

Course Structure and Syllabi

Core Course : RP799: Research and Publication Ethics (L-2, T-0, P-0, CH-2, CR-2)

The course on Research and Publication Ethics be offered compulsorily to all Ph.D. students as course work of the Ph.D. programme w.e.f. the academic session 2020-21.

About the course:

The course has total of 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.

Evaluation:

Continuous assessment will be done through tutorials, assignments, quizzes and group discussions. Weightage will be given for active participation. The final written examination will be conducted at the end of the course.

Unit 1: Philosophy and Ethics

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

Unit 2: Scientific conduct

1. Ethics concerning science and research
2. Intellectual honesty and research integrity
3. Scientific misconduct, falsification, fabrication and plagiarism
4. Redundant publications, duplicate and overlapping publications and salami slicing
5. Selective reporting and misrepresentation of data

Unit 3: 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 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

Unit 4: 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
4. Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

Unit 5: Publication misconduct

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.)

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

Unit 6: Data Base and research Metrics

A. Databases (4 hrs.)

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

B. Research Metrics (3 hrs.)

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

References

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- MacIntyre, Alasdair (1967) *A Short History of Ethics*. London.
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- 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.
- Resnik, D. B. (2011). What is ethics in research & why is it important. *National Institute of Environmental Health Sciences*, 1–10. Retrieved from <https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>
- Beall, J. (2012). Predatory publishers are corrupting open access. *Nature*, 489(7415), 179–179. <https://doi.org/10.1038/489179a>
- Indian National Science Academy (INSA), *Ethics in Science Education, Research and Governance*(2019), ISBN:978-81-939482-1-7. http://www.insaindia.res.in/pdf/Ethics_Book.pdf