

MAHATMA GANDHI CENTRAL UNIVERSITY

(Established by an Act of Parliament)

Course Work

for

Doctor of Philosophy

in Library and Information Science

Syllabus

(Under NEP -2020 w.e.f. 2024-25 - onwards)

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE महात्मा गाँधी केन्द्रीय विश्वविद्यालय MAHATMA GANDHI CENTRAL UNIVERSITY

(Established by an Act of Parliament) Dr. Ambedkar Administrative Building, Near OP Thana, Raghunathpur, Motihari, District: East Champaran, Bihar – 845401



DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

Course Work for Doctor of Philosophy (PhD) in Library and Information Science

A minimum three years full-time research course divided into six semesters leading to the degree of Ph.D. in Library & Information Science

A. Program Details

Name of the Department: Department of Library and Information Science

School: School of Computational Sciences, Information and Communication Technology

Subject: Library and Information Science

Name of the Programme: Ph. D. (Library & Information Science).

Duration of the Programme: Minimum 3 Years divided into 6 Semesters and maximum as MGCU Ordinance.

B. Objectives of the Programme

- 1. To support outstanding research as a corequisite for outstanding education and development
- 2. To develop in critical thinking and analytical skills
- To recognise, identify, and foster the unique capabilities of each learner, by promoting each learners holistic development in both academic and non-academic spheres
- 4. To support continuous review of progress based on sustained research and regular assessment by educational experts
- 5. It helps to prepare students for more meaningful and satisfying lives and work roles and enable economic independence
- 6. The quality and higher education aims to develop good, thoughtful, wellrounded, and creative individuals
- 7. To revamp curriculum, pedagogy, assessment, and student support, increased access, equity, and inclusion.



C. Details of Course Credits and Scheme of Examination:

Ph.D. Programme in Library and Information Science (2024-25 onwards) <mark>First – Semester, Level 8</mark> Credit <mark>: 16</mark>			
Level	Programme	Qualification Titles	Total Credits
Level 8	Ph.D. Programme in Library and Information Science	Minimum Eligibility:4-year Bachelor (Honours with Research) in Library and Information Science degree from Central/State Government recognized university having minimum 75% marks in Level 7 or equivalent grade. Or,Master's Degree in Library and Information Science from Central/State Government recognized university having minimum 55% marks or equivalent grade (5% marks relaxation for SC/ST/OBC (Non-creamy layer)/PwD Candidates) as per MGCU PhD Ordinance.	Semester I : 16 Credits



		First – Semester	, Level	8						
Course Code	Course Title	Broad Credit Distribu Category of			ution	Duration	IA	ESE	Tot al	
		Course	L	Т	Р	Total				aı
PHDLIS 6101/RPE	Research and Publication Ethics	Compulsory/ Non-core	2	1	1	4	60 HRS	30	70	100
PHDLIS 6102	Research Methodology	Core	3	1	0	4	60 HRS	30	70	100
PHDLIS 6103 A	Literature Search and Library	ne course from the Multi-discipli Open Elective		1	or, ch	oose froi 4	60 HRS	30	70	100
PHDLIS 6103 B	Electronic-Resource Management	Open Elective	3	1	0	4	60 HRS	30	70	100
PHDLIS 6103C	Library and User Studies	Open Elective	3	1	0	4	60 HRS	30	70	100
PHDLIS 6103 D	Application of Emerging Technologies in Library	Open Elective	3	1	0	4	60 HRS	30	70	100
			-		0	4	60 HRS	30		
PHDLIS 6103 E	Intellectual Property Rights and Copyrights	Open Elective	3	1	U	-	001113	30	70	100



DEPARTMENT OF LIBRARY & INFORMATION SCIENCE

Ph. D. (Library & Information Science) FIRST SEMESTER Course Work

Course Code	PHDLIS6101/RPE
Course Title	Research and Publication Ethics
Type of Paper	Compulsory/ Non-Core
Credit	4
Teaching Hours	48

Objectives- To make the students aware of the research and publication ethics. This course has 6 units focusing on the basics of the philosophy of science and ethics, research integrity, and publication ethics; hands-on sessions are designed to identify research, misconduct and predatory publications: indexing and citation databases, open access publications, research metrics and plagiarism tools.

