

KRANTIGURU SHYAMJI KRISHNA VERMA KACHCHH UNIVERSITY

Reference:

- 1. Krantiguru Shyamji Krishna Verma Kachchh University Ordinance for Ph.D. Programme- 2023
- 2. University Grants Commission (Minimum Standards and Procedures for Award of Ph.D. Degree) Regulations, 2022

Introduction:

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As per the Ph.D. Ordinance-2023 of Krantiguru Shyamji Krishna Verma Kachchh University and UGC Regulation-2022, the Ph.D. Coursework at the university consists of a minimum of 12 credits. This coursework includes two components: Research Methodology (which incorporates Research and Publication Ethics, as specified by UGC in D.O. No. F.1-1/2018 (Journal/CARE) in 2019) with a minimum of 6 credits, and Subjective Courses with a minimum of 6 credits. To continue in the Ph.D. program and submit their thesis, Ph.D. scholars must achieve a minimum of 55% marks or its equivalent grade on the UGC 10-point scale in the Ph.D. coursework.

Structure of the Coursework:

DETAILED PH.D. COURSEWORK STRUCTURE (MINIMUM 12 CREDITS)

Research Methodology	Research and Publication	Subjective Course	
Course	Ethics Course	(Minimum 6 Credits)	
(4 Minimum Credits)	(2 Minimum Credits)		
will be common for all Faculties/Group i.e. Arts, Science, Commerce and Law	1. Science Group	respective department and t content for the same will decided by respective Head	
 different for following disciplines 1. Science Group 2. Languages Group (Gujarati, Hindi, Sanskrit, English) 	3. Humanities, Social Work, Commerce, Management,	the Department and Dean the concerned Faculty	

- Humanities, Social Work, Commerce, Management, Law and Education Group
- Hishna Varma Hachrichh HUJ-Kachchh 370001

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Detailed Syllabus:

Module	Detailed content	Credit
1.	Research Methodology and Problem Identification and Formulation: Meaning and objectives, motivation of research, types of research, research methods v/s methodology, research and scientific methods, research process and stages of research, defining and formulating the research problem, technique involved in defining a problem, importance of literature review in defining a problem, role of literature review, ways to perform literature review, methods to find open problem and research problems, critical literature review, identifying gap areas from literature study, hypothesis building	
2. 3.	 Research Design and Data Collection and Analysis: Need of research design, concepts related to research design, different research designs, research plan, basic principles of experimental design and setup, collection of primary data, observation methods, interview methods, collection of data through questionnaire and schedules, collection of secondary data, selection of appropriate method for data collection, case study method, guidelines for developing questionnaire, successful interview, survey v/s experiment, processing and data analysis, use of statistical packages, measure of asymmetries and other measures. Fieldwork-The Nature of Field Work, Selection and Training of Investigators, Sampling Frame and Sample Selection, Field Operation, Field Administration. Probability Distribution and Hypothesis Testing: Sampling and probability distribution, definitions and basic concepts of hypothesis testing, procedures of hypothesis testing, flow diagram for hypothesis testing, test of hypothesis, important parametric test, hypothesis testing of mean, proportion, tests for equality of mean and variances of two population, confidence interval, z-test, and X2 test for goodness to fit, limitation of test of hypothesis. 	04
4.	Analysis of Variance and Covariance: Basic principle of Analysis of Variance, ANOVA Technique, Setting up Analysis of Variance Table, short-cut method for oneway ANOVA, Coding method, Two-way ANOVA, ANOVA in Latin-square design, analysis of co-variance (ANCOVA), assumptions in ANCOVA. Academic Ethics: Plagiarism, exposure on anti-plagiarism tools.	
5.	Technical Writing and IPR: Academic writing, sources of information, assessment of quality of journals and articles, writing scientific report, structure and component of research report, types of report – technical reports and thesis, SCOPUS Index, citations, search engines beyond google, impact factor, H-Index. IPR: What is IPR?, importance of patents, types of IPR, process of patent.	
6.	Research and Publication Ethics: Philosophy and Ethics, Scientific Conduct, Publication Ethics, Open Access Publishing, Publication Misconduct, Databases and Research Metrics.	



