

(Extra-Ordinary)

NOTIFICATION

No. 131 /2018

Date : 03/12/2018

Subject : Syllabus of Ph.D. Course Work for all faculties.
Reference : Notification No.126/2016 dated 26.12.2016.

It is notified for general information that the Vice-Chancellor of the University has accepted the syllabus of Course Work on behalf of Academic Council under Section 12(7) of Maharashtra Public Universities Act,2016 as recommended by the committee constituted for changes in course work in view of Maharashtra Public Universities Act,2016.

The syllabus consists of Module-I (Research Methodology), Module-2 (ICT Skills), Module-3 (Recent Trends in the subject), Module-4(Review of Literature) and Module-5 (Seminar for all faculties) to be conducted by the Research Centres for all faculties as per the provisions of Ordinance No.1 of 2016.

It is further notified that the eligibility criteria and other details regarding Course Work shall be as provided under Ordinance No.1 of 2016 .

Sd/-
(Dr. A.P.Deshmukh)
Registrar
S.G.B. Amravati University, Amravati

Ph. D. COURSEWORK
FACULTY OF SCIENCE AND TECHNOLOGY
Syllabus for Module-I: Research Methodology

Teaching scheme

Lectures: 05 Hrs/week

Credits: 05

Examination Scheme

Theory: 80 Marks

Internal Assessment: 20

Duration: 3 Hrs

Course objectives:

- To understand the role of research methodology in Engineering/Science/Pharmacy
- To understand literature review process and formulation of a research problem
- To understand data collection methods and basic instrumentation
- To learn various statistical tools for data analysis
- To learn technical writing and communication skills required for research
- To create awareness about intellectual property rights and patents

Unit I: Introduction to Research

(09 Hours.)

Definition of research, Characteristics of research, Types of research- Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical, Overview of research methodology in various areas, Introduction to problem solving, basic research terminology such as proof, hypothesis, lemma etc., Role of Information and Communication Technology(ICT) in research.

Unit II: Research Problem Formulation and Methods

(09 Hours.)

Literature review, sources of literature, various referencing procedures, maintain literature data using Endnote2, Identifying the research areas from the literature review and research database, Problem Formulation, Identifying variables to be studied, determining the scope, objectives, limitations and or assumptions of the identified research problem, Justify basis for assumption, Formulate time plan for achieving targeted problem solution.

Important steps in research methods: Observation and Facts, Laws and Theories, Development of Models, Developing a research plan: Exploration, Description, Diagnosis and Experimentation

Unit III: Data collection

(09 Hours.)

Static and dynamic characteristics of instruments, calibration of various instruments, sampling methods, methods of data collection, Basic Concepts concerning testing of hypotheses, procedures of hypothesis testing, generalization and interpretation Applied statistics: Regression analysis, Parameter estimation, Multivariate statistics, Principal component analysis Software tools for modeling, Simulation and analysis.

Unit IV: Research reports and Thesis writing

(09 Hours.)

Introduction: Structure and components of scientific reports, types of report, developing research proposal. Thesis writing: different steps and software tools in the design and preparation of thesis, layout, structure and language of typical reports, Illustrations and tables, bibliography, referencing and footnotes, Oral presentation: planning, software tools, creating and making effective presentation, use of visual aids, importance of effective communication.

Unit V: Research Ethics, IPR and Publishing

(09 Hours.)

Ethics: Ethical issues.

IPR: intellectual property rights and patent law, techniques of writing a Patent, filing procedure, technology transfer, copy right, royalty, trade related aspects of intellectual property rights

Publishing: design of research paper, citation and acknowledgement, plagiarism tools, reproducibility and accountability.

Reference Books:

1. Ranjit Kumar, "Research Methodology: A Step by Step Guide for Beginners", SAGE Publications Ltd., 2011.
2. Wayne Goddard, Stuart Melville, "Research Methodology: An Introduction" JUTA and Company Ltd, 2004.
3. C.R. Kothari, "Research Methodology: Methods and Trends", New Age International, 2004
4. S.D. Sharma, "Operational Research", Kedar Nath Ram Nath & Co., 1972
5. B.L. Wadehra, "Law Relating to Patents, Trademarks, Copyright Designs and Geographical Indications", Universal Law Publishing, 2014.
6. Donald Cooper, Pamela Schindler, "Business Research Methods", McGraw-Hill publication, 2005.

Ph. D. COURSE WORK

FACULTY OF COMMERCE AND MANAGEMENT

Syllabus for Module-1 : RESEARCH METHODOLOGY

Teaching scheme

Lectures: 05 Hrs/week

Credits: 05

Examination Scheme

Theory: 80 Marks

Internal Assessment: 20

Duration: 3 Hrs

Unit I : FUNDAMENTAL OF RESEARCH:

Research- Meaning, Definition, Scope, Objectives, Significance and Limitations.

