

COURSE 2: Research and Publication Ethics (RPE) (30 hrs.)

Course objective

- To introduce the basics of philosophy of science and ethics.
- To inculcate research integrity.
- To discuss publication ethics.
- To educate on how to identify research misconduct and predatory publications.
- To discuss Indexing and citation databases.
- To provide information on open access publications and research metrics.
- To introduce various plagiarism tools.

Course Outcome

CO1. Understanding of basics of philosophy of science and ethics.

CO2. Knowledge of research integrity.

CO3. Understanding of publication ethics.

CO4. Knowledge of identifying research misconduct and predatory publications.

CO5. Knowledge of Indexing and citation databases.

CO6. Knowledge of open access publications and research metrics.

CO7. Knowledge of various plagiarism tools.

THEORY (15 hrs.)

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 (5 hrs.)

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

RPE 03: PUBLICATION ETHICS (7 hrs.)

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 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 (15 hrs.)

RPE 04: OPEN ACCESS PUBLISHING (4 hrs.)

1. Open access publications and initiatives
2. SHERPNR oMEO online resource to check publisher copyright & self-archiving policies
3. A software tool to identify predatory publications developed by SPPU
4. Journal finder/ journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer
5. Journal Suggester, etc.

RPE 05: PUBLICATION MISCONDUCT (4 hrs.)

A. Group Discussions (2 hrs.)

1. Subject-specific ethical issues, FFP, authorship
2. Conflicts of interest
3. Complaints and appeals: examples and fraud from India and abroad

B. Software tools (2 hrs.)

1. Use of plagiarism software like Turnitin, Urkund and other 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 (3 hrs.)

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

References

1. Bird, A. (2006). Philosophy of science. Routledge.
2. MacIntyre, Alasdair. (1967). A Short History of Ethics. London.
3. P. Chaddah. (2018). Ethics in Competitive Research: Do not get scooped; do not get plagiarized, ISBN:978-9387480865
4. National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition. National Academies Press.
5. Resnik, D. B. (2011). What is ethics in research & why is it important. National Institute of Environmental Health Sciences, 1-10. Retrieved from