COURSES OF STUDIES

FOR PHD PROGRAM
(UNDER SEMESTER SYSTEM)
2023-24

GANGADHAR MEHER UNIVERSITY, SAMBALPUR, ODISHA

Sl No.	Paper	Semester	Credit	(Marks) Mid Term + Term End	Teaching Hours
1	**711 (Departmental)**	**Sem-1**	**4**	**100 (20+80)**	**60 Hrs**
2	**712 (Research Methgodology-1)**	**Sem-1**	**4**	**100 (20+80)**	**60 Hrs**
3	**713 (Research Methgodology-2)**	**Sem-1**	**4**	**100 (20+80)**	**60 Hrs**
4	**Teaching Assignment**	**Sem-1**	**4**	**100 (0+100)**	**60 Hrs**
5	**Dissertation**	**Sem-2**	**08**	**200**	**120 Hrs**
	TOTAL		**24**	**600 (60+540)**	**360 Hrs**

Revised Syllabus of pre-registration course work for PhD in GMU.

School of Library and Information Science
Course No. 711: PhD Course work

RESEARCH TRENDS IN LIBRARY AND INFORMATION SCIENCE

Objectives: **1.** To acquaint the students with the basic concept and research trend in Library and Information Science.
2. To acquaint with the basic concept of Information Communication Technology & Networking.
.
Course Outcomes: After completion of the course, students will be able
CO-1 Understand the basic concept of research trends in the subject.
CO-2 To analyze the role of consortia and information Centre.
CO-3 To apply the concept of Networking and IPR in electronic environment.
CO-4 To implement the different models and research communication channel in information science.

Unit-I Trends and Developments in Library and Information Management
- Resource Management and Development: Human, Financial, E-Resources and Open Educational Resources
- Digital Library: Components, Digitization tools and technologies, Digital Library Initiatives in India, Open Access Initiative
- Marketing of information Products and Services
- Disaster Management, Digital Information Resources Management, Knowledge Management

Unit-2 Library Networks and Consortia
- Networks and Networking: Types, Hardware/ Software Requirements
- Data Networks, Library & Information Networks and Services
- Electronic Resource Management (ERM) and Library Consortia
- Legal Issues: Copy Right and Intellectual Property Rights in Electronic Environment

Unit-3 Emerging Technologies in Library & Information Centre
- Library Security and Surveillance: RFID, Bar Code, Smart Card, 3M Security, CCTV
- Web Technology: Web 2.0 and Web 3.0 features and functions; Web 2.0 tools and applications in libraries (Weblogs, Podcasts, RSS Feed, Instant Messaging, Wikis, Flickr, Social Networking), Web-scale discovery, Linked open data
- Cloud Computing: Concept, Need, Objectives and its application in libraries
- OER, MOOCs and Digital Library Initiatives: NPTEL, mooKIT, IITBX, SWAYAM Edx; NDLI

Unit-4 Research Communication
- Research Reporting: Structure, Style, Content, Quality parameters and Citation Standards (Chicago, MLA and APA).
- Reference management System: Mendeley, Endnote, Reference Work etc.
  Research support tools: Online survey tools, research profile, research guides, Plagiarism checker
- Research Communication Channels: Research-in-Progress, ETD repositories, Institutional Repositories, Subject Repositories.

References and Further Reading

- Andreasen, Alan and Kotler, Philip (2002) Strategic Marketing for Non-Profit Organisation. 6th ed., NJ: Prentice Hall.
- Bayross, Ivan, N. (2003) Database Concepts and Systems. Navi Mumbai: Shroff.
- Boulos, M. N., I.Maramba, and S. Wheeler." Wikis, Blogs and Podcasts: A New Generation of Web-based Tools for Virtual Collaborative Clinical Practice and Education".BMC Med Edu 6(2006): 41. Web.
- Glassman, N. R. (2018). Citation management tools: A practical guide for librarians.
- Gunasekara, Angappa (2003). Knowledge and Information Technology Management: Human and Social Perspectives. Hershey: Idea Group Publishing.
- Haynes David (2004) Meta Data for Information Management and Retrieval. London: Facet.
- http://www.academia.edu.
- http://www.egyankosh.ac.in/
- http://www.ignou.ac.in/
- http://www.wtec.org/ loyola/ digilibs/ 00_es.htm
- Jenkins, Martin. (2006) Supporting Students in e-learning. In Digital Literacies for Learning. (Eds) Allan Martin and Dan Madigan, Facet Pub. London, pp. 162-171.
- JISC. "Digital Repositories: Helping Universities and Colleges". Briefing Paper.2005. Web.
- Katy Jordan (2014), Initial trends in enrolment and completion of massive open online courses, The International Review of Research in Open and Distance Learning, Vol. 15 (1),

http://www.irrodl.org/index.php/irrodl/article/view/1651

- Kotler, Philip and Armstrong, Gary (2005). Principles of Marketing 11th ed., NJ: Prentice Hall.
- Lassibille, G and Gomez, Lucia Navarro. (2007) Why do higher education students drop out? Evidence from Spain. Education. Education Economics. 16, 89-105.
- Lupone, G. (2000) Digital Libraries: Potentials and Risks. Library High Tech. 17(1) 30.
- Maness, J. M.: Library 2.0 Theory: Web 2.0 and Its Implications for Libraries. Webology, 3(2), 2006. <Available at http://www.webology.ir/2006/v3n2/a25.html>
- Marchal, Benoit (2000) XML by EXAMPLE. New Delhi: Prentice Hall.
- Martin, Allan and Madigan, Dan. (2006) (Eds) Digital Literacies for Learning. Facet Pub, London.