Types of Research: Basic or Pure Research, Applied Research, Descriptive Research, Exploratory or Formulative Research, Explanatory or Casual Research, Experimental Research, Action Research, Evaluative Research, Quantitative and Qualitative Research, Field Study, Case Study, Social Survey.

Formulation of the Problem and Hypothesis: Definition, Characteristics, Types, Limitation in Formulation of Hypothesis,

Research Design: Meaning and Definition, Elements and Types of Research Design.

Sampling: Meaning & Definition, Steps of Sampling Procedure, Purpose of Sampling, Types of Sampling, Essentials of good Sampling, Merits of Sampling Methods, Size of Sample.

Unit II : TESTING OF HYPOTHESIS:

Parametric Test of Hypothesis

Chi-square Test

Analysis of Variance (ANOVA) & Co-variance

Non- Parametric Test of Hypothesis

Multivariate Analysis Techniques

Unit III : DATA COLLECTION:

Principles, Importance, Types & Classification of Data.

Primary Data: Meaning, Importance & limitations.

Sources of Primary Data:

a) **Observation :** Meaning, Definition & Limitations.

b) **Questionnaire:** Meaning, Definition, Types, Features of good questionnaire, Techniques of Constructing questionnaire, Steps in questionnaire constructions, Advantages and limitations of questionnaire methods.

c) **Interview:** Meaning, Definition, Objectives, Types, Role of Interviewer, Merits and Limitations of Interview Technique,

d) **Interview Scheduled:** Meaning, Definition, Objectives, Types, Merits and Limitations of Interview Scheduled.

e) **Social Survey:** Meaning, Definitions, Characteristics, Objectives, Types, Merits and Limitations.

f) **Case Study:** Meaning, Definitions, Characteristics, Objectives, Types, Merits and Limitations.

Secondary Data: Meaning, Importance & limitations.

Sources Secondary Data: Previous research, Books, Journals, Official statistics, Mass media products, Diaries, Letters, Government reports, Web information, Historical data and information

Unit IV : DATA ANALYSIS AND USE OF STATISTICAL & QUANTITATIVE METHOD:

Editing, Classification and Coding.

Categorization, Tabulation, Tables, Graphs, Illustrations.

Use of quantitative method in research.

Statistical Techniques: Measures of Central tendency, Dispersion, Skewness, Kurtosis & Moments, Correlation, Regression.

Theory of Attributes & Association, chi square Test & Distribution.

Unit V : COMMUNICATION, RESEARCH REPORT AND THESIS WRITING:

Basics of Communication Skill, Types of Scientific Communication.

Structure of Research Proposal, Structure of Research Paper, Importance of publishing Research Papers, Publishing papers.

Research Report: Types of Reports, Structure of Research Report, Planning & Principles of Report Writing.

Thesis Writing: Declaration, Title page, Acknowledgement, Table of contents, List of Tables, Figures/Graphs/Plates. Introduction, Literature review, Research Methodology, Middle chapters, Final chapter, Conclusions and suggestions for further work.

Bibliography, References, Appendices and Plagiarism.

References:

1. Bhandarkar & Wilkinson: Methodology and Techniques of Social Research, Himalaya Publication.
2. C. H. Chaudhary, Research Methodology, RBSA Publication.
3. C.R. Kothari, Research Methodology: Methods and Techniques, New Age Pub. New Delhi
4. Goode, I and Hatt P.J. Methods in Social Research, New York, McGraw Hill.
5. Gupta S.C, Fundamentals of Statistics, Himalaya Publication House, Bombay Rajaram V. (1996),
6. Henry C. Lucas, Jr. (2000) – Information Technology For Management, Tata McGraw-Hill Publishing Company Ltd., 7 West Patel Nagar, New Delhi – 110 008.
7. Kothari, C.R. (2008), ‘Research Methodology – Methods & Techniques’, News Age International Publishers, 4835/24, Ansari Road, Daryaganj, New Delhi- 110002.
8. Krishnaswamy K.N., Sivakumar, Appa Iyer & Mathiranjani M (2006), Management Research Methodology, Integration for Principles, methods & Techniques, Pearson Education, New Delhi.
9. Thakur, Devendra (2000), Research ‘Methodology in Social Sciences’, Deep & Deep Publication Pvt. Ltd., F-159, Rajouri Garden, New Delhi – 110 027.
10. William G. Zikmund, Business Research Methods, Orlando Dryden Press.

