



BIR TIKENDRAJIT UNIVERSITY

(Established by the Govt. of Manipur Act No. 9 of 2020, As per U/S 2 (f) UGC Act 1956 and affiliated to AIU w.e.f 1st April, 2021)
University Campus, Canchipur, Imphal – 795003, Manipur

COURSE STRUCTURE AND SYLLABUS FOR PRE-Ph.D. COURSE WORK

Approved by Academic Council on 10th June,
2021



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Course structure and syllabus for pre-Ph.D. course work

The Pre-Ph.D. Course Work is a one semester course and it is compulsory for all provisionally registered students. The objective of the pre-PhD course work is to augment the aptitude of research among the Ph.D. aspirants and get them exposed to the systematic research methodology. This course work will facilitate the students in understanding the tools and techniques for conducting their research. The course work is of 12 credits and the subdivision of the credits for each paper is given as below:

Course code	Course paper	Course title	Credit
PHD-001	Paper-I	Research methodology & Research Publication ethics	4
PHD-002	Paper-II	Subject specific course approved by the DRB	4
PHD-003	Paper-III	Review of literature for Ph.D. topic & Seminar	4

Paper-I: Research methodology & Research Publication ethics (PHD-001)

This is a core paper primarily open to all scholars provisionally enrolled for Ph.D. program in the faculties of science, arts and humanities. This paper has two sections namely, Research Methodology (RM) and Research Publication Ethics (RPE), each carrying 2 credits. The syllabus of this paper is as follows:

Section I: Research Methodology (RM): 2 Credits (50 Marks)		
Unit	Unit Title	Topics to be covered
I	Basics of research and research types	Research objectives, Scientific research, Importance of research methodology, Good Research Practices (GRP), Types of research and methods, Surveys, Case studies, Experiments and field studies etc.
II	Review of literature and research	Basic concept and its need, Literature search, Types of literature review, Review of research, Sources, Synthesis process, Planning of review and documentation.
III	Research design	Process, Identification and Formulation of problem, Hypothesis, Tools of research.
IV	Statistical analysis and report writing	Measures of central tendency, Dispersion and association/relationship, Variance, Regression and Correlation analysis, Hypothesis testing and Test of significance, Research paper and thesis writing.

Section II: Research Publication Ethics (RPE): 2 Credits (50 Marks)		
Unit	Unit Title	Topics to be covered
I	Research ethics and scientific conduct	Introduction to research philosophy and concept of research ethics, Ethical aspects in science and research, Intellectual honesty, Research integrity, Scientific misconducts (Falsification, Fabrication, Plagiarism), Redundant publications(Duplicate, Overlapping and Salami slicing), Selective reporting and misrepresentation of data.
II	Publication ethics	Concept of publication ethics and its significance, Best practices and guidelines (COPE, WAME, etc.), Conflict of interest, Publication misconduct: Concept, problems and types, Violation of publication ethics, authorship and contributorship, Identification of publication misconduct, Complaints and appeals.
III	Predatory and open access publication	Predatory publishers and journals, Open access movement and publications, SHERPA/RoMEO tools to check copyright and self-archiving policies, Journal finder/Journal suggestion tools (JANE, EJF, SJS), Group discussion on publication misconduct.
IV	Quality parameters and practices	Copy Rights and Intellectual Property Rights (IPR), Plagiarism Check: Software tools (TURNITIN, URKUND, etc.) practice, Databases (Indexing, Citation) and Research Metrics: h-index, g-index, i-10 index, Impact Factor, SNIP, SJR, IPP, Cite Score.

Paper-II: Subject specific course (PHD-002) – (100 Marks)

This paper is subject specific course which can be offered by a faculty department and various elective courses may be offered for this paper as per availability of research supervisors and other academic and physical facilities. The detailed syllabi for the elective papers are to be worked out by the department concerned.

Paper-III: Review of literature for Ph.D. topic & Seminar (PHD-003) – (100 Marks)

This course paper is based on research area defined by the research guide and approved by the DRB. The concerned guide should ask the student to prepare and deliver TWO seminars each of one hour duration through PowerPoint presentation and examine the students. The candidate will have to write a Review article on research papers relevant to his/her area of research. The weightage for the two seminars will be of 2 credits and that for the review article will be of 2 credits.

References:

1. Kothari, C.R. (2014) Research Methodology: Methods and Techniques, 2nd edn., New Age International Publishers, New Delhi.
2. Best, J. W. and Kahn, J. V. (2006) Research in Education, 10th edn., Pearson Publication, New Delhi.
3. Koul, L. (2019) Methodology of Educational Research, 5th edn., Vikas Publ., New Delhi (ISBN- 9789353386368)
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5. Kambadur, M., Ghosh, A. and Singhvi A. K. (2019) Ethics in Science Education, Research and Governance, Indian National Science Academy, New Delhi (ISBN: 978-81-939482-1-7)
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7. Chaddah, P. (2018) Ethics in Competitive Research: Do not get Scooped; Do not get Plagiarized, ISBN-978-9387480865
8. National Academy of Sciences, National Academy of Engineering and Institute of Medicine (2009) On Being a Scientist: A Guide to Responsible Conduct in Research, 3rd edn., National Academies Press.
9. Beall, J. (2012) Predatory Publishers Corrupting Open Access, Nature, 489(7415):179.
10. Bird, A. (2006) Philosophy of Science, Routledge.
11. Software Manuals SPSS, MINITAB, MATLAB.
12. UGC Syllabus for Research and Publication Ethics, D.O. no. F.1-1/2018 (Journal/CARE), Dec., 2019.