

Ph.D. Course Work guidelines

- As per UGC Regulations 2016: Minimum Standards and Procedure for Award of Ph.D. Degree, After admission in PhD, a research scholar shall be required to undertake course work for a minimum period of one semester. All candidates admitted to the Ph.D. programme shall be required to complete the course work prescribed by the department during the initial one or two semesters. The women candidates may be allowed a relaxation of two terms / semesters in case of maternity.
- However, if the student is not in a position to complete the course work in the prescribed time limit as above, due to genuine reasons, may file an appeal and on the recommendation of the URC, the Registrar may grant extension up to additional one semester. Failing to complete the course work in the extended period may lead to cancellation of admission.
- Candidates already holding M. Phil. degree and admitted to the Ph.D. programme, or those who have already completed the course work in M.Phil. and have been permitted to proceed to the Ph.D. in integrated course, may be exempted by the Department from the Ph.D. course work. All other candidates admitted to the Ph.D. programme shall be required to complete the Ph.D. course work prescribed by the Department.
- 75 % attendance for coursework classes is required.
- Teaching work per credit is 10 hours. (This may include lectures, seminars, and tutorials).
- COURSE STRUCTURE:

Subject code	Name of course	Credits	Marks
019901	Research Methodology (Part A-Common, Part B: Subject related Research Methodology)	4	100 (Part A:70 + Part B:30)
019902	Subject specific topic (Assignment)	2	50
019903	Submission of literature review	2	50
Total		08	200

- AWARD OF GRADE:
 - A Ph.D. scholar has to obtain a minimum of 55% of marks or its equivalent grade in the UGC 7-point scale (or an equivalent grade/CGPA in a point scale wherever grading system is followed) in the course work in order to be eligible to continue in the programme and submit the dissertation/thesis.
 - Maximum two chances shall be given to the scholar for clearing the coursework, failing to which may lead to cancellation of admission.

- COURSE WORK ASSESSMENT:

Subject code	Assessment Pattern			
	Method of exam		Marks	Assessor
019901	Written examination			
	Research Methodology (Part A-Common, Part B: Subject related Research Methodology)	Objective questions (60 marks) 1 marker 30, 2 marker 15	60	University Exam Center
		Descriptive questions (40 marks) 10 marker any 2 out of 3, 5 marker any 4 out of 5	40	
019902	Submission of hardcopy			
	Subject specific topic (Assignment)	The topic for assignment should be related to scholar’s Ph.D. subject	50	Respective Guide
		Concerned research guide will give topic for assignment		
		Assignment shall be of at least 5000 words		
019903	Submission of hardcopy			
	Literature review related to Ph.D. topic	Document of at least 5000 words	50	Respective guide
Total			200	

SYLLABUS FOR COURSEWORK

Subject: Research Methodology

Code: 019901

Objective: To identify and apply appropriate research methodology in order to plan, conduct and evaluate basic research. The Course will furthermore enable scholars to distinguish between the scientific method and common sense knowledge while laying the foundation for research skills at higher levels.

Part A (Common for all faculties)

1. Basics of Research

Definition of research - Objective of research - Scientific research - Social science research - Ethics in research, Plagiarism, Copyright, How to write research proposal

2. Types and Methods of Research

Classification of Research- Pure and Applied Research - Exploring or Formulative Research - Descriptive Research - Diagnostic Research/Study - Evaluation Research/Studies - Action Research - Experimental Research - Analytical Study of Statistical Method - Historical Research - Surveys - Case Study - Field Studies

3. The Planning Process of Research

Selection of a Problem for Research - Variables - types of variables- Hypothesis Formation - Research Design/Plan, Research process

4. Review of Literature

Need for Reviewing Literature - What to Review and for What Purpose - Literature Search - Procedure - Sources of Literature, Methods of writing review from books, journals, reports etc.

5. Sampling

Sampling frame and design - Techniques or Methods - Choice of Sampling Techniques - Sample Size - Sampling and Non-Sampling Errors

6. Methods of Data Collection

Meaning and Importance of Data - Sources of Data - Use of Secondary Data - Methods of Collecting Primary Data

7. Quantitative and Qualitative Data

Observation Method - Experimentation - Simulation - Interviewing - Panel Method - Mail Survey Projective Technique – Sociometry, Sociogram, Content analysis

8. Tools for Data Collection

Types of Data - Construction of Schedules and Questionnaires – Field Work/survey research methods, Pilot Studies and Pre-tests, Developing research tool

9. Measurement of Scales and Indices – Metric and non metric scales, scaling techniques (comparative, non-comparative scales), Validity and reliability of data

10. Processing of Data

Editing - Classification and Coding - Transcription - Tabulation - Introduction to Statistical Software: SPSS - Graphical Representation

11. Statistical Analysis of Data

Statistical Analysis - Measures of Central Tendency - Measures of Dispersion - Measures of Association/Relationship – Type I and Type II error, Regression and Correlation Analysis - Hypothesis Testing - Test of Significance, Parametric and non parametric tests, Applicability of various tests i.e., Chi-square, ANOVA, Correlation and regression, Univariate/Bivariate/Multivariate analysis

12. Computer Application in Research

Introduction to MS Excel, Using Formulas and Functions, Hands on to SPSS, Features for Statistical Data Analysis, Generating Charts/Graphs, Introduction to MS Word, Features and Functions, Writing Report in MS Word, Introduction to Open Office or Latex, Creating Presentation in MS Power Point, Introduction to Internet Based Search, Use of Advanced Research Techniques, Exploring Shodhganga, Google scholar, Eric, Indian Educational Abstracts, Indexing and Citation databases (Web of Science, Scopus etc.)

13. Thesis/ Manuscript Writing

Types of Manuscript - Planning of Thesis Writing - Research Thesis Format(University guidelines) - Principles of Writing - Documentation - Data and Data Analysis in Thesis - Writing Synopsis, Writing of thesis - Typing of thesis - Briefing - Preparation of Manuscript for Publication of Research Paper - Pictures and Graphs, Citation styles, Writing a Review of Paper, Bibliography .

14. Reference styles

How to cite references, referencing styles - APA, MLA, Cambridge, Harvard, etc.

15. Submission of document about Literature review and assignment by research scholar

Suggested Readings:

1. Research Methodology: An Introduction by CR Kothari, New Age publication
2. Research Methodology: Methods and Techniques by C. R. Kothari, New Age International Publishers, ISBN:81-224-1522-9
3. Research Methodology for Business: A Skill Based Approach by Kumar, Shekaran (2009), New York, John Wiley Publishers.
4. Statistical Methods for Research Workers by Fisher R. A., Cosmo Publications, New Delhi ISBN:81-307-0128-6
5. Methodology of Research in Social Sciences by O. R. Krishnaswamy and M. Rangnatham Himalaya publication House, 2005, ISBN: 8184880936
6. Research Methodology-A Step-by-Step Guide for Beginners, Kumar, Ranjit. (2nd.ed), Pearson Education
7. Research Methodology: Concepts and cases by Chawla and Sondhi, Vikas Publication
8. Marketing Research, by Malhotra Naresh K. , Pearson Education Business Research Methods by Cooper & Schindler, Tata McGraw Hill
9. Sinha P.K., Computer Fundamentals, BPB Publishing
10. Power Analysis for experimental Research: A practical Guide for the Biological, Medical and Social Sciences by R. Barker Baushell, Yu-Fang Li Cambridge University Press

Part B (Research Methodology as per faculty/subject requirement) (Shall be covered by respective supervisor)