MAHATMA GANDHI UNIVERSITY
KOTTAYAM

SCHOOL OF PEDAGOGICAL SCIENCES
Ph.D. (Education) Course Work Programme

SCHOOL OF PEDAGOGICAL SCIENCES

Ph.D. COURSE WORK

VISION OF THE UNIVERSITY

"Mahatma Gandhi University envisions to excel in the field of higher education and caters to the scholastic and developmental needs of the individual, through continuous creation of critical knowledge base for the society's sustained and inclusive growth."

VISION OF THE SCHOOL

Groom competent Teacher Educators and Researchers capable of imparting world class Teacher Education and elevate the discipline of education to global standards.

MISSION OF THE SCHOOL

- To elevate the institution as the ultimate destination for Teacher Education in all matters related to Teaching, Research and Extension.
- To create a cadre of professionally trained Teacher Educators who are in high demand in the globalised scenario.

Regulation and Syllabus for Ph.D. Course Work (Full Time/ Part-Time)

1. Title:

The title of the course is Ph.D. course work for Full Time/Part Time Ph.D. Scholars in Education.

2. Objectives

At the end of or during the course, the student will be able to:

- Explore educational research methods in detail.
- Identify different types of educational research.

- Explain the different statistical techniques for educational research.
- Apply statistical packages for data analysis.
- Review in detail related literature and studies.
- Reflect on the contemporary trends and discourses in Educational Research.
- Appraise different dimensions of research ethics and academic writing.
- Apply Philosophical thoughts in Educational Research.
- Build a Sociological perspective in Educational Research.
- Integrate modern approaches in instructional practices in Educational Research.
- Critically examine curricula and assessment practices in Educational Research.
- Contribute to knowledge domain.

3. Duration

The duration of the program shall be one semester or six months, as prescribed in the Ph.D. ordinance of the university/regulations for the Full Time and Part Time Ph.D. The coursework will consist of 14 credits.

4. Medium of Instruction

The medium of instruction shall be English.

5. Instruction

Instruction will be face-to-face/online/hybrid mode for the Full Time/Part Time Scholars.

6. Course Outline

A minimum of four credits shall be assigned to one or more courses on Research Methodology which could cover areas such as quantitative methods, computer applications, research ethics and review of published research in the relevant field, training, fieldwork, etc. All candidates admitted to the Ph.D. programme shall be required to complete the course

work prescribed as per the University Ph.D. regulations modified from time to time. There are four papers included in the coursework of the Ph.D. (Education) Programme.

7. Course Details

The course details are as follows:

Sl.No.	Course Code	Title of the course	Type of Course- Core/ DSE/ SEC/ AECC/ others	Credits
1	SPSDCIC1301	Research Methodology: Praxis and Paradigms	Core	4
2	SPSDCIC1302	Innovative Reflections in Pedagogy	Core	4
3	SPSDCIC1303	Constructs and Practices in the area of Research	Elective	4
4	SPSDCIC1304	Research and Publication Ethics	Core	2
	Four courses			**14 credits**

8. Assessment

The assessment is continuous and comprehensive including internal and course end assessments. An absolute grading system is followed by the Mahatma Gandhi University. Under this system, the marks are converted to letter grades based on pre-determined mark intervals. The performances of students in each course are expressed in terms of marks as well as in Letter Grades.

Sl.No.	Range of Marks in %	Grade
1	95 to 100	Outstanding
2	85 to 94	A Plus
3	75 to 84	A Only
4	65 to 74	B Plus
5	55 to 64	B Only
6	Below 55	Failed
7	Absent	AB

COURSE I SYLLABUS

SPSDCIC1301: Research Methodology: Praxis and Paradigms (4 Credits)

Course Description:

This course provides insight into different aspects of educational research by identifying the contemporary issues in Education and this course develops ability to do independent research by preparing tools and adopting techniques for data collection, analyzing data for interpretation and generating conclusion, suggestions and policy implications.

I. An introduction to Research

A brief history of Research – Objectives and types of Research – Action Research

II. Literature Review and Focusing Research Questions

Critical Analysis of Literature Review – Developing Research questions and hypothesis – different types of hypotheses.

III. Restrictions and Ethics in Research

Legal restrictions in Research formulations- BPS/APA Ethics code – Ethical issues- Assessing the ethical feasibility of the research – Ethical guidance in conducting research with children.

IV. From Research Questions to Data Collection:

Collecting Quantitative Data: Selecting and developing of quantitative instruments or techniques- Construction and standardization of different tests- Achievement Test, Attitude scale, Interest inventories – Reliability and Validity.

