



**MANAV RACHNA
UNIVERSITY**
Declared as State Private University vide Haryana Act 26 of 2014

MANAV RACHNA UNIVERSITY
Sector-43, Aravali Hills, Faridabad

Ph. D. Course Work Booklet

Content

S. No.	Name of the Subject	Page No.
1	Research Methodology	1
2	Quantitative Techniques	3
3	Comparative Constitutional Law (for Law scholars only)	5
4	Research and Publication Ethics	7



MANAV RACHNA UNIVERSITY

Sector-43, Aravali Hills, Faridabad

Semester-I

SUBJECT CODES	SUBJECT NAME	OFFERING DEPARTMENT	COURSE NATURE (Hard/Soft/NTCC)	COURSE TYPE (Core/Elective etc)	L	T	P	CONTACT HOURS PER WEEK	NO. OF CREDITS
MCH711	Research Methodology	Management & Commerce	HARD	CORE	4	0	0	4	4
MCH712	Quantitative Techniques OR Comparative Constitutional Law (for Law scholars only)	Sciences OR Law	HARD	CORE	4	0	0	4	4
LWH801-B									
CPE-RPE	Research and Publications Ethics	UGC	HARD	CORE	2	0	0	2	2
	Area Specific Course	Various Departments	HARD	CORE	2	0	0	2	2
TOTAL (CREDITS)									12

Course Title	Research Methodology (MCH711)	
Course Type	Core (Departmental)	
L-T-P Structure	(4-0-0)	
Credits	4	
Course Objectives	<p>The aim of this course is to :</p> <p>a) To familiarize scholars with basic of research and the research process.</p> <p>b) To enable the scholars in conducting research work and formulating research synopsis and reports.</p> <p>c) To familiarize scholars with Statistical packages such as SPSS/EXCEL.</p> <p>d) To impart knowledge for enabling scholars to develop data analytics skills and meaningful interpretation to the data sets so as to solve the Research problem.</p>	
Course Outcomes (COs)		Mapping (Employment, Skill Development/Entrepreneurship)
CO1	Develop understanding on various kinds of research, objectives of doing research, research process and research designs.	Employment
CO2	Have basic knowledge on research techniques	Employment
CO3	Have adequate knowledge on measurement & sampling techniques.	Employment
CO4	Formulating research synopsis and report writing.	Employment
CO5	Work on statistical tools in SPSS.	Employment

SECTION A: FOUNDATIONS OF RESEARCH

Definition, Objectives, Motivation, Utility. Concept of theory empiricism, deductive and inductive theory, Characteristics of scientific method, Understanding the language of research – Concept, Construct, Definition, Variable. Paradigm of Research: Logical positivity, Social Construction & critical perspective. Issues of subjectivity and objectivity. Research Process, Research Strategies, Planning a research project and formulating research questions, Problem Identification, Research Objectives and Research Ethics, Hypothesis. Reviewing and evaluating the existing literature.

SECTION B: RESEARCH DESIGNS

Features of a good research design; Exploratory Research Design: concept, and uses, Descriptive Research Designs: concept, types and uses, Experimental Design, Types of Experimental Research Designs: Pre-experimental Designs, True Experimental Designs and Quasi-experimental Designs. Concept of Independent & Dependent variables. Validity and Reliability, Improving the Internal and External reliability. Designing a Qualitative study: Subjectivity, Objectivity, reflexivity & Triangulation.

SECTION C: MEASUREMENT AND SAMPLING

Measurement: Concept of measurement, Scale Measurement, The Nature of Scale Measurement, Properties of Scale Measurements, Four Basic Levels of Scales - Nominal Scales, Ordinal Scales,

Interval Scales, Ratio Scales. Questionnaire Design and Issues. Sampling: Concepts of Statistical Population, Sampling Frame, Sampling Error, Sample Size, Non Response. Characteristics of a good sample, Probability Sample - Simple Random Sample, Systematic Sample, Stratified Random Sample & Multi-stage sampling. Determining size of the sample; non probability sampling techniques and types.