Outcome- After completion of the course, students will be aware of the philosophy of science and ethics, research integrity, and publication ethics; hands-on sessions are designed to identify research, misconduct and predatory publications. Indexing and citation databases, open-access publications, research metrics and plagiarism tools

SECTION (A): Research and Publication Ethics (Theory)

50 Marks

Unit I: Philosophy and Ethics

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

Unit II: Scientific Conduct

- > 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

Unit III: Publication Ethics

- > 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 behaviour and vice versa, types
- Violation of publication ethics, authorship and contributorship
- > Identification of publication misconduct, complaints and appeals
- Predatory publishers and journals



SECTION (B): Research and Publication Ethics (Practice)

50 Marks

Unit IV: Open Access Publishing

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

Unit V: Publication Misconduct

- A. Group Discussion
 - > Subject specific ethical issues, FFP, authorship
 - Conflict of interest
 - > Complaints and appeals: examples and fraud from India and abroad
- B. Software Tools
 - > Use of plagiarism software like Turnitin, Urkund & other open source software tools.

Unit VI: Databases and Research Metrics

- A. Databases
 - Indexing databases
 - > Citation databases: Web of Science, Scopus, etc.
- B. Research Metrices
 - Impact factor of Journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
 - > Metrices: h-index, g index, i10 index, altmetrics



- 1. Bird, A. (2006), Philosophy of Science, Routledge.
- 2. MacIntyre, Alasdair (1967) A Short History of Ethics. London
- P.Chaddah, (2018) Ethics in Competitive Research: Do not get scooped; do not get plagiarized, ISBN:978-9387480865
- National Academy of Science, National Academy of Engineering and Institute of Medicine. (2009). On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition, National Academies Press.
- Resnik, D.B. (2011), what is ethics in research & why is it important. National Institute of Environmental Health Science, 1-10. Retrived from https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm
- 6. Beall, J. (2012). Predatory publishers are corrupting open access. Nature, 489(7414), 179-179.
- 7. https://doi.org/10.1038/489179a
- Indian National Science Academy (INSA), Ethics in Science Education, Research and Governance(2019),
- 9. ISBN:97881939482-1-7. http://www.insaindia.res.in/pdf/Ethics_Book.pdf



Course Code	PHDLIS6102
Course Title	Research Methodology
Type of Paper	Core
Credit	4
Teaching Hours	48

Objective- To make the students aware of the research methodology concepts, definitions, and various techniques used for data analysis in research.

Outcome- After completion of course, students will be aware of implications of research and confident to take up research work.

Unit I: Foundations of Research and Research Design

- > Concept, Meaning, Need and Process of Research
- Types of Research: Fundamental and Applied
- Research Design, Types of Research Design
- > Designing Research Proposal, Literature Search and Literature Review

Unit II: Research Methods

- > Types of research: Qualitative and quantitative method of LIS research
- Scientific Method
- > Historical Method, Survey and Case Study Method
- > Experimental Method

Unit III: Data Analysis and Interpretation

- Data Collection Techniques: Questionnaire, Interview, Observation, Sampling and Delphi
- > Presentation of Data-Tables, Charts and Graphs
- Interpretation of Data: Frequency Distribution, Measures of Central Tendency, Analysis of Time Series, Co-relation Studies and Analysis of Variance
- Use of Statistical Packages

Unit IV: Statistics and its Applications

- Descriptive Statistics Measures of Central Tendency: & Dispersion,
 Correlations and linear regression, Chi-Square test, t-test, z-test, f-test.51 52
- Presentation of Data: Tabular, Graphic, Bar Diagram and Pie Chart, etc. Report Writing Statistical Packages – MS-Excel, SPSS, and Web-based Statistical Analysis Tools, etc.
- > Plagiarism- Self plagiarism, anti-plagiarism guidelines and software



