

NAGALAND UNIVERSITY

Ph.D. Course Work Programme

Department of Commerce



Ph.D. Course Work (1 Semester)

CBCS Programme

Paper	Credit
PCW-01 Research Methodology in Social Sciences	5
PCW-02 Data Analysis & Computer Application in Research	5
PCW-03 Research and Publication Ethics	2
PCW-04 Term Paper	4
Total credit hours	16

- 1 credit hour is equivalent to 1 lecture hour. In case of practical lab, 1 credit hour is equivalent to 2 practical lab hours.
- The 4 (four) courses will be of 100 marks each with 30 marks for internal evaluation and 70 marks for external evaluation. The question paper for external evaluation will consist of 7 (seven) descriptive type questions out of which 5 (five) questions will be required to be attempted by the students. Each question will carry 14 marks. The components for internal evaluation will comprise of home assignments, internal test, project work and practical.

Ph.D. Course Work

Paper: PCW-01 Research Methodology in Social Sciences

Duration: 3 hrs.

Marks: 100

Lectures: 50

Objective: The course aims to equip the researchers with the understanding of the relevance and role of research methodology in Social Sciences.

Unit I: Introduction

Lectures: 10

Meaning, objectives and purpose of research, types of research, significance, characteristics and criteria of a good research; social science research; objectivity; uses and limitations.

Unit II: Review of Literature, Planning of Research and Research Design

Lectures: 10

Need for reviewing literature, procedure and sources of literature; Planning of research-process, selection and formulation of a problem; Hypothesis- meaning, necessity, types, sources and formulation; Research design- concepts, types- exploratory, descriptive and experimental.

Unit III: Data Collection and Sampling Design

Lectures: 10

Primary data- uses, limitations and methods of collecting primary data; uses, limitations and sources of secondary data; tools for data collection; Sampling- meaning, sampling techniques, sampling process, sampling and non-sampling errors.

Unit IV: Measurement and Scaling

Lectures: 10

Meaning; Scales of measurement; Comparative scaling techniques- paired comparison, rank order, constant sum and Q-Sort; Non-comparative scaling techniques- continuous rating scale and itemized rating scales; Scale evaluation- reliability, validity and generalizability.

Unit V: Processing of data, Interpretation and Report Writing

Lectures: 10

Processing of data- editing, coding, classification and tabulation; meaning and techniques of interpretation, precaution in interpretation; Report writing- meaning, types of research reports, format of research reports.

Suggested Readings:

1. Krishnaswami, O.R. and Ranganathan, M. *Methodology of Research in Social Sciences*, Himalaya Publishing House.
2. Majhi, P.R. and Khatua, P.K. *Research Methodology (Concepts, Methods, Techniques and SPSS) (Text and Cases)*, Himalaya Publishing House.
3. Kothari, C.R. and Garg, G. *Research Methodology Methods and Techniques*, New Age International Publishers.
4. Chawla, D. and Sondhi, N. *Research Methodology Concepts and cases*, Vikas Publishing House Pvt. Ltd.
5. Malhotra, N. K. and Dash, S. *Marketing Research An Applied Orientation*, Pearson Publication.

Latest edition of text books may be used

Ph.D. Course Work

Paper: PCW-02 Data Analysis & Computer Application in Research

Duration: 3 hrs.

Marks: 100

Lectures: 40, Practical: 20

Objective: The course aims to equip the researchers with the data analysis techniques and application of software in research.

Unit- I: Univariate and Bivariate Analysis

Lectures: 10

Variable- meaning and types- Ratio, ordinal, nominal and dichotomous

Univariate analysis- Graphical Descriptive Techniques for nominal data and interval data;

Numerical Descriptive Techniques- measures of central location and measures of variability

Bivariate Analysis – correlation and regression analysis.

Unit- II: Theory of Estimation and Testing of Hypothesis

Lectures: 10

Estimation theory, Point and Interval estimation, Confidence limits, Statistical hypothesis- simple and composite, Tests of significance; Errors in testing of hypothesis; Level of significance, Test Statistic and Critical region, one tailed and two tailed tests; Critical values; Limitations of Hypothesis testing.