SECTION D: REVIEW OF LITERATURE

Why and How, How to present review in the thesis. SPSS: Uses of SPSS, application os various statistical tools in SPSS, results interpretation. Report/ Thesis writing: Layout of a Research Paper, Impact factor of Journals. Abstract, Executive Summary, Dissertation, Research Paper, Working Paper, Conceptual Framework, Indexing, Referencing, Report Writing.

REFERENCES BOOKS:

1. Gray, David E. (2004). Doing research in the real world. London, UK: Sage Publications.
2. Galliers R. (1992). Information systems research: Issues, methods, and practical guidelines. Blackwell Scientific Publications, Oxford.
3. Lee A.S., Liebenau J., DeGross, J.I. (1997). Information Systems and Qualitative Research. Chapman and Hall, London.
4. Merges R. P., Menell P. S., Lemley M. A. (2012). Intellectual Property in the New Technological Age. (6th ed.) Aspen Publishers.
5. Turabian K.L. (2007). A manual for writers of research papers, theses, and dissertations. Chicago, IL: University of Chicago Press.
6. Kothari C.R. (2004). Research Methodology: Methods and Techniques. New Age International (P) Limited.

Course Title	Quantitative Techniques (MCH712)	
Course Type	Core (Departmental)	
L-T-P Structure	(4-0-0)	
Credits	4	
Course Objectives	The aim of this course is to develop the understanding of the various Statistical models and Optimization Techniques used for analysis of data/information.	
Course Outcomes (COs)		Mapping (Employment, Skill Development/Entrepreneurship)
CO1	Develop the basic knowledge of quantitative analysis	Employment
CO2	Develop the concepts and basic knowledge of hypothesis Testing	Employment
CO3	Develop the concepts of Regression Analysis	Employment
CO4	Develop the basic knowledge of probability theory	Employment

SECTION A: INTRODUCTION

Nature and Scope of Quantitative Analysis, Developing and Quantifying the Model, Variables and functions – Linear, Quadratic and Exponential functions; Elements of Calculus – Limits, Continuity and Differentiation.

SECTION B: DATA ANALYSIS TECHNIQUES

Quantitative methods of data analysis; Hypothesis Testing - Parametric tests (Z-test, t-test, F-test, ANOVA), canonical correlation, Factor Analysis DFA and Non-parametric Tests (Chi-Square Test), Run test, Median test, Sign-test, Wilcoxon matched pairs-test, Mann-Whitney U-test, Kruskal- Wallis-test, Friedman-test, Kendall's coefficient of concordance and Wald-Wolfwitz number of run test. Tests of significance based on normal distributions; association of attributes. bivariate analysis (Chi-square only) and multivariate analysis—factor analysis, discriminant analysis, cluster analysis, MANOVA, structural equation modelling, and conjoint analysis.

SECTION C: REGRESSION CORRELATION

Partial correlation, Simple Linear Regression Model, Least squares Method, Coefficient of Determination, Residual analysis, Multiple Regression, Multiple Coefficient of Determination, Testing for Significance using Estimated Regression Equation, Logistic Regression. **Time Series:** Components of Time Series, Smoothing Methods, Trend-Seasonal Analysis, Modeling Cyclic

SECTION D: PROBABILITY

Concept of probability theory, Determining probability of an event, Types of events and Algebra of events; Bayes' theorem; Expected value and variance of random event, Probability distributions: Binomial, Poisson, Normal distributions, Normal approximation of Binomial distribution.

REFERENCES BOOKS:

1. Morrison D.F. (1990) Multivariate Statistical Methods. New York: McGraw-Hill.
2. Neil J.S., Rasmussen K. (2007). Encyclopedia of Measurement and Statistics. Thousand Oaks, CA: SAGE Publications.
3. Scott W. M. (2002). Applied Logistic Regression Analysis. Thousand Oaks, CA: Sage Publications.
4. Darlington R.B., Weinberg S., Walberg H. (1973). Canonical variate analysis and related techniques. Review of Educational Research.
5. Gamst G., Lawrence S.M., Guarino A.J. (2008). Analysis of Variance Designs: A Conceptual and Computational Approach with SPSS and SAS. Cambridge University Press.
6. Peter Y.C., Paula M. (2002). Correlation: Parametric and Nonparametric Measures. Thousands Oaks, CA: Sage Publications.
7. Hair J.F., Black W.C., Babin B.J., Anderson R.E. (2010). Multivariate Data analysis. Pearson Prentice Hall.

