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NAAC (2021)
With CGPA 3.52

SHIVAJI UNIVERSITY, KOLHAPUR
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शिवाजी विद्यापीठ, कोल्हापूर - ४१६ ००४,
महाराष्ट्र
दूरध्वनी - ईपीएबीएक्स - २६०९०००, अभ्यासमंडळे विभाग –
०२३१—२६०९०९४

Ref.No. SUK/BOS/ **Date: 14 /06/2024**

To,

The Principals,
All Concerned Affiliated Colleges / Institutions.
Shivaji University, Kolhapur.

Subject: Regarding syllabi of Ph.D Course Work Education under the Faculty of Inter-Disciplinary Studies.

Sir/Madam,

With reference to the subject, mentioned above, I am directed to inform you that the university authorities have accepted and granted approval to the syllabi of Ph.D Course Work Education under the Faculty of Inter-Disciplinary Studies.

This syllabi shall be implemented from the academic year 2024-2025 onwards. A soft copy containing the syllabi is attached herewith and it is also available on university website www.unishivaji.ac.in. (Online Syllabus)

You are, therefore, requested to bring this to the notice of all students and teachers concerned.

Thanking you,

Yours faithfully,

Dr. S.M.Kubal
(Dy Registrar)

Copy to:

1	Director, Board of Evaluation and Examination	7	Centre for Distance Education
2	The Dean, Faculty of IDS	8	Computer Centre / I.T.cell
3	The Chairman, Respective Board of Studies	9	Affiliation Section (U.G.) / (P.G.)
4	B.A.,B.Com.,B.Sc. Exam	10	P.G.Admission / P.G.Seminar Section
5	Eligibility Section	11	Appointment Section -A/B
6	O.E. I, II, III, IV Section	12	Dy.registrar (On/ Pre.Exam)

SHIVAJI UNIVERSITY, KOLHAPUR

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Faculty of Interdisciplinary Studies

Syllabus for

Ph.D. Course Work

EDUCATION

(Revised Syllabus to be implemented from June, 2024 onwards)

SHIVAJI UNIVERSITY, KOLHAPUR

Master of Philosophy M. Phil. / and Doctor of Philosophy [Ph. D.]

M.Phil. Ph.D. Coursework COURSE STRUCTURE

(To be implemented from Academic Year 2020-21 Onwards)

A) Pre Registration Coursework :

Sr. No.	Paper Title	Examination Scheme				
		No. of credit	Theory		Minimum passing 40%	Total Marks
			Continuous Assessment	Written Examination		
1	2	3	4	5	6	7
1	Research and Publication Ethics (RPE)	2	20	30	20	50
Written Exam : MCQ TYPE / To be Conducted faculty wise through Examination Section						

Before the confirmation of registration, the scholar has to complete Pre - Registration Coursework.
Continuous Assessment will be done through tutorials, assignments, quizzes and group discussions, Weightage will be given for active participation. Final written examination will be conducted at the end of the course

B) After Registration Pre Ph.D. Coursework:

1) Total No .of Compulsory Papers as per UGC Guideline :

Sr. No.	Subjects / Papers	Marks
1	Research Methodology, Quantitative Techniques and Computer Application.	100
2	Recent Trends in the subject concerned	100
3	Optional Paper (Based on Specialization).	100
	Total	300

2) SCHEME OF TEACHING:

Sr. No.	Paper Title	Teaching Scheme			
		Lectures in Hours	**Seminars** in Hours	**Library Work** in Hours	**Total** Hours
1	Research Methodology, Quantitative Techniques and Computer Application	40	10	10	60
2	Recent Trends in the subject concerned	40	10	10	60
3	Optional Paper (Based on Specialization)	40	10	10	60

3) SCHEME OF EXAMINATION :

Sr. No.	**Paper Title**	**Examination Scheme**				
		No. of credit	**Theory** Marks	**Internal** Marks	**Minimum Passing 40%**	**Total Marks**
1	Research Methodology, Quantitative Techniques and Computer Application	4	80	**20**	**40**	100
2	Recent Trends in the subject concerned	4	80	**20**	**40**	100
3	Optional Paper - M. Phil /Pre. Ph. D. (Based on Specialization)	4	80 Marks	20	**40**	100
				Total		300

- **Theory Examination: is to be conducted by the university with duration of 3 hours per paper.**
- **Internal Examination is to be conducted by the concerned departments or research centers in the following form:**
  1. **For paper 1 and 2 the internal evaluation will include 2 Seminars of 10 Marks each**
  2. **For paper – 3 the internal evaluation will be as follows:**

  a) Seminars (Submission and Presentation)- 10 marks

  b) Review s Literature : Submission and Presentation- 10 marks

(Papers will have separate passing head for theory examination and internal evaluation 32+8=40)

