanyupanishad [15 hrs]

Brief Introduction to *Yogchudamanyupanishad, Shadanga Yoga- Asana* & its types, Types of *Chakra, Nadi, Prana, Pranayama*: Its types & Benefits, Concept of *Kundalini, Mitahara, Mudra & Bandhas,* Concept of *Pratyayahara,* Concept of *Dharana,* Concept of *Dhyana,* Concept of *Samadhi*.

REFERENCE BOOKS:

1. 108 Upanishad-*Brahmavidya Khand*- Pt. Sriram Sharma Acharya, Shantikunj, Haridwar. 108 Upanishad-*Jnana Khand*- Pt. Sriram Sharma Acharya, Shantikunj, Haridwar.
2. 108 Upanishad-*Sadhana Khand*- Pt. Sriram Sharma Acharya, Shantikunj, Haridwar. Swami Nikhilananda - *The Principal Upanishads*, Courier Corporation, 2003 Swami Sivananda - *The Essence of Principal Upanishads*, Divine Life Society,1980
3. Upanishad Sangraha- *Jagdish Shashtri*, Motilal Banarasidas, Varanasi, Delhi, Chennai.

Course Title: Insight into Indian Philosophy

Course Code: PHD-Y-102 C

Course Credit: 3

Course Code: MS-CT 101
Course Objectives:

Following the completion of this course, students shall be able to

1. Appreciate the insight in the six systems of Indian philosophy.
2. Explain the understanding of Yoga as a philosophy and inculcate the essence.
3. Describe the various schools of philosophy like Buddhism, Samkhya, Mimamsa etc. which are relevant to yoga practice.

Expected outcomes; after going through this course, lecturers are expected to have

1. Basic understanding of Indian Philosophy.
2. In-depth understanding of yoga Philosophy.
3. Analytic aptitude to discuss life problems using connection to Indian Philosophy

UNIT 1: Nyaya and Vaisesika

Nature of physical world, concept of Individual soul, supreme soul, and liberation in Indian philosophy, Theory of body, mind and soul, The sixteen Padarthas according to Nyaya, Concept of Nyaya philosophy; Means and objects of knowledge and salvation according to Nyaya and Vaisesika, Category of substance-Nava dravyas, Category of quality-24 gunas, Relation between Nyaya and Vaisesika philosophy.

UNIT 2: Samkhya and Yoga

Theory of cause and effect; Prakriti and Purusha; Concept and Process of evolution and Liberation; Concept of Atman, Brahma, Maya, Universe, God; Three fold afflictions and means to overcome afflictions; Twenty five entities and means of knowledge according to Samkhya and; Saakarya Vada; Similarities and dissimilarities between Vyakta and Avyakta, Triguna; Existence of Purusa, plurality of Purusa, proximity of Purusa and Prakriti; Karana, Antah Karana and Bahya Karana according to Sankhya Karika; Liberation and means of attaining it; Organization of the Yoga sutras, stages of Chittas, forms of Chitta, modification of Chittas, Kind of Kleshas, the eight fold of Yoga and God & liberation.

UNIT 3: Mimamasa (Purva and Uttara)

Concept of Badarayana in Uttaramimamsa; Anumana, Sabda; Difference between vidya & avidya, subject & object, creation & causation, cause & effect; Pratyaksa, Anumana, Upamana, Arthapati, Anupalabdi and Sabda according to Uttaramimamsa; Atheism, Dharma in the context of Purvamimasa, Summary of ten Upanisads, Atman, Brahma, Maya, Universe, God; These lf and human life; Major teachings of Mimamsa system; Self less action, non attachment, self-control, self-discipline; Daily schedule for psychophysical wellbeing, social awareness, sense of equality, unity with diversity, selectiveness.

UNIT 4: Jain, Buddha and Carvaka Philosophy

Carvaka philosophy: Origin and history of Carvaka philosophy, Metaphysics and Epistemology, Buddhism: Four noble truths, Pramanas Jainism: Categories, Triratnas and Syadvada.

RECOMMENDED BOOKS:

Bhushan, N., & Garfield, J. L. (2015). Indian Philosophy in English: From Renaissance to Independence.

Bhushan, N., & Garfield, J. L. (2017). Minds Without Fear: Philosophy in the Indian Renaissance. New York, NY: Oxford University Press.