- 1. Booth,W. C., Williams, J. M. and Colomb, G. G. (2003). The Craft of Research.University of Chicago Press.
- Borgman, Christie L., ed. (1990). Scholarly Communication and Bibliometrics. Newbury Park, CA: Sage Publications, Inc.
- 3. Brady, John. (1997). The Craft of Interviewing. New York: Vintage.
- 4. Busha, Charles H. and Harter, Stephen P. (1980) Research Methods in Librarianship. New York: Academic Press.
- 5. Davis, GB (1997) Management Information System: Concept, Foundation Structure and Development. New York: McGraw Hill.
- 6. Gillham, Bill. (2000). The Research Interview. London: Continuum Press.
- Gupta, B. M. (1996). Bibliometrics, Scientometrics and Infometrics. New Delhi: Segment Books.
- 8. Khanna, J K (2000) Documentation and Information Services, Systems and Techniques. Agra: YK Publishers.
- 9. Kish, Leslie. (1995). Survey Sampling. New York: Wiley.
- 10. Marshall, Catherine and Rossman, Gretchen B (2006). Designing Qualitative Research. Sage USA.
- 11. Nielsen, Jakob. (2000). Designing Web Usability. New Riders, USA.
- 12. Payne, Stanley. (1951). The Art of Asking Questions. Princeton University Press.
- Raju, Nemani Govinda. (2009). Bibliometric Applications: Study Of Literature Use Patterns
- 14. Rea , Louis M and Parker , Richard A. (2005). Designing and Conducting Survey Research, San Francisco: Jossey-Bass.
- 15. Reinard , John C. (2006). Communication Research Statistics. Sage, USA.
- 16. Rowntree, Derek. (2003). Statistics without Tears: A Primer for Non-Mathematicians. London: Penguin.
- 17. Rubin, Herbert and Irene. (2004). Qualitative Interviewing: The Art of Hearing Data. Sage, USA.
- 18. Sudman, Seymour (1976). Applied Sampling. New York: Academic Press.



Course Code	PHDLIS6103 A
Course Title	Literature Search and Library Databases
Type of Paper	Open Elective
Credit	4
Teaching Hours	60

Objectives- To acquaint the students with the steps of literature search and database services.

Outcome- After completion of the course, students will be able to understand the process of literature search and database services which will help them to conduct their research work systematically.

Unit I: Basics of Literature Search

- > Concept, Definitions and Purpose of literature search
- Users and their Information Needs
- Process of Literature Search
- > Advantages of Computer based Searching

Unit II: Information Sources and Search Strategies

- Information: Concept, Definitions, Need and Purpose
- > Types of Information Sources: Primary, Secondary, Tertiary
- > Boolean Operators (AND, OR, NOT), Proximity Search, Truncation Search
- Single Search to Library Resources: Federated Search and Web Scale Discovery Services

Unit III: Library Databases and Management

- Databases: Concept and Definitions
- > Types of Databases
- Database Services
- Publishers and Aggregators

Unit IV: Open Access Resources

- Open Access Journals
- Institutional Repositories
- Digital Libraries
- > Open Access Policies and Agreement



Recommended Books:

- 1. Koul, L. (1997). Methodology of Educational Research. New Delhi: Vikas Publishing House Pvt. Ltd. (Third Revised Edition)
- Ghosh, S. B. and Das, A. K. (2007). Open Access and Institutional Repositories a Developing Country Perspective: A Case Study of India. IFLA Journal 33.4, 229-250. Print.
- 3. https://egyankosh.ac.in/bitstream/123456789/102358/1/Unit-2.pdf
- 4. <u>https://www.hope.ac.uk/media/gateway/library/How%20to%20do%20a%20literature %20search.pdf</u>
- 5. https://egyankosh.ac.in/bitstream/123456789/43734/1/Unit-21.pdf
- 6. https://egyankosh.ac.in/bitstream/123456789/33158/1/Unit-7.pdf
- 7. https://egyankosh.ac.in/bitstream/123456789/35338/5/Unit-10.pdf
- 8. https://surrey-content.surrey.ac.uk/sites/default/files/2019-08/literature-searching.pdf



Course Code	PHDLIS 6103 B
Course Title	Electronic-Resource Management
Type of Paper	Open Elective
Credit	4
Teaching Hours	48

Objectives: To make the students aware of collection development and different types of electronic resources and their use.

Outcome: After completion of the course, students will be able to differentiate and utilize electronic resources for their learning and research activities.