STANDARD OF PASSING:

i) The scholar should secure minimum 40% marks to complete the course work in individual paper. M. Phil. / Ph.D. 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 programme and submit the dissertation / thesis (as per R.D. 11.9). the candidate will be allowed to reappear the examination for one, two or three papers if he / she could not achieve 55% aggregate in coursework examination.

ii) The examination shall be conducted at the end of each academic year.

iii) The evaluation of the performance of the scholars shall be as per scheme of examination.

iv) Question Paper shall be set in the view of the / in accordance with the entire syllabus and preferably covering each unit of syllabus.

NATURE OF QUESTION PAPER AND SCHEME OF MARKING:

The nature of question paper for the subject/paper shall be as indicated below:

a. Short answered questions *(Any Four Out of Six Questions)* *(20 Marks)*
b. Long answered questions *(Any Two Out of Four Questions)* *(20 Marks)*
c. Short notes *(Any Four Out of Six Questions)* *(20 Marks)*
d. Problems / Cases/Exercise Oriented Questions. *(Any One Out of Two Questions)* *(20 Marks)*

Note: *Question Paper should focus on all units in the syllabus*

Research Methodology, Quantitative Techniques and Computer Application

Objectives – 1. To familiarize the students with the nature of research in general and educational research in particular.
2. To equip the students to design and conduct a scientific inquiry.
3. To train students to use Web tools for conduct of Research
4. To enable the students to analyze the data quantitatively and qualitatively and draw valid conclusions.
5. To train the students to write the research report.
6. To enable the students to contribute research papers for educational journals, conferences and seminars.
7.To train students to evaluate Educational Research

Unit- 1: Fundamentals of Research (15 hrs)

(a) Introduction to Educational Research - Defining educational research and its significance - Philosophical foundations of educational research (ontology, epistemology, and axiology) - Quantitative, qualitative, and mixed methods research approaches in education

(b) Theory Building and Conceptual Foundations in Education - Understanding the role of theory in educational research - Developing educational concepts, constructs, and operational definitions - Exploring different levels of theory in education (grand, mid-range, and substantive)

(c) Variables and Measurement in Educational Research - Identifying and defining variables in educational contexts - Understanding variable attributes and measurement scales - Developing and validating research instruments (tests, surveys, observational protocols)

(d) Research Ethics in Education - Ethical principles in educational research (respect, beneficence, justice, and integrity) - Ethical guidelines and institutional review board (IRB) processes - Ethical considerations in educational data collection, analysis, and reporting - Responsible conduct of research and avoiding research misconduct in education

(e) Research Proposal Development in Education - Understanding the components of an educational research proposal - Crafting compelling research questions and objectives - Developing a theoretical framework and methodology for educational research - Effective communication of research significance and potential contributions

(f) Literature Review and Hypothesis Development in Education - Conducting comprehensive and systematic literature reviews in education - Identifying knowledge gaps and research opportunities in educational contexts - Formulating research questions and hypotheses in educational research - Evaluating the testability and falsifiability of hypotheses in education

(g) Research Designs, Sampling, and Methods in Education - Types of research designs in educational research (experimental, quasi-experimental, correlational, etc.) - Sampling techniques and sample size determination for educational studies - Data collection methods in educational research (surveys, interviews, observations, etc.) - Emerging research methods and tools in education (e.g., learning analytics, educational data mining)

(h) Innovation, Knowledge Advancement, and Application in Education - Promoting creativity and innovation in educational research - Advancing knowledge and theory in educational contexts - Disseminating and translating educational research findings - Implications and applications of educational research for practice and policymaking

Unit-2: Communication and Evaluation of Research (15 hrs)

(a) Report Writing and Research Paper Composition (6 hrs) - Structure and components of a research paper - Effective academic writing techniques - Formatting and citation styles (APA, MLA, Chicago, etc.) - Plagiarism avoidance and ethical considerations - Manuscript submission and peer-review process

(b) Presentation of Research Proposals (3 hrs) - Developing compelling research proposals - Effective communication strategies for oral presentations - Visual aids and presentation tools (PowerPoint, Prezi, etc.) - Handling questions and feedback during proposal defenses

(c) Evaluation of Research Reports (3 hrs) - Criteria for assessing research quality and rigor - Critical analysis of research methodology, findings, and conclusions - Providing constructive feedback and peer review - Ethical considerations in research evaluation

(d) Dissemination of Research (3 hrs) - Writing effective abstracts and synopses - Oral and poster presentations at conferences and seminars - Utilizing multimedia and digital platforms for research dissemination - Strategies for research communication and public engagement

Unit- 3 Quantitative Method (15 hrs)

(a) Use of Quantitative Methods in Research - Overview of quantitative research methods and their applications in the field of education - Strengths and limitations of quantitative approaches

(b) Types and Sources of Data - Categorical and numerical data - Primary and secondary data sources - Techniques for data collection (surveys, experiments, observations, etc.)