Sampling — Different Types - Sampling Errors - Type I and Type II errors - Different types of variables.

Research Designs – Survey Research, Experimental Research, Quasi experimental Research, Historical Research, Analytical Research, Correlational Research.

Qualitative Research – Diversity in qualitative Research – Case studies, ethnography – grounded theory – Discourse Analysis, Interpretive phenomenological Analysis, Triangulation.

Mixed Method Research- combining qualitative and quantitative data, Designs in Mixed method research.

V. Data Analysis and Interpretation:

Data processing and Analysing strategies- Descriptive Analysis – Central Tendency and Dispersion, Coefficient of Variation – Correlation and Regression Analysis.

VI. Reporting and Thesis Writing:

Structure and Components of Research Report – APA format

VII. Application of Computer in Educational Research:

MS Office- MS Word, MS Excel, MS Power point, Free software – Linux.

Basic Principles of Statistical Computation using SPSS

Internet in Research- use of internet sites, search engines, E-journal and E- library- INFLIBNET

Reference:

1. John W. Best & James V. Kahn (2007). Research in Education. New Delhi: Prentice Hall of India Private Limited.

2. S. Anandalakshmy, Nadita Chandhara, Neeraja Sharma (2008). Researching families and children culturally Appropriate Methods. New Delhi: SAGE Publications India Pvt.Ltd.

3. Anthony, M., Graziano, A.M & Raulin, M.L. (2009). Research Methods: A process of Inquiry: Allyn and Bacon.

4. Satarkar, S.V. (2000). Intellectual Property rights and copy right. Ess Ess Publications.

5. SPSS- Operating Manual and handbook – latest version.

6. Gay, L.R. (1996). Educational Research competencies for Analysis and Application. USA: Prentice Hall International (UK) Limited.

7. Donald M.McBurney (2001). Research Methods- USA: Wadsworth Thomas Learning.

8. James H.McMillan & Sathy Suhumacher (1989). Research I Education. A conceptual introduction. USA: Harper Collins.

SPSDCIC1302: Innovative Reflections in Pedagogy (4 Credits)

Course Description:

This course deals with application of philosophical, psychological and sociological perspectives in Education Research. The Scholars will acquire knowledge to integrate the modern approaches in instructional practices in Educational Research. Also, the course develops the ability to critically analyze the topics pertaining to gender, environment and inclusion in Educational Research.

I. Applied Philosophy

Applications of Western and Indian Schools of Philosophy in the present educational scenario. Changes in values- Influence of Western culture – Role of Indian Philosophers in Value Education.

II. Applied Sociology

Social constructivism – Social issues and problems – Roles of Educator: Integrated/ Inclusive Education.

Human Rights Education, Women's Education – Women Empowerment, Rights to Education- National policies on education: Articles and Amendments.

III. Applied Psychology

Applications of theories of Piaget, Bruner, Gagne, Ausubel and Vygotsky in teaching learning process.

Class room applications of personality theories- Freud, Rogers, Bandura – Modern Techniques in personality.

Various types of Intelligences – Multiple Intelligences – Emotional Intelligence, Moral Intelligence – Spiritual Intelligence. Classroom applications of theories of Gardner, Goleman. Techniques of Improving Intelligence, Creativity and problem-solving ability.

Assessment of Intelligence and personality – Modern Techniques.

Psycho- somatic disorders in children – Drug addiction, use of narcotics, Hallucinogens etc. Measures for improving Mental Health and Mental Hygiene -Techniques of Guidance and Counselling. Effective classroom management-coping with undesirable behaviours.

IV. Modern Instructional Approaches:

Computer supported collaborative Learning (CSCL) - Technology Enhanced Learning (TEL) Computer Aided/Managed Assessment - Cloud computing – M-Learning-Blended learning - Ubiquitous (U-Learning) – Concept mapping, mind mapping.

Models of Teaching-Families of models-Modern Teaching Models.

Preparation of lesson transcripts in any one model from each family and in one modern teaching model.

Instructional Design- Laurillard's Conversational Model - Gilly Salmon's Five stage model.

V. Assessment Practices

Identifying expectations – Advanced questioning – Effective assessment – Grading – Rubric designing – Accountability – Assessing Process skills and behavior.

VI. Quality improvement in Primary Education

Recommendations of educational commissions, Acts

Issues, problems and remedial measures of primary Education in Kerala

Innovations in Curriculum development and evaluation in primary Education.

