

COURSES OF STUDIES

**FOR PHD PROGRAM
(UNDER SEMESTER SYSTEM)**

2024-25



**GANGADHAR MEHER UNIVERSITY, SAMBALPUR,
ODISHA**

SEMESTERSYSTEMOFPHD

Sl No.	Paper	Semester	Credit	(Marks) MidTerm +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	TeachingAssignment	Sem-1	4	100 (0+100)	60 Hrs
5	Dissertation	Sem-2	08	200	120 Hrs
TOTAL			24	600 (60+540)	360 Hrs

RevisedSyllabusofpre-registrationcourseworkforPhDinGMU.

SchoolofLibraryandInformationScience Course No. 711: PhD Course work

RESEARCHTRENDSINLIBRARYANDINFORMATION SCIENCE

- Objectives:**
- 1.ToacquaintthestudentswiththebasicconceptandresearchtrendinLibraryand Information Science.
 - 2.ToacquaintwiththebasicconceptofInformationCommunicationTechnology&Networking.

CourseOutcomes:Aftercompletionofthecourse,studentswillbeable CO-1

Understand the basic concept of research trends in the subject.

CO-2Toanalyzetherole ofconsortiaandinformation Centre.

CO-3ToapplytheconceptofNetworkingand IPInelectronicenvironment.

CO-4Toimplementthendifferentmodelsandresearchcommunicationchannelininformationscience.

Unit-ITrendsandDevelopmentsinLibraryandInformationManagement

- ResourceManagementandDevelopment:Human,Financial,E-ResourcesandOpen Educational Resources
- DigitalLibrary:Components,Digitizationtoolsandtechnologies,DigitalLibraryInitiatives in India, Open Access Initiative
- MarketingofinformationProductsand Services
- DisasterManagement,DigitalInformationResourcesManagement,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: CopyRight and Intellectual Property Rights in Electronic Environment

Unit-3 Emerging Technologies in Library & Information Centre

- Library Security and Surveillance: RFID, Barcode, 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, moocKIT, 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 Works 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.
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- 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/>
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- 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, Gandy Gomez, Lucia Navarro. (2007) Why do higher education students drop out? Evidence from Spain. *Education. Education Economics.* 16, 89-105.
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- 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.
- O'Reilly, Tim. "What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software". *Communications & Strategies* 1(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.
- Sollomon, 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, Keywords, 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-sources 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 properties
- 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) IntroductiontoMS-Officesoftware:MS-Word(Trackchange)
- ii) MS-Excel
- iii) MS-PowerPoint
- iv) FeaturesforStatisticalDataAnalysisToolPack,SPSS
- v) Tables,FiguresandPicturesusingExcel
- vi) PreparationofPosters
- vii) Electronicsubmissionof manuscripts
- viii) Communicationskills,oralandposter

Unit-IV

ADVANCEDTOOLS&TECHNIQUES IN RESEARCH

- i) Indexingdatabases
- ii) Citationdatabases:Web ofScience,Scopus, etc.
- iii) ResearchMetrics
- iv) ImpactFactorofjournalasperJournal CitationReport,SNIP,SJR,IPP,Cite Score
- v) Metrics:h-index, gindex, i10index, altmetrics
- vi) Openaccesspublicationsandinitiatives
- vii) SHERPA/RoMEOonlineresourcetocheckpublishercopyright&self-archiving policies
- viii) SoftwaretooltoidentifypredatorypublicationsdevelopedbySPPU
- ix) Journalfinder/journalsuggestiontoolsviz.JANE,ElsevierJournalFinder,Springer Journal Sugester, etc.

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

REVIEW WORK
(ReportWriting+SeminarPresentationoftheReport
+Viva-voce)