(c) Data Analysis for Specific Types of Data - Appropriate statistical techniques for analyzing categorical, ordinal, and interval/ratio data - Considerations for selecting the right data analysis method

(d) Tabulation and Graphical Representation - Constructing frequency distributions, histograms, bar charts, pie charts, and other visual representations of data - Interpreting and communicating findings through effective data visualization

(e) Measures of Central Tendency - Mean, median, and mode - Calculating and interpreting these measures for different data types

(f) Measures of Dispersion - Range, variance, standard deviation, and coefficient of variation - Assessing the spread and variability of data

(g) Correlation - Concept of correlation and its types (Pearson, Spearman, etc.) - Calculating and interpreting correlation coefficients - Assumptions and limitations of correlation analysis

(h) Regression - Simple and multiple linear regression - Interpreting regression coefficients and the coefficient of determination (R-squared) - Assumptions and limitations of regression analysis

(i) Use of Chi-Square - Concept and applications of the chi-square test - Calculating and interpreting chi-square statistics

(j) Steps Involved in Applying Chi-Square Test - Formulating hypotheses - Calculating expected frequencies - Computing the chi-square statistic - Determining the p-value and drawing conclusions

(k) Non-Parametric or Free-Distribution Tests - Wilcoxon signed-rank test, Mann-Whitney U test, Kruskal-Wallis test, etc. - Assumptions and appropriate use of non-parametric tests

(l) Testing of Hypotheses for Non-Parametric Data - Formulating null and alternative hypotheses - Selecting the appropriate non-parametric test based on the research question and data characteristics - Interpreting the test results and drawing conclusions

Unit- 4 Computer Application for Research (15 hrs)

Advanced Computer Applications in Education:

- Word processing (e.g., Microsoft Word, Google Docs)
- Data processing (e.g., spreadsheet management, database management)
- Graphical processing (e.g., creating and editing images, diagrams, and visualizations)

Web-based Research Tools and Techniques:

- Introduction to Web 2.0 tools for research (e.g., online collaboration, social media, research networks)

- Effective use of search engines and academic databases
- Research data management and citation tools

Quantitative Data Analysis using Statistical Software:

- Introduction to Excel for data analysis (e.g., data organization, calculations, charts, and graphs)
- Introduction to SPSS (Statistical Package for Social Sciences)
- Descriptive and inferential statistics using SPSS
- Data visualization and interpretation

Multimedia and Instructional Technology:

- Principles of multimedia learning
- Use of graphical software (e.g., Adobe Illustrator, Inkscape, Canva)
- Creating and editing multimedia resources (e.g., presentations, videos, animations)
- Integrating multimedia in teaching and learning

Paper –II (Compulsory) RECENT TRENDS AND ADVANCES IN EDUCATION

Marks: **Duration: 60 hrs**

Objectives: To enable the student to -
1) Be aware of the recent trends and advances in the field of Education.
2) Apply the knowledge of recent trends for teaching, research and administration.

Unit: 1 Learning Society (15 hrs)
a) Concept of Learning Society
b) Lifelong learning , Heutagogy
c) Pillars of Education and Tensions in Education according to Dellor's Commission
d) National Knowledge Commission
e) Indian Knowledge System

Unit: 2 Neuropsychology of Learning (15 hrs)
a) Multiple Intelligence
b) Neuroscience of learning and teaching
c) Critical thinking and Human emotions
d) Counseling for Psychological problems in the Educational context
e) Brain based Teaching Learning Strategies

Unit: 3 Process of Teaching and Teacher Education (15 hrs)
a) Levels of learning
b) Measurement of teaching
c) Constructivist approach to teaching
d) Resourceful and innovative teaching
e) Classroom processes: social, emotional, logical, substantive, pedagogical and managerial
f) Presage and contextual variables of a teacher

Unit : 4 Trends in Education (15 hrs)
a) e- Teaching, e-Learning and e-Evaluation
b) Inclusive Education
c) Education for Peace
d) Global Education
e) TQM in Education
f) Sustainable Development Goals (Goal No.4)