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SUGGESTED LECTURES TOPICS:

COMMON RESEARCH METHODOLOGY COURSE FOR ALL FACULTIES (Minimum 1 Credit)

Topic/ Session Name

Introduction to Research

Quality of Research

Motivation to Research & Literature Review

Planning & Implementation of Research Activities

Paper & Thesis Writing

Innovation & Critical Thinking

Briefing of Krantiguru Shyamji Krishna Verma Kachchh University Ordinance for Ph.D. Programme- 2023 and University Grants Commission (Minimum Standards and Procedures for Award of Ph.D. Degree) Regulations, 2022



RESEARCH METHODOLOGY COURSE- SCIENCE GROUP (Minimum 3 Credit)

Topic/ Session Name

Use of ICT in Research –I
Use of ICT in Research – II
Use of ICT in Research - III
Statistical Analysis Through R
Lab Safety
Design of Experiment, Types of Common Errors in Experimental Design
Instrumentation for Modern Science Research
Introduction to Sci Lab
LaTeX Scientific Document Preparation Tool - I
LaTeX Scientific Document Preparation Tool – II
Bibliographic Tools
AI Application in Research
Statistical Data Analysis and Tabular Presentation of Data
Descriptive Statistical Analysis
Statistical Data Analysis: Parametric Statistics - I
Statistical Data Analysis: Parametric Statistics – II
Research Metrics: Impact Factors of Journals as per Citation Reports
Database: Citation Database, Web of Science, Scopus etc.
Research Publication: Patent & Research Outcomes
Types of Research
MS Excel
Ms. Excel-II
Philosophy of Research in Science – I
Philosophy of Research in Science - II
Population, sample and Sampling Techniques
Research Design
Errors in Observation and Propagation of Errors
Computers and Researcher
General Seminar Session



RESEARCH AND PUBLICATION ETHICS COURSE- - SCIENCE GROUP (Minimum 2 Credits)

Topic/ Session Name

Publication Ethics – I Publication Ethics - II

Publication Ethics – III

Publication Ethics – IV

Ethics, Definition, Moral, Philosophy, Nature of Moral Judgement and Reactions - I

Ethics, Definition, Moral, Philosophy, Nature of Moral Judgement and Reactions - II

Open Access: Greater Impact for your Research

SHERPA/ROMEO and Journal Finders useful Online Resources for Research

Enhancing Research Output & Visibility

Database & Research Metrics

Various Types of Reports & Ethics

Redundant Publications: Duplicate and Overlapping Publications, Salami Slicing, Selective Reporting and Misinterpretation of Data

Ethics in Science Publication

Importance of Mentorship in Research

AI: A blessing or a Curse for Research

Computational v/s Analytical Research in Science

Scientific Conduct

Publication Misconduct

Journal Finder/journal suggestion tools

Use of Plagiarism software



RESEARCH METHODOLOGY COURSE- LANGUAGE GROUP (English. Gujarati, Sanskrit, Hindi) (Minimum 3 Credit)

Topic/ Session Name

Documentation of Research and Method and Area of Research Characteristics of Academic and Research Report Presentation Effective Presentation Research in Poetry Some Important Research in Language and Advance Research in Language Types of Research and Research using Psychological Methods and Critics of Literature and Problem in Language Research Importance of report writing in academics and research Necessity of Report Writing for Achievement of Academics and Research Goals Necessity of Report Writing for Achievement of Academics and Research Goals Distinct Character Sticks of Research in Literature Identify Research Problems in Language and Literature Marketing Effective Presentation using PowerPoint - I Marketing Effective Presentation Using PowerPoint -II Important Language Skill of Research Research in Literature Various Word Processors, E.g. MS- Word, Libra-office, Google docs. etc... Tips of Writing Outstanding Communication Etc... How to Prepare a Research Paper-I How to Prepare a Research Paper-II Research in Comparative Literature - I Research in Comparative Literature - II Research Material Compilation and Notes Writing Techniques - I Research Material Compilation and Notes Writing Techniques - II Indian Research Methodology Word Processors Tools for Indian Languages (Emphasis on Sanskrit, Hindi and Gujarati) Scope of Research Qualitative Research in Language and Types of Research Degree Granting Researches and Study - Based Researchers Computers and Researcher General Seminar Session



RESEARCH AND PUBLICATION ETHICS COURSE- - LANGUAGE GROUP (English. Gujarati, Sanskrit, Hindi) (Minimum 2 Credits)

Topic/ Session Name

Publication Ethics - I

Publication Ethics - II

Publication Ethics - III

Publication Ethics - IV

Ethics, Definition, Moral, Philosophy, Nature of Moral Judgement and Reactions - I