Bilimoria, P. (2015). Nature in Indian Philosophy and Cultural Traditions. Sophia Studies in Cross-cultural Philosophy of Traditions and Cultures (Vol. 12). New Delhi, India: Springer.

Frauwallner, E. (1973). History of Indian Philosophy, (Vol 2. Varanasi, India: Motilal Banaridass Publishers.

Gupta, B. (2012). An Introduction to Indian Philosophy: Perspectives on Reality, Knowledge, and Freedom. New York, NY: Routledge.

Hiriyanna, M. (1994). Outlines of Indian Philosophy. Varanasi, India: Motilal Banaridass Publishers.

I, B. S., Potter, K. H., Larson, G. J., Bhatlacharya, R. S., Philosophy, B., Karl, A. D. E., et al. (1995). Encyclopedia of Indian Philosophies.

Mohanty, J. N. (2008). A History of Indian Philosophy. A Companion to World Philosophies, 24–48.

Potter, K. H. (1987). Encyclopedia of Indian Philosophies Vol IV. Delhi, India: Motilal Banaridass Publishers.

Press, O. U. (1928). Indian Philosophy: A Very Short Introduction. Mind (Vol. 37).

Radhakrishnan, S., & Moore, C. A. (Eds.). (1957). A Source Book in Indian Philosophy. New Jersey, NJ: Princeton University Press.

Schweizer, P. (1993). Mind/ Consciousness Dualism in Sankhya-Yoga Philosophy.

Philosophy and Phenomenological Research, 53(4), 845–859. doi:10.2307/2108256

Timalsina, S. (2008). Consciousness in Indian philosophy: The Advaita doctrine of "awareness only."

Subject- Introduction to Computer Application & Systematic Review for Yoga Research

Paper Code- PHD-Y-103 A

Credit- 3

Goal and Objectives

The goal of this course is to introduce methods to perform systematic reviews of scientific literature. We will cover types of reviews, steps in conducting a systematic review, how to formulate an answerable research question, trial registration of the systematic review, define inclusion and exclusion criteria, Participants Interventions Comparisons Outcomes (PICO) framework, different database for the evidence, extract data, assess the risk of bias in trials, and the basis computer skill for systematic review

Knowledge:

After the completion of this subject, students should be able to

1. Understand the process of conducting systematic review
2. Understand various concepts related to systematic review
3. Evaluate strength of evidence in scientific literature
4. Understand PRISMA reporting guidelines.

Skill:

After the completion of this subject, students should be able to

1. Organize the literature in a systematic manner
2. Use various computer tool to enhance the efficiency of performing systematic review (Microsoft word, Excel)
3. Publish or Perish software and Reference managing Software ZOTERO.
4. Write the draft of systematic review adhering to standard reporting guidelines.

Study outcome:

The student will be able to conduct and write a systematic review on a given topic, and also distinguish various sources of scientific literature.

Unit I

Use of computer tools for Research: Reference Management Software Mendeley, Software for paper formatting MS Office (Word, Excel and PowerPoint), Software for detection of Plagiarism, Publish or Perish a software program that retrieves and analyses academic citations.

Unit II

Introduction to systematic reviews of literature, types of questions that can be addressed with systematic reviews, protocols

Formulating a well-formed study question and a logic mode

Population, intervention, comparators, outcomes, setting and timing (PICOTS).

Framing questions that can be answered

Unit III

Developing a protocol for a systematic review with PROSPERO Registration

Searching the literature and identifying studies

Discussion of MeSH headings.

Search strategies and databases.

Bibliographic file management

What literature to review and the role of gray literature.

Developing search strategies according to PICOTS.

Steps in search strategy: preliminary screen and full text review.

Developing data extraction forms - forms for RCTs Focus on the information needed to answer key questions.

Capturing how the variables are reported as well as actual results (minimum datasets). PICOTS elements.

Relevant descriptive study information.

Unit IV

Assessing bias (quality) of studies: Criteria

For RCTs

Definitions of quality and risk of bias.

Methodological and reporting quality.

PRISMA

RCTs and CONSORT

Overview of the software used for systematic reviews.