Ph.D. Course Work

Faculty of Humanities

Syllabus for Module-1: RESEARCH METHODOLOGY

Teaching scheme

Lectures: 05 Hrs/week

Credits: 05

Examination Scheme

Theory: 80 Marks

Internal Assessment: 20

Duration: 3 Hrs

Course Objectives:

- To understand the role of research methodology in Education and Physical Education
- To understand the basic, conceptual knowledge and its application to actual research.
- To understand literature review process and formulation of a research problem.
- To develop the skill of understanding resources, literatures, ability to review, and capacity to explore the issues for research in Education and Physical Education.
- To equip with various tools and techniques of data collection, classification, verification, interpretation and recourse to resources for research.
- To learn technical writing and ICT skills required for the research
- To create awareness about intellectual property rights and patents

Unit I: Introduction to Research Methodology

Research : Nature, Characteristics, Area and Need.

Classification of Research : Fundamental /Pure; Applied and Action Research.

Descriptive Research: Survey Study & Case study.

Historical Research: Steps & Sources; Primary & Secondary Data; Historical Criticism (Internal and External)

Philosophical research: Meaning, Steps, Pitfalls and Data Synthesis.

Qualitative Research: Case Study, Ethnography and Phenomenology.

Experimental Research: Meaning, Nature & Importance; Variables in Experimental Research (Meaning & Types); Designs in Experimental Research (Single Group Design, Reverse Group Design, Repeated Measure Design, Static Group Comparison Design, Equated Group Design, Factorial Design); Internal and external validity of results.

Unit II: Research Proposal

Research Proposal: Concept, Need, Importance and Types

Research Problem: Meaning, Types, Sources, & Importance; Locating the Research Problem; Criteria for Selecting Research Problem, and Evaluation of Research Problem.

Objectives: Concept, Nature and Types.

Research variable: Meaning and Types.

Hypothesis/Assumption: Meaning, Need, Characteristics, Sources, Types (Null & Alternative); and Testing of Hypothesis (Parametric & Non-Parametric Test).

Anti Plagiarism Software : URKUND

Unit III: Sampling/Population and Research Tools

Sampling/Population: Meaning & Definition, Concept, Characteristics of good sample and size & Errors of the samples; Types of Sampling (Simple, Random, Random Number, Systematic, The Stratified Random, The Area/ Cluster sampling); Non-Probability Sampling Methods (Convenience Sample, Judgement Sampling, Quota Sampling); Multistage Sampling.

Research Tools: Concept and Nature, Varied types of Research Tools (Interview; Observation, Sociometric, Questionnaire, Attitude scales-Thuston's & Likert's Techniques, and rating Scale.

Statistical Test : T,Z,Chi-Square, Anora, Use of SPSS Software, MS-Excel.

Unit IV: Probability Distributions and Graphs and Inferential Statistics

Normal Curve: Meaning of probability; Principles & Properties of normal curve; Divergence from Normality (Skewness and Kurtosis); Graphical Representation of data in Statistics (Scattered, Line diagram, Bar diagram, Histogram, Frequency Polygon, Ogive Curve).

Tests: Tests of significance, Independent and Dependent "t" Test, Chi-Square Test; Level of confidence and Interpretation of data.

Correlation: Meaning of correlation, co-efficient of correlation (calculation of co-efficient of correlation by the Product Moment Method and Rank Difference Method.

Concept of ANOVA (One Way) and Theory of ANCOVA.

Unit V: Research Proposal and Evaluation of Research Report

Format of Research Proposal:

Preliminary Pages: Cover Page, Title page, Table of Content & other text if any;

Main proposal: Introduction to the title, Justification to the Research Proposal/Problem, Objectives/Purposes of the proposal, Importance/Significance of the proposal, Assumptions/Hypothesis/es, Delimitation & Limitation of the proposal, Operative Definitions of the terms;

Reviews of related Literature;

Research Methodology and Plan of the Proposal; statistically application (if any);

Proposed Analysis of Data collection; Proposed Summary, Conclusions & Recommendations and

Bibliographical part; Appendices (if any)

Thesis/Dissertation as Research Report

Title (Cover & First Inner page), Pre-pages [Ph.D. Course work completion certificate from the University, Certificate of Head of the Department/Research Center, Certificate issued by the Supervisor & Co-Supervisor (if any), Scholar's Declaration, Acknowledgement];

Front Materials [Table of Content, List of Graphs/Figures/Tables & other text (if any)];

Main body of thesis (Introduction, Reviews, Methodology, Results & Discussion, Summary, Conclusion & Recommendations);

Back Materials (References and Appendices);

Style of writing a Thesis/Dissertation

Reference style :- APA, MLA, CHICAGO, Reference Management Tool Mendley, Zotero

UGC Regulation 2018 (Ethics of Research)

Evaluation of research report: Norms, Format, Language and Technical Rules.

Paper Presentation: Abstract and full paper for presenting in a conference and to publish in Journals, Mechanics of writing Research Report, Footnote and Bibliography writing.

