MANSAROVAR GLOBAL UNIVERSITY, SEHORE

Doctor of Philosophy (PhD)

COURSE WORK

Course Work: Credit Requirements, number, duration, syllabus, minimum standards for completion, etc.

- The credit assigned to the M.Phil. or Ph.D. course work shall be a minimum of 08 credits and a maximum of 16 credits.
- The course work shall be treated as prerequisite for M.Phil./Ph.D. preparation. 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, field work, etc. Other courses shall be advanced level courses preparing the students for M.Phil./Ph.D. degree.
- All courses prescribed for M.Phil. and Ph.D. course work shall be in conformity with the credit hour instructional requirement and shall specify content, instructional and assessment methods. They shall be duly approved by the authorized academic bodies.
- The Department where the scholar pursues his/her research shall prescribe the course(s) to him/her based on the recommendations of the Research Advisory Committee, as stipulated under sub-Clause 8.1 below, of the research scholar.
- All candidates admitted to the M.Phil. and Ph.D. programmes shall be required to complete the course work prescribed by the Department during the initial one or two semesters.
- Candidates already holding M. Phil. degree and admitted to the Ph.D. programme, or those who have already completed the course work in M.Phil. and have been permitted to proceed to the Ph.D. in integrated course, may be exempted by the Department from the Ph.D. course work. All other candidates admitted to the Ph.D. programme shall be required to complete the Ph.D. course work prescribed by the Department.
- Grades in the course work, including research methodology courses shall be finalized after a combined assessment by the Research Advisory Committee and the Department.
- A M.Phil./Ph.D. scholar has to obtain a minimum of 55% of marks or its equivalent grade in the UGC 7-point scale (or an equivalent grade/CGPA in a point scale wherever grading system is followed) in the course work in order to be eligible to continue in the programme and submit the dissertation/thesis.

PART-I (COURSE WORK)

SUBJECT CODE	SUBJECT NAME	SUB TYPE	L	T	P	TOTAL CREDITS	INT MARKS	EXT MARKS	TOTAL MARKS
PHD-101	RESEARCH METHODOLOGY	COMPULSORY	3	1	-	4	30	70	100
PHD-102	COMPUTER APPLICATIONS IN RESEARCH	COMPULSORY	3	1	-	4	30	70	100
	TOTAL		**6**	**2**	**--**	**8**	**60**	**140**	**200**

PART-II (COURSE WORK)

SUBJECT CODE	SUBJECT NAME	SUBJECT TYPE	L	T	P	SUBJECT CREDITS	INT MARKS	EXT MARKS	TOTAL MARKS
PHD-103	RESEARCH AND PUBLICATION ETHICS	COMPULSORY	3	1	-	4	30	70	100
PHD-104	REVIEW OF LITERATURE	COMPULSORY	3	1	-	4	30	70	100
	TOTAL		**6**	**2**	**--**	**8**	**60**	**140**	**200**

RESEARCH METHODOLOGY

UNIT 1

An overview: Meaning , significance and types of Research; Steps in Research; Procedure of Scientific Research; Identification and Selection of Research Problem; Defining Research problem; Review of Literature- Need and Procedure. Research Design/Format; Hypothesis: Need and Procedure to formulate hypothesis.

UNIT 2

Sampling: Concept and Need of Sampling, Size of sampling, methods of sampling-merits and demerits; Measurement in Research, Indicators: Selection of Indicators, Selection of statistical methods.

UNIT 3

Methods of Data Collection: Nature, need and significance, Sources of data in Geography, Types of Data, Methods of Fieldwork, Methodology and tools of data collection, observation, questionnaire, schedules and interviews. Procedure for designing questionnaire/schedule, coding. Classification and tabulation of data; Processing and Analysis of collected Data: Editing, Cartographic presentation: Need, significance, Selection of Cartographic methods- maps, diagrams, combination of maps and diagram.

UNIT 4

Analysis of data: Measurement of averages, ratios central tendency, dispersion and relationship. Hypothesis testing, use of recent available computer added methodologies;

UNIT 5

Report writing: Interpretations: meaning and techniques, steps of report writing, formatting and structuring the content of chapters, procedure to decide the format of chapters, tables, maps and diagrams, Drafting of Report of the research work.