- Meadow, Charles T. Boyce, Bert R. and Kraft, Donald. H. (2000) Text Information Retrieval Systems. 2nd ed., San Diego, CA: Academic Press.
- Natarajan, Ganesh (2000) Knowledge Management: Enabling Business Growth, New Delhi: Tata McGraw Hills.
- Oreilly, Tim. "What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software". Communications & Strategies1(2007):17.Web.
- Powell, Thomas A (2000) The HTML Complete Reference. 2nd ed., New Delhi: Tata McGraw Hill.
- Raman, A Thothathri (2003) Knowledge Management: A Resource Book. New Delhi Excel Books.
- Sollumon, Michael R., Marshall, Greg W. and Stuart, Elnoro (2004) Marketing Real People, Real Choices, 4th ed., NJ: Prentice Hall. Trcson, Arizona: Knowledge Computing Corporation.

PAPER-712
RESEARCH METHODOLOGY-I

Unit-I
SCOPE, PHILOSOPHY AND ETHICS OF RESEARCH AND ETHICS
i) Introduction and Scope
ii) Introduction to philosophy: definition, nature and scope, concept, branches
iii) Ethics: definition, moral philosophy, nature of moral judgments and reactions, Research ethics, Institutional ethics committee.
iv) Ethics with respect to science and research
v) Intellectual honesty and research integrity

Unit-II
SCIENTIFIC CONDUCT
i) Research problem: Identification, Selection, Formulation of research objectives
ii) Research design: Components, Types and Importance
iii) Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
iv) Redundant publications: duplicate and overlapping publications, salami slicing
v) Selective reporting and misrepresentation of data

Unit-III
TECHNICAL WRITING
i) Literature search technique, using SCOPUS, Google Scholar, PUBMED, Web of science, Indian Citation Index, and RG

ii)   Types of technical documents; Full length research paper, Short/Brief communications, Letters to editor, Book chapter, Review, Conference report, Project proposal Components of a full length research paper; , Rationale of the paper, Aims and objectives, Hypothesis building, Work plan, Materials and methodology, Results and discussion, Conflict of interest statement,

iii)   Components of a research proposal; Project summary Key words, Origin of the proposal, Major objectives Methodology, Instrument facility available in the PI's department, Overview of status of Research and Development in the subject, Importance of the proposed project in the context of current status.

iv)   Styles of referencing; APA, MLA, Oxford, Harvard, Chicago, Annotated bibliography, Tools for citing and referencing, Grammarly, Endnote etc, How to cite and how to do referencing

Unit-IV

PUBLICATION ETHICS

i)   Publication ethics: definition, introduction and importance

ii)   Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.

iii)   Conflicts of interest

iv)   Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types

v)   Violation of publication ethics, Subject specific ethical issues, FFP, authorship,

vi)   Identification of publication misconduct, complaints and appeals

vii)   Predatory publishers and journals

viii)   Plagiarism-Pitfall

ix)   Use of plagiarism software like Turnitin, Urkund and other open-source software tools. Complaints and appeals: examples and fraud from India and abroad

PAPER-713
RESEARCH METHODOLOGY-II

Unit-I

IPR AND CYBER LAW.

i)   Patents, Patent laws, process of patenting a research finding

ii)   Intellectual property (IP), Intellectual property right (IPR)

iii)   Copyright, Trademarks, GI

iv)   Cyber laws

v)   COPE

Unit-II

QUANTITATIVE DATA ANALYSIS

i)   Types of Data, Data Collection – Methods and Tools

ii)   Hypothesis testing

iii)   Normal and Binomial distributions and their property

iv)   Tests of significance: Student t- test, F- test, Chi-$square$ test

v)   Correlation and Regression

vi)   ANOVA – One-way and Two-way, Multiple-range test

Unit-III

COMPUTER FUNDAMENTALS
i) Introduction to MS-Office software: MS-Word(Track change)
ii) MS-Excel
iii) MS-Power Point
iv) Features for Statistical Data Analysis Tool Pack, SPSS
v) Tables, Figures and Pictures using Excel
vi) Preparation of Posters
vii) Electronic submission of manuscripts
viii) Communication skills, oral and poster

Unit-IV
ADVANCED TOOLS & TECHNIQUES IN RESEARCH
i) Indexing databases
ii) Citation databases: Web of Science, Scopus, etc.
iii) Research Metrics
iv) Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
v) Metrics: h-index, g index, i10 index, altmetrics
vi) Open access publications and initiatives
vii) SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies
viii) Software tool to identify predatory publications developed by SPPU
ix) Journal finder /journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

Paper-714
Marks-200(150+25+25)

RIVIEW WORK
(Report Writing + Seminar Presentation of the Report + Viva-voce)