REFERENCE :

- 1) Dr. C.R. Kothari : A Guide for Researchers in Social Sciences and Management.
- 2) Dr. Catherine Rawson : 'Practical Research Methods' A User-friendly Guide to Mastering Research.
- 3) Ranjit Kumar : A Step-by-Step guide for Beginners
- 4) Stuart Melnille & Wayne Goddard : Research Methodology : An Introduction
- 5) Plant D. Leely : Practical Research
- 6) Kitsakorn Locharoenrat : Research Methodology for Beginners
- 7) H.V. Deshpande : Research in Literature and Language, Philosophy : Areas and Methodology
- 8) Wayoc C. Booth : The Craft of Research
- 9) David Willinson : Research Tools Kits : A Complete Guide to Practitioner Research
- 10) Winklison T.S. and P.L. Bhandarkar – Methodology and Techniques of Social Research, Himalaya Publishing House, Bombay.
- 11) P.V. Young – Scientific Social Surveys and Research
- 12) [http:// www.zotero.org](http://www.zotero.org)
- 13) [http:// www.mendeley.com](http://www.mendeley.com)
- 14) [http:// www.inflibnet.ac.in](http://www.inflibnet.ac.in).
- 15) [http:// www.shodhaganga.inflibnet.ac.in](http://www.shodhaganga.inflibnet.ac.in)

संदर्भग्रंथ सूची :

१. मिलिंद मालशे - संशोधन पध्दती
२. दु.का. संत - संशोधन पध्दती प्रक्रिया अंतरंग
३. वसंत बापट - तौलानिक साहित्याभ्यास : मूलतत्वे आणि दिशा
४. चंद्रशेखर जहागीदार - तौलानिक साहित्याभ्यास : तत्वे आणि दिशा
५. स.गं. मालशे - शोधनिबंधाची लेखनपध्दती
६. व्ही.बी. पाटिल - संशोधन पध्दती (मंगेश प्रकाशन)
७. सुनील माली - सामाजिक संशोधन पध्दती (झायमंड पब्लिकेशन)
८. वसंत स. जोशी - भाषा व साहित्य संशोधन
९. सु.रा. पुनेकर - संशोधन स्वरूप आणि पध्दती
१०. अशोक केळकर - वैखरी
११. डॉ. पु.ल. भांडारकर - सामाजिक संशोधन पध्दती
१२. डॉ. एस.आर. वाजपेयी - सामाजिक अनुसंधान और सवेक्षण
१३. सतपाल रेहेला - सामाजिक सवेक्षण और अनुसंधान के मुलतत्वे
१४. दिलीप खैरनार व किशोर राउत - सामाजिक संशोधन पध्दती

Ph. D. COURSE WORK

FACULTY OF HUMANITIES

SUBJECT : LAW

Syllabus for Module-1 : RESEARCH METHODOLOGY

Teaching scheme

Lectures: 05 Hrs/week

Credits: 05

Examination Scheme

Theory: 80 Marks

Internal Assessment: 20

Duration: 3 Hrs

Course objectives:

❖ The Module-I : Legal Research Methodology has following objects

- To create the understanding of Research methodology and its application to the research topic under consideration. An attempt has been made to introduce the basic, conceptual knowledge and its application to actual research undertaken by researcher.
- To develop the skill of understanding resources, literatures, ability to review, and capacity to explore the issues for legal research, theme of law reform and legal solution to solution to societal problem.
- To equip with various tools and techniques of data collection, classification, verification, interpretation and recourse to resources for research
- To inculcated ethical values, introduce research standards, and enlighten the scholars with legal norms applicable to research with respect to ethics, lapses, quality enhancement and reconnoiter research culture.

UNIT I : Legal Research – Characteristics, approaches and methodology

What is Research? Meaning and Objectives, purpose and significance, Definition of research, Characteristics features of Legal research and its utility, Research methods *vis a vis* Research Methodology

Legal Research - Meaning, scope and purpose. Relation between law and society

Types/kinds of Legal Research:

Doctrinal and Non-Doctrinal (empirical); Applied, fundamental; Inductive-Deductive method Library research, field research and laboratory research, analytical, descriptive, conceptual; Participatory and Non-Participatory; Comparative, historical, statistical, critical, socio-legal; Mono disciplinary and trans-disciplinary; quasi-disciplinary, inter-disciplinary (multi-disciplinary) research; Quantitative and qualitative, one time and longitudinal, clinical or diagnostic research; Critical Legal Studies, Research for legal reform

UNIT II: Prologue to the Research problem

Formulating the basic outline for research –

Formulation of Research problems – identifying the research areas from the literature review identification of variables, Setting of objectives – mapping of resources, scope, limitations and constrains Formulation of Hypothesis – Types of, correlation with objectives