Prescribed Text Book or Study Materials:

1. Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, Welch VA (editors). Cochrane Handbook for Systematic Reviews of Interventions version 6.0 (updated July 2019). Cochrane, 2019. Available from www.training.cochrane.org/handbook.
2. Uman, L. S. (2011). Systematic reviews and meta-analyses. Journal of the Canadian Academy of Child and Adolescent Psychiatry, 20(1), 57.
3. Grant, M. J., & Booth, A. (2009). A typology of reviews: an analysis of 14 review types and associated Methodologies. Health Information & Libraries Journal, 26(2), 91-108.
4. Munn, Z., Stern, C., Aromataris, E., Lockwood, C., & Jordan, Z. (2018). What kind of systematic review should I conduct? A proposed typology and guidance for systematic reviewers in the medical and health sciences. BMC medical research methodology, 18(1), 5

Course Title: Qualitative and Quantitative Analysis

Course Code: PHD-Y-103 B

Course Credit: 3

Learning Outcomes

- To describe the nature, purpose, scope, areas and types of statistics.
- To explain the characteristics of quantitative and qualitative analysis.
- To select and explain the appropriate statistical method for research. 。To differentiate parametric and non-parametric statistics.
- To identify appropriate qualitative research method for a research study.
- To explain tools, designs and procedures for collection of data.
- To explain the importance of documentation and dissemination of researches in education.

Unit1: Fundamentals of Statistics

- Concept and role of statistics in Educational Research Descriptive and Inferential statistics
- Graphical Presentation of Data
- Measures of Central Tendency
- Measure of Variability and Positions
- Normal Probability curve (NPC): Characteristics and uses

Unit 2: Quantitative Analysis of Data

- Parametric and non-parametric statistics
- Parametric Statistics:'t'test,ANOVA,Correlation-Assumption and Interpretation
- Non-Parametric Statistics:ANCOVA,Correlation(Rank Difference Method
- Biserial Correlation, Coefficient of Contingency, Phi Coefficient,Tetra Choric Correlation and point-biserial Correlation etc.
- Chi Square-Assumption,Interpretation and Distribution
- Mann Whitney U test,sign test median test and kruskal wallis test -Assumption .and Interpretation.
- Regression analysis and path analysis.

Unit 3: Qualitative Research Methods

- Philosophical Research, Historical Research
- Ethnography
- Phenomenology
- Grounded theory
- Narrative Inquiry

Unit 4: Qualitative Analysis of Data

- Focused group Discussion
- Interview
- Case Study
- Content Analysis

- Triangulation
- Field Notes
- Portfolio and Rubrics

Suggested Readings:

1.Garrett, E.H. (2021). Statistics in Psychology and Education.Sixth Edition.SurjeetPublications

2.Mangal, S.K. (2010). Statistics in Psychology and Education.PHI Learning

3.Cohen, L…. Manion.L., Morrison.K.(2018). Research Methods in Education.EigthEdition.Routledge Publishers

4.Johnson Burke.R.&Christensen Larry (2014). Educational Rescarch:Quantitative.Qualitative and Mixed Approaches.Sage Publications.

5Creswell John W.andPoth , Cheryl N. (2016), Qualitative Inquiry and Research Design:Choosing Among Five Approaches,Sage Publications.

6.DenzinNorman k., Lincoln,Yvonna Sessions, (1994). The SageHandbook of QualitativeResearch,Sage Publications.

Course Title: Emerging Trends in Research

Course Code: PHD-Y-103 C

Course Credit: 3

Learning Outcomes:

- -To understand and analyses the issues and trends in contemporary approaches ofresearch.
- ·To develop the sense of collaborative research through inters and Trans disciplinary
- approaches.
- ·To Understand meaning &Concept of Public Policy
- ·To inculcate Policy framing in Field of Research
- ·To Explore the gap between Research and Policy Making
- ·To Understand Policy Analysis

Unit-I Disciplinary Understanding

- Historical development of the current disciplinary structure of the academic system
- Concept,Meaning and Definition of Discipline and Academic Disciplines
- Academic Disciplines -Differences, Relationship and Classification of Academic Disciplines
- Multidisciplinary,trans-disciplinarily,and interdisciplinary
- Inter-disciplinary approach,Multidisciplinary approach,Trans-disciplinary approach, Collaborative research
- Mono-disciplinary and interdisciplinary research approaches

Unit -II Process of Disciplinary research

- Interdisciplinary research process (from identification of problems to Discussion and Conclusion)
- Trans-disciplinary research process y (from identification of problems to Discussion and Conclusion)
- Multidisplinary research process (from identification of problems to Discussion and Conclusion)
- Collaborative research process (from identification of problems to Discussion and Conclusion)