Unit I: Electronic-Resources: An Overview

- > E-Resources: Introduction, Advantages, Disadvantages
- ➤ E-Resources Life Cycle
- ➤ Standards for E-Resources
- ➤ Open Access Initiatives

Unit II: Types of Electronic-Resources

- ➤ E-Journals & E-Books
- ➤ Databases, CD-ROM databases
- ➤ Internet Resources
- > Library Consortium, Criteria Evaluation of E-Resources

Unit III: Web Resources

- ➤ Web Resources Introduction, Needs
- Science & Technology
- ➤ Humanities & Social Sciences
- Evaluation of Web Resources

Unit IV: Collection development and Management of Electronic Resources

- Collection development of E-Resources
- ➢ Policy for E-Resources
- > Licence and agreement for procurement of E-Resources
- ➤ Case study of Digital Library



1. Frank Rennie & Robin Mason. (2011). e-Learning and Social Networking Handbook:

Resources for Higher Education. Amazon.com

- 2. James E. Bobick and G. L. Berard (2011). Science and Technology Resources: A Guide for Information Professionals and Researchers (Library and Information Science Text Series). Amazon.com
- 3. Karin Wikoff. (2011). Electronic Resources Management in the Academic Library: A Professional Guide. Amazon.com
- 4. Peter Clayton and G. E. Gorman. (2001). Managing Information Resources in Libraries: Collection Management in Theory and Practice. Amazon.com
- Ruth C. Clark & Richard E. Mayer. (2011). e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning (Essential Knowledge Resource). Amazon.com



Course Code	PHDLIS 6103C
Course Title	Library and User Studies
Type of Paper	Open Elective
Credit	4
Teaching Hours	48

Objectives- To make students identify the users of a library or of any information system or service and to understand the concept of user education. **Outcome-** After completion of the course, students will be aware of the users and user education in broader perspectives.

Unit I: Library and Information Users

- > Information: Definition and its nature, Categories of information users
- > Information needs of users, Information seeking behaviour
- > Information Seeking Behaviour, Wilson's Nested Model of Conceptual Areas
- Library Users and Usage

Unit II: Changing Role of Libraries

- > Changing Role of Library Professionals in the Digital Age
- > Evaluation of library sources and services: Books, periodicals, catalogues.
- Effectiveness: Cost Benefit /Cost Effectiveness studies
- Planning surveys, collecting information, processing and analysis of data interpretation and presentation

Unit III: User Studies

- User Studies: concept and meaning, Objectives, Need, Planning
- > Methods or Techniques of User Studies
- Implications of User Studies for Libraries, Collection Development, Weeding out Documents, Allocation of Resources, User-based Information Services
- Limitations and Evaluation of User Studies.

Unit IV: User Education

- > User Education: Definitions, Components, Goals and Objectives
- Development of User Education
- Information Technology and User Education
- > Evaluation of a User Education Programme



- 1. Banwell, Linda, and Graham Coulson. "Users and User Study Methodology: The Jubilee Project". Information Research 9.2 (2004)
- 2. Bernal, J.D. Report on Royal Society's Scientific Conference. London: Royal Society, 1948. Print
- 3. The Transmission of Scientific Information: A User's Analysis In: International Conference on Scientific Information. Vol.1. Washington: NRC, 1959. pp.77-95. Print
- 4. Busha, Charles H., and Stephen P. Harter. Research Methods in Librarianship: Techniques and Interpretations. New York: Academic Press, 1980. Print
- 5. Devarajan, G. Library Information User and Use Studies. New Delhi: Beacon Books, 1995. Print
- 6. Guha, B. Techniques of User Studies. Paper 11.3 in DST Course Material. New Delhi :INSDOC, 1976. Print.
- 7. Fjallbrant, Nancy and Malley, Ian (1984): User Education in Libraries. 2nd ed: London:- Clive Bingley
- 8. Fjallbrant, N: (1996). Educate.- a networked user education project in Europe. In IFLA

Journal, zz(I)

- 9. Girja Kumar and Krishan Kumar (1983). Philosophy of User Education. New Delhi: Visas Publishing House.
- 10. Kirkendall , C.A. (1980). Library Use Education: Current Practices and Trends.. Library Trends, 29(I).
- 11. Knapp, P.B. ('1964). The Monteith College Experiments. New York: Scarecrow Press.
- 12. Lubans, J, ed. (1974). Educating the Library User. London: BOWKER



Course Code	PHDLIS 6103 D
Course Title	Application of Emerging Technologies in Library
Type of Paper	Open Elective
Credit	4
Teaching Hours	48

Objectives- To make the students aware of Technologies in the Library, Emerging Technologies, Knowledge Management (KM) and Application of Emerging Technologies in the Library.