Research Design – Different types of Research Design, Formulating Research Design, mapping time plan

Types of research design - Exploratory, Experimental, Descriptive, Diagnostic, Descriptive, Critical, Analytical, Impact-analysis,

UNIT III : Data collection

Data Collection - Principles, Importance, Types & Classification of Data Primary & Secondary

Techniques and methods of Data collection – Observation, Sampling – types of, Questionnaire, Survey, Interview, case studies, Use of scaling techniques, Jurimetrics, Computerized Research

Recourse to Resources - Glossary of Research Terminologies, Legal enactments, Legislative debate, Committee reports, Judicial decisions (foreign-domestic), Case comments, Book Review, Commentaries, Law commission Reports, Corpus Juris Secundum (CJS), Halsbury Law of India, Articles, Conference and Workshop proceedings, Treaties and International documents, Briefs/petitions and other transactional legal documents, Law Dictionaries,

Encyclopedia, CAD, Data bases – AIR, FindLaw, Lexis Nexus, WestLaw, Manupatra, Indian Kanon, Hein Online, West Law India, JSTOR, Taxman, Lexis Nexis, SCC Online, Manupatra, SSRN, India Code, Supreme Court/ High Courts Decisions Websites, Law Commons, Law Commission of India, Legal Abbreviations, Book Finder, AV Library of International Law Article Finder WorldLII, commonlii, Shodhganga, Indian and foreign periodicals, Compilation of list of reports or special studies conducted relevant to the problem, policy statements,

Method of citation of data and references – Utility and importance, referring primary references, Blue Book Methods, ILI, APA, Chicago

UNIT IV : Classification, Tabulation, Analysis, interpretation of Data and Report writing

Basic Concepts concerning testing of hypotheses, procedures of hypothesis testing, Classification and tabulation of data- use of cards for data collection-Rules for tabulation. Explanation of tabulated data.

Analysis of data, Graphical Representation, generalization and interpretation, Variable testing, Presentation of data

Assessment of Data – Determining ratio-decidenti, Obitor Dictum, using references in proper context, Balancing conflict and consensus of different thoughts, theories, opinion and approaches

Report writing, indexing, technique of presentation of research, Essential components of Report – Indexing, Glossary, Abbreviations, Bibliography, Footnotes/endnotes,

Unit V : Ethics and standards applicable to research, respecting IPR Rights and Legal norms

Ethics: ethical issues, standards and norms, Objectivity of Research scholar,

Acknowledging Contributions, Moral Rights of Author, Academic honesty, liberty and Privacy Rights, Academic accountability

Legal norms applicable to Research – Immunities to research activities, Test of original contribution, Universities Ordinances, UGC regulations and standards for maintaining quality research, malpractices and lapses in research

Plagiarism tools, reproducibility and accountability.

Note : The contents may include the related terminologies, topics, concepts appropriate in the context.

Bibliography

Bhandarkar & Wilkinson: Methodology and Techniques of Social Research, Himalaya Publication, Chaudhary C. H, Research Methodology, RBSA Publication.

Dawn Watkins, Mandy Burton, Research Methods in Law Routledge, 2013

Erwin C. Surrency, B.Fielf and J. Crea, A Guide to Legal Research (1959) 10. Morris L. Cohan, Legal Research in Nutshell, (1996), West Publishing Co.

Goode, I and Hatt P.J. Methods in Social Research, New York, MSGraw Hill.

Gupta S.C, Fundamentals of Statistics, Himalaya Publication House, Bombay Rajaram V. (1996), Harvard Law Review Association, Uniform System of Citations.

Henry C. Lucas, Jr. (2000) – Information Technology For Management, Tata McGraw-Hill ILI Publication, Legal Research and Methodology.

Kothari C.R., Research Methodology: Methods and Techniques, New Age Pub. New Delhi Kothari, C.R. (2008), 'Research Methodology – Methods & Techniques', News Age International Publishers, 4835/24, Ansari Road, Daryaganj, New Delhi- 110002.
M.O.Price, H.Bitner and Bysiewiez, Effective Legal Research (1978)

Methodologies of Legal Research : Which Kind of Method for What Kind of Discipline? Edited by Mark Van Hoecke Hart Publishing, Oxford and Portland, Oregon, 2011.

Mike McConville, Research Methods for Law, Edinburgh University Press, 2007

Pauline V. Young, Scientific Social Survey and Research, (1962)

Peter Cane, Herbert Kritzer, The Oxford Handbook of Empirical Legal Research, OUP Oxford, 2012 Publishing Company Ltd., 7 West Patel Nagar, New Delhi – 110 008.

Reza Banakar, Max Travers, Theory and Method in Socio-Legal Research, Bloomsbury Publishing, 2005 S.K.Agrawal (Ed.), Legal Education in India (1973), Tripathi, Bombay.