Suggested Readings:

- Kothari C.R. and Garg G. Research Methodology: Methods and Techniques, New Age International Publisher, London. 2016.
- Kumar Ranjit, Research Methodology, Sage Publication, New Delhi. 2016.
- Misra, Harikesh N. Research Methodology in Geography. Rawat Publication. 2015
- Murthy K. L. Narsimha. Research Methodology in Geography. Concept Publication. New Delhi. 2014.
- Misra H.N.and V.P.Singh. Research Methodology in Geography: Social Spatial and Policy Dimensions. Rawat Publications New Delhi, 1998.
- Prasad H. Research Methods and Techniques in Geography, Rawat Publication New Delhi 1992
- Sheskin,I.M. Survey Research for Geographers, Scientific Publishers, Jodhpur,1987.
- Minshull, R. Introduction to Models in Geography, Longman, London, 1975.
- Harvey, David. Explanation in Geography, Edward Arnold London, 1971.
- Goode ,W.I .and P.K.Hatt. Methods in Social Research, McGraw Hill, Tokyo,1962

COMPUTER APPLICATIONS IN RESEARCH

UNIT 1

Basics of Computer: Characteristics of Computers, Evolution of computers, computer memory, computer generations, Basic computer organization; System software, Application software, introduction to operating system, single user, multi-user, multi-tasking single tasking, application of computer for business and research, MS-windows, Linux.

UNIT 2

Data Communication and Networks: Data communication concepts, local area network, wide area network, internet, intranet, extranet, website. E-mail, search engines-enterprise E-communication and E-collaboration

UNIT 3

Using Internet for Research: The Internet: quick look, what is internet, Use of Internet, major internet services, electronic mail, www, downloading super tools for better computing Internet and the society, Use of E-Journals, Use of E-library, searching the keyword search engines, News and multimedia, governments, archives and statistics.

UNIT 4

Introduction to Research Related Software's: Introduction to Data analysis software-SPSS: Definition, objectives and features, data analysis using SPSS: Data entry creating variables, switching to data labels, data analysis: Frequencies, recording into different variables, cross tabulations and layers. Core calculation software, developing utility programs for research, Introduction to C programming

UNIT 5

Research Related Tools and Utilities MS-Office and its application, File handing in window, various versions of MSOffice, Research publishing tool- MS-Word, Adobe acrobat, Graphics tool- MS Excel, MS-Power Point: Creating presentations and adding effects, Subject/field specific tools on www.freeware.com

Suggested Readings:

- Suresh K. Basandara.," Computer Today", New Delhi, Cialgotra – 1999
- Rom Mansfield., "The concept guide to Microsoft office". New Delhi BPB 1994.
- Suilz," Learn Dos in a Day", New Delhi BPB.
- P.K. Sinha," Computer Fundamentals", New Delhi BPB 1995
- Gini Courter, & Annette Marquis, "Microsoft Office 2000 No Experience Required", BPB Publications, New Delhi, 1999
- Laurie Ulrich, "Tech yourself Microsoft Office 2000 in 21 days", Techmedia, New Delhi, 1999
- Sumitabha Das, "Unix Concepts and Applications", Tata McGraw Hill Pub. Co. Ltd., New Delhi, 1997

RESEARCH AND PUBLICATION ETHICS

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

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

- **RPE 02: SCIENTIFICCONDUCT (5hrs.)**

1. Ethics with respect to science and research
2. Intellectual honesty and research integrity
3. Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
4. Redundant publications: duplicate and overlapping publications, salami slicing
5. Selective reporting and misrepresentation of data

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

1. Publication ethics: definition, introduction and importance
2. Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.
3. Conflicts of interest
4. Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types
5. Violation of publication ethics, authorship and contributorship
6. Identification of publication misconduct, complaints and appeals
7. Predatory publishers and journals

REVIEW OF LITERATURE

Objectives

This course has been designed to inculcate the skills of reviewing the concerned area of his/her research. The students are expected to review the articles as much as possible with the collaboration of his/her supervisor/s. He/she is expected to go through the milestone researches and books relevant to the work. They must focus on the chronological development of the constructs and develop the skills of observation of change/advancements that have taken at methodological levels. Thus, it is expected that they must develop full conceptual and methodological understanding of their area of interest.

1. Review of literature should be related to your research area.
2. It should be of 05-10 pages only
3. Review should consist of references of last 10 years.