Course Title	Comparative Constitutional Law (LWH801-B)	
Course Type	Core (Departmental)	
L-T-P Structure	(4-0-0)	
Credits	4	
Course Objectives	This course focuses on a series of interesting questions in the emerging field of comparative constitutional law. Four major questions will be focused upon where there is sharp differentiation between practice in India and practice in the rest of the world. 1) the role of courts in democracies, focusing on the rise of political courts. 2) the question of constitutional change, focusing on how constitutions are amended and how new constitutions are written. 3) explore the literature related to the structure of the state, including the important question of how far a state can go to protect itself. 4) the role of international and comparative law in the interpretation of domestic constitutions.	
Course Outcomes (COs)		Mapping (Employment, Skill Development/Entrepreneurship)
CO1	To describe the concept and nature of comparative constitutional law.	Employment
CO2	To explain the acquired understanding of and/or facility in the influences of political institutions in law.	Employment
CO3	To evaluate the jurisdiction and working of institutions/organs, and will be able to do doctrinal analysis, including close reading of cases and precedents, and application to facts.	Employment
CO4	To be able to apply jurisprudential considerations in legal research and analysis.	Skill development

SECTION A: BASICS OF COMPARATIVE CONSTITUTIONAL LAW

- An Overview and Historical Perspectives of CCL, Constitution & Constitutionalism
- Comparing constitutions as an academic discipline.
- Constitutionalism-modern/liberal & authoritarian constitutionalism, changing ideas of constitutionalism
- Rule of Law-Dicey's concept & Modern concept, Virtue & Rule of law, Challenges

SECTION B: CONSTITUTIONAL SOVEREIGNTY AND REVIEW

- System of Governance under different Constitutions; Some reflections on method in CCL.
- Separation of Powers, Checks and Balances in India, US and UK, Australia and Canada
- Judicial Review, Constitutional Courts
- Independence of Judiciary, Judicial Balancing

SECTION C: CONSTITUTIONAL FEDERALISM

- a) Comparing territorial structures: unitary, federal and quasi-federal structure
- b) Cooperative federalism
- c) Federalism and localism
- d) Comparing systems of government: Presidentialism, Parliamentarism and Semi-Presidentialism

SECTION D: CIVIL AND POLITICAL RIGHTS

- a) Free Speech Justifications
- b) Freedom of Expression & Academic Freedom: Background & Formation of Legal Principles
- c) Freedom of speech and the role of “knowledge” institutions (e.g. free press, universities, civic NGOs)
- d) Positive social welfare rights.

REFERENCE BOOKS, JOURNALS, ARTICLES

1. Ran Hirschl, *Comparative Matters: The Renaissance of Comparative Constitutional Law* (OUP, 2014)
2. Michel Rosenfeld and András Sajó (eds.), *The Oxford Handbook of Comparative Constitutional Law* (OUP, 2012)
3. Mark Tushnet, Thomas Fleiner, and Cheryl Saunders (eds.), *Routledge Handbook of Constitutional Law* (Routledge, 2013)
4. Vicky Jackson, *Constitutional Engagement in a Transnational Era* (OUP, 2013)
5. Kim Lane Scheppele, “The Agendas of Comparative Constitutionalism,” *Law and Courts* 13 (2003)
6. Sujit Choudhry, *The Migration of Constitutional Ideas* (ed., 2006)
7. Mark Tushnet, *Some Reflections on Method in Comparative Constitutional Law*.
8. Stephen Gardbaum, “Reassessing the New Commonwealth Model of Constitutionalism,”
9. *International Journal of Constitutional Law* (2010).
10. Ran Hirschl, “The Judicialization of Mega-Politics and the Rise of Political Courts,” *Annual Review of Political Science* 11 (2008).
11. Mark A. Graber, “The Non-Majoritarian Difficulty: Legislative Deference to the Judiciary,”
12. Frank B. Cross, “The Error of Positive Rights, 48 *UCLA L. Rev.* 857 (2001) (excerpts).
13. András Sajó, *How the Rule of Law Killed Hungarian Welfare Reform*, *East European Constitutional Review*, vol. 5, no. 1 (Winter 1996) (excerpts).
14. Kim Lane Scheppele, “Constitutional Courts in the Field of Power Politics: A Real Politik Defense of Social Rights,” 82 *Texas L. Rev.* 1921 (2004) (excerpts).