Singh Rattan, Legal Research Methodology, Lexis Nexis, 2013

Tripathi G.P., Legal Research and Research Methodology, Central Law Publications, 2015

William J. Grade and Paul K. Hatt, Methods in Social Research, Mc Graw-Hill Book Company, London

For various Databases and E-resources –

For English Laws, See, <http://www.library.qmul.ac.uk/subject/law/databases>

For Law Commission Reports, <http://lawcommissionofindia.nic.in/>

For Constituent Assembly Debate, <http://parliamentofindia.nic.in/ls/debates/debates.htm>

for Parliament Library and Reference, Research, Documentation and Information Service (LARRDIS) See, <http://www.parliamentofindia.nic.in/ls/intro/p14.htm>

for Judgement Information Systems (For decisions of Indian Courts)

<http://judis.nic.in/supremecourt/chejudis.asp>

for data bases of case laws, SUPPLIS--Database of Caselaws <http://supnet.nic.in/suplis/main.html>

for University Ordinance, rules, UGC guidelines see, www.sgbau.ac.in For Indian Legal material www.commonlii.org/in/

Ph. D Course Work
Faculty of Interdisciplinary Studies
Module-1: RESEARCH METHODOLOGY

Teaching scheme

Lectures: 05 Hrs/week

Credits: 05

Examination Scheme

Theory: 80 Marks

Internal Assessment: 20

Duration: 3 Hrs

Theory:

Objectives

- To understand importance of research in the concerned subject
- To know application of types and tools of research in the concerned subject
- To develop skill in research work in the concerned subject

Unit I Research Process&Design strategies in Research

1.1 Research Process

1.1.1 Meaning, objectives and areas of research in the concerned subject

1.1.2 Identification of research problem

- Selection and formulation of research problem
- Specifying objectives
- Formulating hypothesis
- Deciding variables

1.2 Research Design Strategies

1.2.1 Descriptive studies

1.2.2 Analytical studies

1.2.3 Experimental studies

- Randomized control trials
- Non randomized or Non- experimental trials

Unit II Sampling Design

- 2.1 Census and sample survey
- 2.2 Characteristics of good sample design
- 2.3 Implications of sample design
- 2.4 Sampling Techniques
 - 2.4.1 Probability or random sampling
 - 2.4.2 Non-probability sampling

Unit III Measurement scales, Research tools and Data Collection

- 3.1 Measurement scales, scaling techniques, scale construction techniques
- 3.2 Research tools, types of tools; Questionnaire, interview schedule Observation, Construction of Questionnaire/ Schedule
- 3.3 Types of data
 - 3.3.1 Primary data and Secondary data
 - 3.3.2 Qualitative and Quantitative data

Unit IV Statistical Analysis

- 4.1 Application of parametric tests
- 4.2 Application of Non parametric tests
- 4.3 Use of computer for data analysis – Knowledge of different types of software for statistical analysis: SPSS and EXCEL.

Unit V Scientific Writing of Research report:

- 5.1 Scientific writing techniques of the thesis
 - Norms, format, language and technical rules
- 5.2 Bibliography, Referencing, Style of Referencing and Appendix.
- 5.3 Ethics of qualitative research and quality of researcher.
- 5.4 Research papers: Norms of writing research papers and articles in National and International Journals.

References:

1. Arvind Chandra and T. P. Sexena; Style Manual for writing: Thesis, Dissertation and Papers in social sciences, New Delhi Metropolitan Book Co.pvt Ltd
2. Bryman A. And Cramer D (1994) Quantitative Data analysis for Social Scientist
3. Best John W and Kahn James B. 1989 Research in Education, New Delhi, Prentice Hall of India Private Limited
4. Kerlinger, Foundation of Educational Research
5. Kothari C. R. 1996 Research Methodology-Methods and Techniques, New Delhi. VishwaPrakashan
6. K. Sing, (1986) Techniques and Methods of Social Survey Research and Statistics, Prakashan Kendra, Lucknow.
7. Ingle P.O. (2012) Scientific and Technical Report Writing.
8. Kothari C. R. (2004) Research Methodology : Methods and Techniques, New Age International (P) Limited.

Ph. D. COURSEWORK

Syllabus for Module-2 : ICT (Information and Communication Technology) Skills

(Syllabus for the faculties of Science and Technology, Commerce and Management, Humanities, Inter-disciplinary Studies)

Teaching scheme

Term Work: 04 Hrs/week

Credits : 02

Examination Scheme

Term Work: 50 Marks

Course objectives:

To learn and acquire the skills using ICT tools..

To learn the basics of Information Technology.

To learn and acquire the word processing skills.

To learn and acquire the spreadsheet processing skills.