Unit -III Concept of Policy Research

- Academic Research &Policy Research
- Policy Research &Policy Framing
- Process and structure of Policy making
- Processes of identifying the successes, failures and gaps in Policy.
- Stakeholders in policy making
- Monitoring and evaluation Educational Policy

Unit-IV Issues Related to Policy Research

- Autonomy and Quality
- Equity and Efficiency
- Privatization and equity
- Access and equity
- Accountability vs Capabilities

Suggested Readings

- Stephen,P.(2015). Emerging trends in Social Science Research.Puri,V.(2019). Modern Trends in Research Methodology.DOI:334
- Bhushan Sudhanshu.Challenges of Higher Education Policy:Accountability vs.
- Capabilities,Lecture Note 4
- Sen Amartya (2009). The Idea of Justice.Allen Lane and Harvard University
- Bhushan Sudhanshu,Idea of Justice,2009, Chapter-wise Summary
- Sudhanshu Bhushan,Video,Lecture Note,15 minutes.Ayyar,R.V.V.(2016). The Holy
- Grail:India's Quest for Universal Elementary Education OUP, Delhi.2016.
- Satish Deshpande and Usha Zacharias (Eds.). Beyond Inclusion the Practice of Equal
- Access in Indian Higher Education.Routledge,2013.
- Thorat,Sukhadeo and Nidhi S.Sabharwal (2015). 'Caste and Social Exclusion:Concept,
- Indicators,and Measurement,'in A.K.Kumar,P.Rustagi,and R.Subrahmanian (Eds).
- India's Children:Essays on Social Policy (New Delhi:Oxford University Press,2015).

Course Title: Research and Publication Ethics

Course Code: PHD-Y-104

Course Credit: 2

Learning Outcomes

- to describe the philosophical perspectives of research and publication ethics
- to understand publication ethics their implications for improving the quality of research
- to develop an in-depth understanding about the open access publishing and publication
- to understand databases and research metrics with the historical development of misconduct databases and research metrics
- to able to conduct and use Hands on sessions predatory publications Indexing and citation databases,open access publications

Unit-I Ethics and Scientific Conduct

- Introduction to philosophy: definition, nature and scope, concept, branches
- Ethics: definition, moral philosophy, nature of moral judgments and
- Scientific misconducts: Falsification, Fabrication, and Plagiarism (FPP)
- Redundant publications duplicate and overlapping publications, salami slicing

Unit-II Publication Ethics

Publication ethics definition:

- introduction and importance best practices/standards setting initiatives and guidelines: COPE, WAME etc.
- Conflicts of interest
- Publication misconduct: definition, concept. problems that lead to unethical behaviour and vice versa types
- Violation of publication ethics, authorship and contributor ship
- Predatory publishers and journals
- Journal finder/Journal suggestion tools viz.JANE, Elsevier Journal Finder, Springer Journal Suggested, etc

Databases and Research Metrics:

- Use of plagiarism software like Turnitin, Urkund and other open-source software tools
- Subject specific ethical issues, FFS, authorship
- Conflicts of interest
- Indexing databases
- Citation databases: Web of science, Scopus, etc

Suggested Readings

- Best, Kahn, J&Jha.Ax(2017) Research in Education, New Delhi: PEARSON (ISBN978-93-325745191

- Bird A (2006) Philosophy of Science.Routledge Bogdan C. Biklen, S.&Jha, AK (2016). Qualitative Research for Education.New Delhi:PEARSON ISBN 978-93-3257452-6
- Macintyre, Alasdair 1967) A Short History of Ethics London P Chaddan,(2018) Ethics inCompetitive Research Do not get scooped;do not get plagiarized.ISBN 978-9387480865National Academy of Science.
- National Academy of Engineering and Institute ofMedicine (2009) On Being a Scicntist a Guide to Responsible Conduct in Research:Third Edition National Academies Press Resnik DB. (2011). What is cthic in research &why is its important National Institute of Environmental Health Science,1-10.
- Bcall (2012). Predatory publishers are corrupting open access. Nature,489(7415).179.179 hups://doieg/10.1038489179a Indian National Science Academy (NSA). Ethics inScience Education. Research and Govenance (2019) ISBN978-81-939482-1-7. http: www.insaindia.res.in'pdf Ethics Book pdf