

The Common Syllabus for Ph.D. Coursework

The Assam Kaziranga University



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Rationale:

This paper is introduced according to the guidelines of the University Grant Commission(UGC) to facilitate the researchers to have minimum knowledge of research methods and basic statistical tools for research data analysis. This course would be helpful for researchers to improve their skills in writing research papers or projects and other relevant academic manuscripts.

CatalogueDescription:

Introduction to research, Research proposal, Sampling and techniques of data collection, Data processing and analysis, Application of computer in research

Pre-requisite: Basics of logical thinking, quantitative tools, and computer application

Course Outline:**Unit 1: Introduction to Research**

- a) Definition of research: facts, concepts, and theory building
- b) Natural science and social science: the subjectivity and objectivity debate and the issue of value neutrality
- c) Inductive and deductive reasoning, theory building

Unit 2: Research Proposal

- a) Selection of research problem, statement of the research problem, review of literature
- b) Research questions, hypotheses, assumptions, and ethical issues in different steps of research
- c) Different types of research design

Unit 3: Sampling and Techniques of data collection

- a) Sampling techniques: probability and non-probability sampling
- b) Measurement and scaling techniques: comparative and non-comparative scales
- c) Methods of data collection: observation, interview, questionnaire, and case study
- d) Development of questionnaire or schedule

Unit 4: Data Processing and Analysis

- a) Types of data, editing, coding, tabulation, and graphical representation of data
- b) Basic statistics, correlation, and regression: linear and multiple
- c) Testing of hypothesis: parametric and non-parametric tests

Unit 5: Application of Computer Research

- a) Introduction to Data Analysis Tool Pack in Microsoft Excel
- b) Introduction to Statistical Package for Health Sciences(SPSS)
- c) Bivariate and multivariate data analysis using Microsoft Excel andSPSS

ReferenceBook(s):

1. Kothari, C.R. Research Methodology: Methods and Techniques, New Age International Private Limited, New Delhi.
2. Bajpai, N. Business Research Methods, Pearson Education.
3. Chawla, D. and Sondhi, N. Research Methodology: Concepts and Cases, Vikas Publishing House, New Delhi.
4. Das and Malhotra. Marketing Research, Pearson Education, New Delhi.
5. Rubin, A. and E.R. Babbie. Research Methods for Social Work, Cengage Learning.
6. Sharma, J. K. Business Statistics, Pearson Education.

GradingSystem:

Total Marks =100 (Internal = 30 marks & Final Examination = 70marks)

UN3002:Research and Academic Writing

Credit:4

Semester– I

Rationale:

This is a course designed to introduce the students to the procedures and mechanics of writing a research paper. This course would provide the participants with the opportunity to improve their skills in writing research papers and other academic texts. The course covers techniques that can be applied to different types of academic writing including essays, reviews, articles, research papers, theses, and dissertations. The course is writing intensive and emphasizes written and oral communication skills. Students will become better writers and overall better communicators as they prepare to move into an academic and research setting.

CatalogueDescription:

Research and Writing, The Style and Mechanics of Research Writing, Writing Research Papers and Dissertations: Structure and Contents, Research Ethics and Academic Integrity, Systems of Documentation, Presentation Skills

Pre-requisite: Advanced Proficiency in English and Sound Knowledge of Research Methodology

Course Outline:

Unit I: Research and Writing

OverviewofResearchWriting; The Research Paper as a Form of WrittenCommunication; Basic Principles of Communication; Types of Academic Writing: Essays, Reviews, Research Paper, Report, Term Paper, Review Article, Thesis, Dissertation, Comment Paper, Short Communication, Case Study, etc.; Types of Research Papers: Argumentative, Analytical, Definition, Compare and Contrast, Cause and Effect; Stages in Writing a Research Paper; CollectingInformation: Preparing a working Bibliography; Critical Evaluation of the Sources and NoteTaking

