

PhD Course Work guidelines: Mandatory for PhD scholars

Compulsory Course Work:

As per UGC Minimum Standards and Procedure for Award of PhD Degree Regulations 2016, a PhD scholar shall be required to undertake course work for a minimum period of one semester which is compulsory pre-requisite for both full time and part time candidates.

It shall consist of one or more courses on Research Methodology which shall cover areas such as quantitative methods, computer applications, research ethics and review of published research in the relevant field, training, and field work and other areas found relevant to the discipline concerned. Other courses shall be advanced level areas in the subjects concerned for enabling the students to acquire deep knowledge in the preparation for PhD degree.

All the candidates admitted to the PhD program shall be required to complete the PhD course work prescribed by the University & respective Department during the initial / first semester. Research Supervisor along with Research Advisory Committee shall prescribe the courses and recruit faculty to teach candidates prescribed courses.

The concerned Department must be involved in teaching of Course Work, especially related to selection of Title and preparation of Synopsis.

A candidate will complete his Course Work of six months through intensive classes, assignments, review of literature, short studies under the recognized Supervisor & Research Advisory Committee.

After the completion of Course Work, examination will be conducted by Examination section of the University. In case candidate fails or drops in examination, one more chance will be given for the compulsory Course Work Examination.

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 Research Advisory Committee, the Dean may grant extension up to additional one semester. Failing to complete the course work within the extended period (within first year of admission) may lead to cancellation of candidature.

Scholars admitted to the PhD program shall be required to complete the course work prescribed by the respective departments during the initial one year from the date of registration, failing which the registration shall be automatically cancelled.

SYLLABUS FOR COURSEWORK: Research Methodology

Objective: To identify and apply appropriate research methodology in order to plan, conduct and evaluate basic research. The Course will enable scholars to develop the foundation for research skills at appropriate levels.

Part A: (Common for all faculties)

- 1. Basics of Research:** Definition of research - Objective of research - Scientific research - Ethics in research, Plagiarism, how to write research proposal
- 2. Types and Methods of Research:** Classification of Research- Descriptive Research - Diagnostic Research/Study - Evaluation Research/Studies - Experimental Research - Analytical Study of Statistical Method - Surveys - Case Study - Field Studies & others.
- 3. Review of Literature:** Need for Reviewing Literature - What to Review and for What Purpose - Literature Search - Procedure - Sources of Literature.
- 4. The Planning Process of Research:** Selection of a Problem for Research – Formulation of the Selected Problems - Hypothesis Formation - Measurement - Research Design/Plan, Research process.

5. Sampling: Sampling 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.

8. Tools for Data Collection: Types of Data - Construction of Schedules and Questionnaires - Measurement of Scales and Indices - Pilot Studies and Pre-tests.

9. Field Work: The Nature of Field Work - Selection and Training of Investigators - Sampling Frame and Sample Selection.

10. Processing & Statistical Analysis of Data: Editing - Classification and Coding - Transcription - Tabulation - Introduction to Statistical Software: SPSS - Graphical Representation.

Statistical Analysis - Measures of Central Tendency - Measures of Dispersion - Measures of Association/Relationship - Regression and Correlation Analysis - Hypothesis Testing (For Proportion and Means) - Test of Significance.

11. Computer Application in Research: Introduction to MS Excel, Using Formulas and Functions, Hand 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.

12. Report Writing: Types of Reports - Planning of Report Writing - Research Report Format - Principles of Writing - Documentation - Data and Data Analysis in Thesis - Writing of Report - Typing of Report - Briefing - Preparation of Manuscript for Publication of Research Paper - Pictures and Graphs, Citation styles, writing a Review of Paper, Bibliography, Writing Synopsis & Thesis.

13. Ethics in Research:

Course Outline: This course explores techniques for recognizing, analyzing, and resolving ethical dilemmas facing healthcare professionals and biomedical researchers in today's highly regulated environment. Use of humans and animals in research, data acquisition and management, protection of human subjects / animals involved in research programs.

14. Responsible conduct of research & Publication Ethics:

Course Outline: Promotion of academic integrity & prevention of misconduct including Plagiarism, using Plagiarism detection software tools, reference management tools, proper attribution, copyright & intellectual property right policies etc.

Include elements of responsible conduct of research, publication ethics, use of plagiarism detection tools and reference management tools as a compulsory course work for Research Scholars.

Part B: (Research Methodology as per faculty/subject requirement) (Shall be covered by respective supervisor, Research Advisory Committee).

COURSE STRUCTURE: (This may include lectures, seminars, and tutorials).

Sl. No	Name of course	Remarks
1	(Part A-Common for all) Research Methodology	As mentioned above
2	Part B: Subject related Research Methodology	
2.a.	Subject specific topic (Assignment)	Respective guide & RAC
2.b.	Seminar about literature review or research paper	

Course work examination & qualifying marks criteria:

a) A PhD. scholar has to obtain a minimum of 55% of marks or its equivalent grade in the UGC 7-point scale in the course work in order to be eligible to continue in the program and submit the dissertation/thesis.

b) Maximum two chances shall be given to the scholar for clearing the coursework, failing to which may lead to cancellation of admission.

c) 75 % attendance for coursework classes is required.

Evaluation process of coursework:

Paper setting & evaluation: The Controller of Examination section shall appoint paper setters nominated by Vice-Chancellor at his own discretion or from the list recommended by PhD committee.

Research methodology paper of the course work:

Subject	Type of Question	Marks	Centre Name
Research Methodology (Part: A) Common for all	Descriptive questions (15 marker any 4 out of 6)	60	University Exam Centre
	(Objective/short objective structured) 8 marker any 5 out of 6)	40	

Subject	Subject specific topic (Assignment)	Centre Name
Research Methodology (Part: B) as per Faculty/Subject requirement	Concerned research guide will give topic for assignment	Under supervision of respective guide in PhD research institute through the Research Advisory Committee.
	Seminar about literature review or research paper (in relevant subject)	

Note:

The course work is a pre-requisite for PhD program and all admitted candidates shall be required to complete the prescribed course work within the first year of PhD program.

Qualifying Examinations on prescribed Course work will be conducted by the university.