To learn and acquire the presentation skills using ICT tools.

To learn and acquire the internet searching using ICT tools.

Unit I :INTRODUCTION

IT (Information Technology),ICT (Information and Communication Technology)

CT (Computer Technology) Characteristics of a Computer, Limitations of a Computer Different Types of Computers, Different Types of Personal Computers (PCs) . Main parts of a Computer system : Processing Devices, Memory Devices, Input Devices, Output Devices, Storage Devices. Categories of Software, Application Software. Computer Network: Basic hardware and terminology in networks, Classifications of Computer Networks, The Internet, The Intranet and Extranet.

Unit II :INTRODUCTION TO OPERATING SYSTEM & WORD PROCESSING SOFTWARE

(Latest Versions of the Operating System/ Word Processing Software are Recommended)

Installing Windows, Basic Operations in Windows, Interface, Introduction to Windows File System, Storing and Managing Data, Windows User Accounts, The System Settings. Adjusting the Computers Settings. Introduction to MS Office. Word Processing with MS-Word : basic operations- Editing, Proofing, and Formatting text, paragraphs and pages, Printing the documents. Working with tables, images. Mail merge. Working with Charts, Equations, Symbols.

Unit III : INTRODUCTION TO SPREADSHEET SOFTWARE

(Latest Version of the Spreadsheet Software is Recommended)

Introduction to MS Excel and its User Interface. Working with workbooks, work sheets. Data Entry techniques. Defining data set as a Table. Setting, Previewing, and Printing under MS-Excel. Performing Calculations on Data. Working with Excel Formulas, Functions and Charts. Sorting/ Filtering data.

Unit IV : INTRODUCTION TO PRESENTATION SOFTWARE

(Latest Version of the Presentation Software is Recommended)

Working with MS PowerPoint. Presentation Basics. Adding more components to the slides, Formatting Presentations, backgrounds and layout. Applying Themes. Using Slide Master. Working with Graphics, Images and Clips. Working with Multimedia. Inserting Sound and Narration. Delivering Presentations. Animating Objects. Adding Action effects. Live Presentation. Using Custom Shows. Saving/Protecting the Presentation. Printing the slides.

Unit V : INTRODUCTION TO THE INTERNET

The Internet: an introduction, Meaning and benefits of the Internet? The history of the Internet, Differences between Internet and World Wide Web. Connecting to the Internet. Web Browsers. User Interfaces of Web Browsers. Browser Customization. Search Engines. E-mail: Basic Concepts and terminologies. Using emails. Security and risk in Internet. E-commerce. E-learning. E-Government. E-entertainment. Top Ten Future Trends- The Internet by 2020.

Reference Books:

1. Shirish Chavan "Rapidex Computer Course", Unicorn Books.
2. Alexis Leon & Mathews Leon , " Fundamentals of Information Technology", Vikas Publishing.
3. Peter Norton "Introduction to Computers" , 6th International Edition (McGraw Hill)
4. Williams Sawyer, "Using Information Technology: A Practical Introduction to Computer & Communications" 6th International Edition (McGraw Hill).
5. Sarah E. Hutchinson and Stacey C. Sawyer, "Computers, Communications & information: A user's introduction", MacGraw Hill.

Ph. D. COURSEWORK

Syllabus for Module-2 : ICT (Information and Communication Technology) Skills

(Syllabus for the Subject – Law)

Faculty of Humanities

Teaching scheme

Lectures: 04 Hrs/week

Credits :02

Examination Scheme

Internal Assessment-50 (Practical)

Duration: 3 Hrs

Course objectives:

The course has an objective to expose the scholar with ICT technology and its mechanism, use, application to the field of Legal Research. The Computer is a useful tool for management and manipulation, retrieval, depository for information and storage of data. Internet technology helps accessing the data, uploading, sharing and linkage. It further helps to generate opinion, platform for data collection, cost effect and resourceful.

This Module aimed at to develop the skill of scholar for optimum use of ICT for the purpose of research.

The board area for this module will be as follows –

Unit I :

Technology as a tool to accelerate Legal research.
Search Engines for retrieving information, Databases and access to legal data and transactional legal documents

Unit II :

Use of computer for data management and data manipulation.
Various software helpful for data presentation, tabulation, and arrangement in accordance with variable.

Unit III :

Social media as an instrument for seeking opinion, response, access to public opinion
Citation methods for Internet material and References mechanism for Internet material

Unit IV :

Different tools for collecting data via network e.g. Interview through 'skype'
Access to various databases of legal material and its arrangements and mapping

Unit V :

Use of ICT for scheduling, planning, time management and accelerating progress of research
Various issues with respect to the internet material other than 'literary work' and its use for the purpose of research

Ph. D. COURSEWORK

Module-3 : Recent Trends in the Subject

(For all Faculties)

Teaching scheme
Term Work: 04 Hrs/week
Credits : 02

Examination Scheme
Term Work: 50 Marks

Historical Development in Subject/Research Area, Growth and Development in Subject/Research Area, Contributors in Subject/Research Area, Institutions in Subject/Research Area.