Outcome- After completing the course, students will be able to understand technologies in the library, emerging technologies, knowledge management (KM), and the application of emerging technologies.

Unit I: Technologies in the Library

- Transformation of Library and Information Science, E-Resources and Consortia Management
- Library and Information Science Profession: Trends & Issues
- > Web 3.0 and Web 4.0 and its Applications in Library Services
- Remote Access to E-Resources Anywhere, Anytime

Unit II: Emerging Technologies in Libraries

- > RFID Implementation in Libraries, QR Code and Useful applications in Libraries
- > E-learning and MOOCs: Role of Libraries
- > Artificial Intelligence: Representation of Knowledge & Beyond
- Internet of Things for Libraries

Unit III: Knowledge Management (KM)

- > Development of a Digital Library Using DSpace on Windows
- Big data and Data Visualization
- Knowledge Management (KM) with Special Reference to Libraries Content Management System
- Research Data Management in Higher Educational Institutions

Unit IV: Application of Emerging Technologies in Library

- Semantic Web and Libraries
- > Cloud Computing and Its Application in Libraries
- > Blockchain Technology and Its Application in Libraries



> Social Media and Mobile Applications

- Baba, Abdul Majid; Bhardwaj, Raj Kumar; Dhaka, S.S.; Ashraf, Tariq & Hasan, Nabi (Eds.). (2018). Developing Smart Libraries: Changes, Challenges, Issues & Strategies: Proceedings of the 3rd International Conference of Asian Libraries (ICAL-2018). (pp. xix, 688). New Delhi: Asian Library Association.
- Hasan; Nabi; Chaurasia, Neeraj K.; Chavan, Shankar B.; Verma, Vijay K. and Khanchandani, Vanita (Eds.). (2020). Library Handbook: IIT Delhi (revised and enlarged edition). (pp. 66). New Delhi: IIT Delhi. (ISBN – 978-93-5382-346-7): http://library.iitd.ac.in/pdf/LibraryHandbook.pdf
- Hasan, N., & Naskar, D. (2020). ARPIT Online Course on Emerging Trends & Technologies in Library & Information Services (ETTLIS): A Case Study. DESIDOC Journal of Library & Information Technology, 40(3), 160168. (ISSN- 0976-4568) (DOI: 10.14429/djlit.40.3.15488): https://publications.drdo.gov.in/ojs/index.php/djlit/article/view/15488/7306.
- 4. Hasan, N. (2020). Excellence in Library Services: A case study of IIT Delhi. Reinventing Library Services in the Digital Age (Virtual), 27-30 August 2020, LIS Academy, Bangalore, 6-6.
- 5. Hasan, N. (2020). Marketing of Library Resources, Services and Products. Swayam Prabha Channel, Ministry of HRD, Govt. of India: https://www.swayamprabha.gov.in
- Hasan, N. (2019). Retrieving Information from E-Resources and Online Databases. Swayam Prabha Channel, Ministry of HRD, Govt. of India: https://www.swayamprabha.gov.in
- 7. Hasan, N. (2019). Search Engines and Meta Search Engines. Swayam Prabha Channel, Ministry of HRD, Govt. of India: https://www.swayamprabha.gov.in
- 8. Hasan, N. (2019). Need and Purpose of Library Automation. Swayam Prabha Channel, Ministry of HRD, Govt. of India: https://www.swayamprabha.gov.in



9. Hussain, A., & Fatima , N. (2017). Emerging Trends in Information Technology in Modern Libraries. Manakin Press.

Course Code	PHDLIS 6103 E
Course Title	Intellectual Property Rights and Copyrights
Type of Paper	Open Elective
Credit	4
Teaching Hours	48

Objectives- To make the students aware of the intellectual property & copyright concepts and other issues related to patents.