VII. Knowledge Management

Knowledge Management strategies, Knowledge Management techniques, Transforming information to Dynamic knowledge.

Reference:

1. Helnich, Robert, Michael Molenda and James D Russell (1989). Instructional Media and the New Technologies of Instruction – New York: Mac Millian Publishing Company.

2. Batis, A. and Pook, G (2003). Effective Teaching with Technology in Higher Education. San Francisco: Jossey – Bass/ John Wiley.

3. Brameld, T. (1971). Patterns of Educational Philosophy. New York, Hold: Rinehart & Winston.

4. Mc. Celellan.J.E (1976). Philosophy of Education. New Jersey: Prentice Hall.

5. Lucan, J.C. (1972). Our Western Educational Heritage, New York: Mac Millan.

6. Creswell J.W (2007). An Introduction to Mixed methods Research, Sage Publications.

7. Creswell J.W (2009). Research Design: Qualitative, Quantitative and Mixed Methods Approaches, Sage Publications.

SPSDCIC1303: Constructs and Practices in the area of Research (4 Credits)

Course Description:

The course provides in depth knowledge regarding the constructs and practices of the topic of research. The recent trends and innovations in the variable under study is detailed and comprehended for making valuable contributions to the domain of knowledge by way of the research study undertaken.

I: Recent Trends in Technology-Mediated Learning

Platforms for flexible Instructional Collaboration, Scope for Motivational Guidance in Technology mediated Learning, Scaffolding for Self-Reliance and fostering Social Sensitivity, Applications of Technology-Mediated Learning in Zoology.

II: Hybrid Learning

Conceptual Foundation, The Framework and Design, Integrating Cognitive Strategies, Nurturing Affective Strategies- Social Sensitivity and Motivation.

III: Hybrid Learning in Practice

Practical Application of Hybrid Learning in Higher Education, Selection of Hybrid Learning Models, Designing Hybrid Learning Modules, Delivery modes and procedures.

IV: Designing Hybrid Learning Modules

Tools and Techniques for designing Hybrid Learning Modules, Learning Strategies in Hybrid Learning, Merging Digital and Physical Experience, Review of Best Practices.

V: Teaching in Hybrid Learning Environments

Facilitation - Techniques, Principles and Practices, Direct Instruction – Methods and Strategies, Assessment – Modes and Praxis, Best Practices and Tips

Reference:

1. Almarode, et.al. (2021). *The Quick Guide to Simultaneous, Hybrid, and Blended Learning,* United States: Corwin Publishers.

2. Ark, T.V. (2011). *Getting Smart: How Digital Learning is Changing the World*, California: Jossey- Bass Publishers.

3. Arnab, S. (2022). *Game Science in Hybrid Learning Spaces*, New York: Routledge Publishers.

4. Bai, X., & Smith, M.B. (2010). Promoting Hybrid Learning Through a Sharable eLearning Approach,*Journal of Asynchronous Learning Networks*, 14(3).

5. Caulfield, J. (2011). *How to Design and Teach a Hybrid Course: Achieving Student-Centered Learning Through Blended Classroom, Online and Experiential Activities,* USA: Stylus Publishing Ltd.

6. Gil, E. (2022). *Hybrid Learning Spaces*, New York: Springer Publishers.

7. Handayani, T., et.al (2021). Developing hybrid learning models platform based on user experience, *The 5th Annual Applied Science and Engineering Conference* doi:10.1088/1757-899X/1098/3/032018

8. Hirumi, A. (2013). *Online and Hybrid Learning: Design Fundamentals*, USA: International Society for Technology in Education Publishers.

9. Lin, Q. (2008). Student Views of Hybrid Learning: A One-Year Exploratory Study, *Journal of Computing in Teacher Education,* 25(2).

SPSDCIC1304: Research and Publication Ethics (2 Credits)

Theory

I: PHILOSOPHY AND ETHICS

Introduction to Philosophy: definition, nature and scope, concept, branches.

Ethics: Definition, moral philosophy, nature of moral judgements and reactions.

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

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

Practice

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.

V: PUBLICATION MISCONDUCT

A. Group Discussions

Subject specific ethical issues, FFP, authorship

Conflicts of interest

Complaints and appeals: examples and fraud from India and abroad.

B. Software tools

Use of plagiarism software like Turnitin, Urkund and other open source software tools

VI: DATABASES AND RESEARCH METRICS

A. Databases

Indexing databases

Citation databases: Web of Science, Scopus etc.

B. Research Metrics

Impact factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score

Metrics: h-index, g index,i10 index, altmetrics