प्रो. रजनीश जैन
सचिव

Prof. Rajnish Jain
Secretary



विश्वविद्यालय अनुदान आयोग
University Grants Commission

(मानव संसाधन विकास मंत्रालय, भारत सरकार)
(Ministry of Human Resource Development, Govt. of India)

बहादुरशाह जफर मार्ग, नई दिल्ली-110002
Bahadur Shah Zafar Marg, New Delhi-110002

Ph : 011-23236288/23239337

Fax : 011-2323 8858

E-mail : secy.ugc@nic.in

D.O.No.F.1-1/2018(Journal/CARE)

December, 2019

Respected Sir/Madam,

University Grants Commission in its 543rd meeting held on 9th August, 2019 approved two Credit Courses for awareness about publication ethics and publication misconducts entitled “**Research and Publication Ethics (RPE)**” to be made compulsory for all Ph.D. students for pre-registration course work **(attached as Annexure)**.

In view of the above, you are requested to ensure that the above two Credit courses may be made compulsory for all Ph.D. students for pre-registration course work undertaken in your University from the forthcoming academic session.

With regards,

Yours sincerely,

(Rajnish Jain)

TO THE VICE-CHANCELLORS OF ALL UNIVERSITIES

ANNEXURE

Course Title:

- **Research and Publication Ethics (RPE)**-Course for awareness about the publication ethics and publication misconducts.

Course Level:

- 2 Credit course (30 hrs.)

Eligibility:

- M.Phil., Ph.D. students and interested faculty members (It will be made available to post graduate students at later date)

Fees:

- As per University Rules

Faculty:

- Interdisciplinary Studies

Qualifications of faculty members of the course:

- Ph.D. in relevant subject areas having more than 10 years' of teaching experience

About the course

Course Code: CPE- RPE

Overview

- This course has total 6 units focusing on basics of philosophy of science and ethics, research integrity, publication ethics. Hands-on-sessions are designed to identify research misconduct and predatory publications. Indexing and citation databases, open access publications, research metrics (citations, h-index, Impact Factor, etc.) and plagiarism tools will be introduced in this course.

Pedagogy:

- Class room teaching, guest lectures, group discussions, and practical sessions.

Evaluation

- 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.

Course structure

- The course comprises of six modules listed in table below. Each module has 4-5 units.

Modules	Unit title	Teaching hours
Theory		
RPE 01	Philosophy and Ethics	4
RPE 02	Scientific Conduct	4
RPE 03	Publication Ethics	7
Practice		
RPE 04	Open Access Publishing	4
RPE 05	Publication Misconduct	4
RPE 06	Databases and Research Metrics	7
	Total	30

Syllabus in detail

THEORY

- RPE 01: PHILOSOPHY AND ETHICS (3 hrs.)**

- Introduction to philosophy: definition, nature and scope, concept, branches
- Ethics: definition, moral philosophy, nature of moral judgements and reactions

- RPE 02: SCIENTIFIC CONDUCT (5hrs.)**

- 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

- RPE 03: PUBLICATION ETHICS (7 hrs.)**

- 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

- RPE 04: OPEN ACCESS PUBLISHING(4 hrs.)**

- Open access publications and initiatives

2. SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies
3. Software tool to identify predatory publications developed by SPPU
4. Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

- **RPE 05: PUBLICATION MISCONDUCT (4hrs.)**

- A. Group Discussions (2 hrs.)**

1. Subject specific ethical issues, FFP, authorship
2. Conflicts of interest
3. Complaints and appeals: examples and fraud from India and abroad

- B. Software tools (2 hrs.)**

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

- **RPE 06: DATABASES AND RESEARCH METRICS (7hrs.)**

- A. Databases (4 hrs.)**

1. Indexing databases
2. Citation databases: Web of Science, Scopus, etc.

- B. Research Metrics (3 hrs.)**

1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
2. Metrics: h-index, g index, i10 index, altmetrics