Trends in Subject/Research Area, Changing Perspective in Subject/Research Area, International Trends in Subject/Research Area , Current State in Subject/Research Area.

World Literature in Subject/Research Area, Print Information Resources, Electronic Information Resources , Selection of Information Sources.

Scope and Objectives of Subject/Research Area, Scope of Subject/Research Area, Objectives of Subject/Research Area , Assumptions and Propositions in Subject/Research Area.

References :

List of References /Books /Monograms/ Handbooks/Encyclopaedia/Resources shall be provided by the Research Centre.

Ph. D. COURSEWORK

Module-4 : Review of Literature

(For all Faculties)

Teaching scheme

Term Work: 04 Hrs/week

Credits : 02

Examination Scheme

Term Work: 50 Marks

A literature review is a search and evaluation of the available literature in your given subject or chosen topic area. This is two credit course is meant to give the instructions to research scholars how to select the research problem in specific area. A literature review can be acting as the first stage of research projects. A literature review is a critical and in depth evaluation of previous research. It is a summary and synopsis of a particular area of research, allowing anybody reading the paper to establish why you are pursuing this particular research. A literature review expands on the reasons behind selecting a particular research question. A literature review should avoid the temptation of stressing the importance of a particular research program it is better to organize the review around ideas and individual points.

Expectations:

Research scholars shall submit the literature review which included the following parameters;

- Research scholar should classify a research region,
- Formulate research area,
- Decide the place/region where research perform/Research process,
- Diagnose the research problem,
- Historical background of research topic,
- Surveys of existing research reports on selected research topic,
- Utility/impact of selected research topic finding,
- Future scope of selected research topic,
- Research Design/Plan etc.

While conducting a Literature Review Consider the following Points:

- Evaluation of the credibility of sources is one of the most difficult aspects of a literature review, especially with the ease of finding information on the internet.
- Search engine does not distinguish or judge the quality of results. This is why it is still good practice to begin research in an academic library. Any journals found there can be regarded as safe and credible. The easiest way is to scan the work, using the abstract and introduction.
- Check into the credentials of any source which you rely on heavily for the literature review. The reputation of the University or organization is one of the factor.

Literature Review Writing Format: As a general rule for writing a literature review,

- Each paragraph should address one point, and
- Present all of the available evidence,
- Evaluate all of the available evidence
- From all possible differing points of view
- Formulate the research problem and future scope.

Ph. D. COURSEWORK

**Module-5 : Seminar
(For all Faculties)**

Teaching scheme
Term Work: 01 Hr/week
Credits : 01

Examination Scheme
Term Work: 50 Marks

This one credit course is meant to give scholars practice speaking in front of an audience and to explore topics of the chosen field in detail. Scholars will do the research on relevant topics and organize presentations for faculty and other scholars. The topics may be any aspect of the related domain and must be approved by the supervisor in advance

Expectations:

Attendance at each seminar is mandatory for all scholars enrolled. In addition, scholars are expected to attend all other seminars in the research center, such as invited guest speakers. It is expected that scholars will actively participate by asking questions of the speaker. The effort by scholars to meet these expectations will be considered in the determination of the final grade.

The scholar should strive for professionalism in all aspects of this class. Whereas most scholars choose to use PowerPoint to present their seminar, overheads, 35-mm slides or the chalkboard are also acceptable media for visual aids.

Each scholar shall give 20-minute presentations. The seminar should cover several (3-4, or more) related papers in a given area. The topic may be in an area closely related to the proposed research. The scholar should be thoroughly familiar with the literature on the chosen topic. The seminar should be organized into a cohesive presentation.

Scholars shall submit a detailed outline (1 – 1.5 pages) of the presentation and also a brief abstract (one or two paragraphs; **250 words max.**) describing the presentation.

The final grade shall be determined by several factors: the quality and content of the seminars, improvement from the first to the last, participation in the class as a whole, and ability to meet scheduled deadlines.

Proposal Seminar Delivery Format:

- Introduction of the scholar/supervisor
 - Introduction and background information on the topic. What relevant research has been performed previously?
 - State the problem(s) that remain unanswered.
 - Clearly state the objectives and give the specific hypotheses needs to test.
 - Describe the methodology to test the proposed hypotheses. Give reasons why chosen these methods over other approaches.
 - Present any data collected thus far.
 - Describe what remains to be done, and what is expected to find.
 - Explain the significance of the findings (or potential future findings).
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