Centre for Studies in Science Policy
School of Social Sciences,
Jawaharlal Nehru University, New Delhi

Course Title	Research and Publication Ethics
Course Code	SP611P
Total Credit	2, Two (Thirty hours Contact)
Level of Course	Ph.D. (Compulsory)
Mode of Teaching	Lecture/ Group discussion/ Hands on training/Practical
Evaluation	Active participation, group discussion and quizzes (25%); Practical: 40%; and End Semester written examination: 35 %
Course Coordinator	Prof. Madhav Govind & Dr Saradindu Bhaduri

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**

THEORY

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

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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.

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