Unit- III: Parametric and Non parametric tests

Lectures: 10

Parametric tests- Z test, t- test and f- test

Non-Parametric Tests- Chi- Squares Test, Sign Test, Wald-Wolfowitz Run Test, Wilcoxon Matched Pairs Test, Mann-Whitney-Wilcoxon Test, Kruskal-Wallis Test.

Unit- IV: Multivariate Analysis and Content Analysis

Lectures: 10

Factor Analysis, Cluster Analysis, Content analysis for qualitative research- Introduction, selecting sample, coding, analysis of websites and visual materials, Advantages and Disadvantages of Content Analysis.

Unit- V: Computer Application in Research

Practical: 20

Quantitative data analysis using software- recording data, coding variables, recoding variables; Data Analysis- univariate, bivariate and multivariate; Qualitative data analysis, advantages and limitations of software applications; Style of citation and referencing- APA and MLA

Suggested Readings:

1. Alan, B and Emma, B. *Business Research Methods*, Oxford University Press.
2. Boot, John C.G. and Cox Edwin B. *Statistical Analysis for managerial Decisions*, McGraw- Hill Publishing Co. Ltd, New Delhi
3. Chou, Ya- Lun. *Statistical Analysis with Business and Economics Applications*, New York: Holt, Rinehart & Winston.
4. Gupta, S.P. *Statistical Methods*, S. Chand & Co.
5. Saunders, M., Lewis, P. and Thornhill, A. *Research Methods for Business Students*, Pearson Education Pte. Ltd., Singapore.
6. Schnider and Cooper. *Business Research Methods*, Tata McGraw Hill, New Delhi.

7. Premraj, H. *SPSS (Statistical Package for Social Sciences)*, Margam Publications, Chennai

Latest edition of textbooks books may be used.

Ph.D. Course Work

Paper: PCW-03 Research and Publication Ethics

Duration: 3 hrs.

Marks: 100

Lectures: 15, Practical: 30

Objective: The course aims to make researchers aware about the publication ethics and publication misconducts.

Unit- I: Philosophy and Ethics and Scientific Conduct

Lectures: 8

Introduction to philosophy: definition, nature and scope, concept, branches; Ethics: definition, moral philosophy, nature of moral judgements and reactions; Ethics with respect to science and research; Intellectual honesty and research integrity; Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP); Redundant publications: duplicate and overlapping publications, salami slicing; Selective reporting and misrepresentation of data.

Unit- II: Publication Ethics

Lectures: 7

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 contributorship; Identification of publication misconduct, complains and appeals; Predatory publishers and journals.

Unit- III: Open Access Publishing

Practical: 8

Open access publications and initiatives; SHERPA/ RoMEO online resource to check publisher copyright & self-archiving policies; Software tool to identify predatory publications developed by SPPU; Journal finder/ journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

Unit- IV: Publication Misconduct

Practical: 8

A. Group Discussions

Practical: 4

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

B. Software tools

Practical: 4

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

Unit- V: Databases and Research Metrics

Practical: 14

A. Databases

Practical: 8

Indexing databases; Citation databases: Web of Science, Scopus, etc.

B. Research Metrics

Practical: 6

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

Suggested Readings:

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 <https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>
6. Beall, J. (2012). Predatory publishers are corrupting open access. *Nature*, 489 (7415), 179-179. <https://doi.org/10.1038/489179a>
7. 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

Ph.D. Course Work
Paper: PCW-04 Term Paper

Marks: 100

Objective:

The purpose of the term paper is to enable the scholar to learn the process of undertaking research in a particular area. It is a research report prepared by the scholars after completing research work on pre-approved area in Commerce. Structure of the term paper should be in the form of a dissertation in an abridged form.

Distribution of marks

Report : 70

Viva-voce : 30

Guidelines:

The topic of the term paper may be finalised within first month of commencement of classes in consultation with the concerned supervisor as allotted by the Department. Four copies of the completed term paper must be submitted to the supervisor within six months from the commencement of Ph.D. course work classes. For the purpose of the viva-voce the scholar(s) shall be required to present the term paper before an evaluation board duly constituted by the Head of the Department.