

## BMCC Research Center

Faculty of Commerce: Revised Syllabus for PhD Course Work

Research Methodology (Syllabus as defined by SPPU (2019))

Total Hours: 60 Credit :4

Research and Publication Ethics

Total Hours: 30 Credit 2

Probable date of Commencement of both courses: 2<sup>nd</sup> week of February 2023.

### Syllabus

Sr. No	Unit
1	Research Definition types expected outcome of Doctoral research contribution to knowledge and society
2	Research process, research method v/s methodology
4	Key concepts - observations facts, Laws, theories, induction, deductions, Assumptions, Fallacies, Augmentation, predictions, explanation, development of models
6	Qualitative and Quantitative research approaches, mixed mode research,
9	Descriptive research design
10	Experimental and quasi experimental research design
14	Literature Review, Writing of Review - Use of appropriate language, referencing style, software tools
15	Defining and Formulating research problems - selecting the problem - necessity of defining problem research area in functional and sectoral area of management
16	Formulating the research question, research problem, research objectives
17	Hypothesis - meaning types purpose framing the research hypothesis
18	Qualitative Research In depth interviews, focus groups, Observations etc
19	Qualitative Research - Ethnography, Ground Theory
23	Reliability & validity in Qualitative Research
24	Identifying Variables Levels of Variable Measurement types of Variables
25	Measurement of attitudes - Scaling Techniques, Multi item measurement scales, Scale adoptions Scale development
26	Reliability & validity of measures
27	Designing data collection instrument - questionnaire, interview guide, focus group discussion guide, web guide questionnaires
28	Pilot study - Objectives Method Sample Outcome
29	Fundamentals of Statistic, Understanding Normality, outliers, non response
30	Preparing the data analysis, processing of data - editing - classification coding and classification
31	Data representation tables graphs
32	Uni Variate Analysis
33	Hypothesis testing
34	Bi variate analysis

35	Multi variate analysis
36	Non Paramatic test
37	Analysing the finding & conclusion, lining back to the research questions and objective, linking back to literature
38	Guidelines about writing thesis - Pre writing considerations, layout, structure and language of typical reports - illustrations and tables, bibliography, referencing and footnotes
39	Ethics in research, ethical committee - inform consent - commercialisation, copywrite, IPR, Plagiarism, citation, Reproducivabilty and accountability.
40	Guidelines about publishing research work - identifying reputed journals indexing etc
	TOTAL

**A) Topic for Ph.D. research student for self-study**

<b>Sr. No</b>	<b>Unit</b>
3	Research philosophy Ontology, Epistemology
5	Research Paradigms - Positivist, Post Positivist Approach
7	Research Design
8	Exploratory Research Designs
11	Case Study Research Designs
12	Literature Review -Role and Importance
13	Literature Review -Sources, Methods, Outcome
20	Primary & Secondary data
21	Sampling terminology - Probability, and Non-Probability Sampling Methods
22	Sampling Size Decisions, Sampling for Qualitative Research and Sampling for Quantitative Research
23	Reliability and Validity in Qualitative Research
26	Reliability and Validity Measures
27	Designing of Data Collection Instrument - questionnaire, Interview schedule Group Discussion, Web Based Questionnaire
28	Pilot Study - Objectives, Method, Sample`
	Total

**C) Hours allotted ie. 19 hours can be used for individual guidance or group guidance by faculty.**

**Title of the course: Research and Publication Ethics**

**Total Hours: 30 Credit: 2**

**Faculty Ph. D. with the minimum 10 years teaching experience in the relevant subject.**

Course structure:

<b>Module</b>	<b>Unit Title</b>
Theory	
1	Philosophy and Ethics
2	Scientific Conduct
3	Publication Ethics
Practice	
4	Open Access Publishing
5	Publication Misconduct
6	Database and Research Matrix
	Total

Syllabus in Detail

Theory

Model 1: Philosophy and Ethics (3Hrs)

- i. Introduction to Philosophy – Definition, Nature and Scope, Concept and Branches
- ii. Ethics: Definition, Morale Philosophy, Nature of model judgement and reactions

Model II: Scientific Conduct (5 HRS)

- i. Ethics with respect to science and research
- ii. Intellectual honesty and research integrity
- iii. Scientific misconduct, Falsification and plagiarism
- iv. Redundant publication – duplicate and overlapping publications, Salami slicing
- v. Selective reporting and mis representation of data

Model III: Publication Ethics (7 HRS)

- i. Publication Ethics: definition, introduction and importance
- ii. Best practices, standard setting initiatives and guidelines – COPE, WAME etc
- iii. Conflict of interest
- iv. Publication misconduct definition – concept, problems that lead to unethical behavior and vice versa, types
- v. Violation of Publication ethics – authorship and contributor ship
- vi. Identification of Publication Misconduct – complaints and appeals

- vii. Predatory Publishers and journals

## PRACTICE

### Model; IV: Open Access Publishing(4HRS)

- i. Open Access Publication and Imitative
- ii. SAERPA/ RoMEO online research to check publishers copywrite and self-archiving policies.
- iii. Software tool to identify predatory publications develop by SPPU.
- iv. Journal finder/ journal suggestion tools viz, JANE, Elsevier Journal finder, Springer journal suggester etc.

### Model V: Publication Misconduct (4HRS)

- A. Group Discussion (2HRS)
  - i. Subject specific ethical issues FFP, authorship
  - ii. Conflict of interest
  - iii. Complaints and appeals: examples and frauds from India and abroad
- B. Software tools (2 HRS)  
Use of plagiarism software like Turnitin, Urkund and other open-source software tools

### Model VI : Database and Research Matrix (7HRS)

- A. Databases (4HRS)
  - i. Indexing databases
  - ii. Citation databases ie. Web of Science, Scopus etc
- B. Research Matrix (3 HRS)
  - i. Impact factor of journals as per journal citation report, SNIP, SJR, IPP, Cite Score
  - ii. Metrics – h- index, g index, i 10 index, altimetric

## Assessment and Evaluation

### FOR RESEARCH METHODOLOGY

1. 50 % marks for two home assignment
2. 25% marks for presentation of own research proposal
3. 25% marks for MCQ on entire syllabus
4. Total marks = 100

### FOR RESEARCH AND PUBLICATION ETHICS

1. 50 % marks for MCQ on entire syllabus.
2. 50% for practicals
3. Total marks = 100