Ethics, Definition, Moral, Philosophy, Nature of Moral Judgement and Reactions - II

Software Tools – Use of Plagiarism Software like Turnitin, Urkund and other Open-Source Software Tools

Duplicate Publications and Simultaneous Submissions

Databases: Indexing Database and Citation Database -Web of Science, Scopus etc & Research Metrics: Impact Factors of Journal as Per Journal Citation Report SNIP, SJR, IPP, Cites Score and Metrics – H-Index G- Index, I10-Index Almetrics – I

Databases: Indexing Database and Citation Database -Web of Science, Scopus etc & Research Metrics: Impact Factors of Journal as Per Journal Citation Report SNIP, SJR, IPP, Cites Score and Metrics – H-Index G- Index, 110-Index Almetrics-II

Databases: Indexing Database and Citation Database -Web of Science, Scopus etc & Research Metrics: Impact Factors of Journal as Per Journal Citation Report SNIP, SJR, IPP, Cites Score and Metrics – H-Index G- Index, 110-Index Almetrics-III

Research Metrics: Impact Factors of Journal as Per Journal Citation Report SNIP, SJR, IPP, Cites Score and Metrics – H- Index G- Index, I10-Index Almetrics

Research in Literature

Importance of Publication Ethics

Ethics with respect to research to languages - I

Ethics with respect to research to languages - II

Immigration and cultural integration

Cultural customs and how they impact society

Impact Factor of Journal as per journal citation report, SNIP, SJR, IPP, Cite Score

Use of Plagiarism software



RESEARCH METHODOLOGY COURSE- HUMANITIES, SOCIAL WORK, COMMERCE, MANAGEMENT, LAW AND EDUCATION GROUP (Minimum 3 Credit)

Topic/ Session Name

Introduction to Course Work and Research Designs Sampling Design Problem Definition & Identification Hypothesis Formulation Questionnaire Design Field Work Opportunities & Challenges of Research Social Science Research **Research Proposal** Literature Review Tools of Data Collection Qualitative Research Methods-I Qualitative Research Methods-II **Research Metrices** Data Base Management Uncovering the Unexplored: Research Opportunities in the realm of IKS ICT in Research-I ICT in Research-II Statistics analysis through SPSS-I Statistics and Social Sciences Understanding Social Science Research Post COVID Applications of AI **Research Topic Relevance** Thesis Writing Parametric Tests Non-Parametric tests Analysis of Variance (ANOVA) Chi-square Test General Seminar Session



RESEARCH AND PUBLICATION ETHICS COURSE- - HUMANITIES, SOCIAL WORK, COMMERCE, MANAGEMENT, LAW AND EDUCATION GROUP (Minimum 2 Credits)

Topic/ Session Name

Publication Ethics - I Publication Ethics - II Publication Ethics - III Publication Ethics - IV **Referencing Ethics Research Ethics** Theory Building Measurement & Scaling Social Science Research Publication Database I-Citation Database Evaluation Criteria of Research Funding Agencies Database II-Indexing Database Importance of Literature Review and Ethics Software Tools: Use of Plagiarism Software Netnography in Research Enhancing Research Output & Visibility Publication Misconduct: Its Violation & Identification Academic Writing Journal Finder/journal suggestion tools Impact Factor of Journal as per journal citation report, SNIP, SJR, IPP, Cite Score



Examination Pattern and Assessment of the Ph.D. Coursework (Research Methodologyincluding Research and Publication Ethics):

Research Methodology: 4 credits (Assessment from 100 marks)

Attendance: Minimum 80% compulsory to appear in the examination. Seminar Presentation: 30 marks Written Examination: 70 marks (2 hours duration)

Style of question paper:

Section-1 will be MCQ based on Common Sessions. There will be 30 questions, carrying 1 mark each.

Section-2 will be based on individual groups. There will be 20 questions of short answer type. Each question carries 2 marks.

Passing standard: Minimum 55 /100 marks

Research Publication and Ethics: 2 credits (Assessment from 50 marks)

Attendance: Minimum 80% compulsory to appear in the examination. Attendance: 10 marks Assignment: 20 marks Group Discussion: 20 marks Passing standard: Minimum 28 /50 marks

Examination Pattern and Assessment of the Ph.D. Coursework (Subjective): 6 Credits (Assessment from 150 marks)

The department will decide the examination pattern and assessment style according to nature of the subject and content of the coursework. The candidate must score at least 55% in the subjective assessment also.



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