Unit II: The Style and Mechanics of ResearchWriting

Style: Diction, Tone, Voice, Economy, Sentence Structure, Tense, Active and Passive Voice, IntransitiveVerbs; Parallelism; Logical Consistency and Coherence; Unbiased Language; Mechanics: Spelling, Punctuation, Abbreviation, Hyphenation, Italics, Capitalization, Numbers, Enumeration, Quotations

Unit III: Writing Research Papers and Dissertation: Structure and Contents

The Research Proposal/Synopsis: Format; The Research Paper: Format; The Dissertation: Front Matter, Main Body, ReferenceMaterials

Unit IV: Research Ethics and Academic Integrity

History of Research Ethics; Information Sharing Today; Definition of Plagiarism; Consequences of Plagiarism; Unintentional Plagiarism; Forms of Plagiarism

Unit V: Systems of Documentation

Style Manuals; Documenting Sources; Purposes of Notes and Parenthetical References; List of Works Cited; Alphabetization of Entries; Types of Bibliographies: Annotated Bibliography; End Notes and Footnotes

Unit VI: Presentation Skills

Planning; Structure; Delivery

Reference Books:

1. American Psychological Association. (2010). *Publication Manual of the American Psychological Association* (6th ed.). Washington, DC: APA
2. Chicago Manual (2005). *Chicago Manual of Style* (5th ed.). Chicago: University of Chicago Press
3. Day, R. and Castel, B. (2012). *How to Write and Publish a Scientific Paper* (7th ed.). Cambridge: Cambridge University Press
4. Michaelson, H.B. (1990). *How to Write and Publish Engineering Papers and Reports* (3rd ed.). Phoenix: Oryx Press
5. Modern Language Association of America (2009). *MLA Handbook for Writers of Research Papers*. (7th ed.). Author
6. Slade, C. (2009). *Form and Style* (13th ed.) Wadsworth Publishing
7. Swales, J. M. and Feak, C. B. (2000). *English in Today's Research World: A Writing Guide*. Michigan: University of Michigan.
8. Thomson, P. and Kamler, B. (2012). *Writing for Peer Reviewed Journals: Strategies for Getting Published*. Routledge.

Grading System:

Total Marks: 100 (Written Assignment: 60 marks, Oral Presentation: 40)

Rationale:

The course is designed to impart advanced knowledge and skills to various aspects of Research and Publication Ethics. Upon completion of the course, the student shall be able to

- Understand the basics of philosophy of science and ethics, research integrity, and publication ethics.
- Identify research misconduct and predatory publications.
- Understand Indexing and citation databases, open access publications, and research metrics (citations, *h*-index, Impact Factor, etc).
- Use plagiarism tools for a valid and ethical research report.

Unit I: Philosophy and Ethics

Introduction to philosophy: definition, nature and scope, concept, branches. Ethics: definition, moral philosophy, nature of moral judgments and reactions.

Unit II: Scientific Conduct

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 III: Publication Ethics

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 behavior and vice versa, types, Violation of publication ethics, authorship and contributorship; Identification of publication misconduct, complaints and appeals, Predatory publishers and journals.

UNIT IV: Open Access Publishing

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 V: Publication Misconduct

Subject-specific ethical issues, FFP, Authorship, Conflicts of interest; Complaints and appeals: examples and fraud from India and abroad. Software tools Use of plagiarism software like Turnitin, Urkund and other open-source software tools

UNIT VI: Databases and Research Metrics

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

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

Reference Books:

1. The Ethics of Teaching and Scientific Research By Miro Todorovich; Paul Kurtz; Sidney Hook.
2. Research Ethics: A Psychological Approach By Barbara H. Stanley; Joan E. Sieber; Gary B.Melton
3. Research Methods in Applied Settings: An Integrated Approach to Design and Analysis by Jeffrey A. Gliner; George A. Morgan Lawrence Erlbaum Associates, 2000
4. Ethics and Values in Industrial-Organizational Psychology By Joel Lefkowitz Lawrence Erlbaum Associates, 2003.

EvaluationPattern:

Total Marks = 100 (Internal = 30 marks & Final Examination = 70marks)