Outcome- After completion of the course, students will be aware of IPR & copyright, copyright violation and infringement.

Unit I: Intellectual Property and Rights

- > Intellectual Property: Concept, Genesis, Development and Categories
- > Enforcement of Intellectual Property Rights
- ➢ Role of WIPO
- > Emerging Issues in Intellectual Property Rights

Unit II: Copyright

- Copyright: Meaning and Scope
- Rights to Copyright Owner
- Licensing of Copyright
- Copyright Laws and Related Issues

Unit III: Patents

- Patent: Concept and Scope
- Patent Laws in India
- > Patent Laws in Abroad
- Violation and Infringement, Violation and Infringement India USA UK

Unit IV: Copyright& Patent in Digital Era

- > Intellectual Property Digital Era: Meaning and Development
- ➢ IPR Acts
- > Application of IPR in Electronic Environment
- Copyright of Electronic Resources



- 1. Ajit Parulekar and Sarita D' Souza, Indian Patents Law Legal & Business Implications; Macmillan India Ltd, 2006.
- 2. Andrew Murra. (2010). Information Technology Law: The law and society. OUP Oxford
- 3. B. L. Wadhera; Law Relating to Patents, Trade Marks, Copyright, Designs & Geographical Indications; University Law Publishing Pvt. Ltd., India, 2000
- 4. Bourgagaize, Jewell and Buiser, Biotechnology: Demystfying the Concepts, Wesley Longman, USA, 2000
- 5. Carlos M. Correa and Abdulqawi A. Yusuf. (2008). Intellectual Property and International Trade: The TRIPS Agreement (Second Edition). Kluwer Law International
- 6. D. Balasubramaniam, C.F.A. Bryce, K. Dharmalingam, J. Green and K. Jayaraman, Concepts in Biotechnology, University Press (Orient Longman Ltd.)., 2002
- 7. Deborah E. Bouchoux. (2012). Intellectual Property: The Law of Trademarks, Copyrights, Patents, and Trade Secrets. Delmar Cengage Learning.
- 8. Federico Munari and Raffaele Oriani. (2011). The Economic Valuation of Patents:
- Methods and Applications (New Horizons in Intellectual Property Series). Edward Elgar Publishing
- 9. Fishman, Stephen. (2008). The copyright handbook: what every writer needs to know.Berkeley, CA: Nolo.
- 10. Freeman, Lee & Peace, A. Graham. (2005). Information ethics : privacy and intellectual property. Hershey, PA : Information Science Pub.
- 11. Jessica Litman. (2001). Digital Copyright: Protecting Intellectual Property on the Internet. Prometheus Books
- 12. John Grant, Charlie Ashworth and HenriJ. A. Charmasson. (2008). Patents, Registered Designs, Trade Marks and Copyright for Dummies. Wiley
- 13. Jude C. Umeh. (2008). The World beyond Digital Rights Management. BCS, The

Chartered Institute for IT

- 14. P.Narayanan; Law of Copyright and Industrial Designs; Eastern Law House, Delhi,
- 2010 P.N. Cheremisinoff, R.P. Ouellette and R M Bartholomew, Biotechnology Applications and Research, Technomic Publishing Co., Inc. USA, 198



Course Code	PHDLIS 6104
Course Title	Technical Writing
Type of Paper	Core
Credit	4
Teaching Hours	48

Objective- To acquaint scholar with communication process, planning, organisation of technical/scientific writing, technical editing, editorial tools, publication process and ethics.

Outcome- After completion of the course, scholars will be confident about communication process, planning, organisation of technical/scientific writing, technical editing, editorial tools, publication process and ethics.

Unit I: Communication Process

- > Overview of Communication process
- > Characteristic features of Technical Writing
- > Target group in Written Communication
- Reader /Writer Relationship

Unit II: Planning and Organisation of Technical / Scientific Writing

- > Definition, Structure, Purpose, Characteristics and functions
- > Aberrations in Technical Writing
- > Collection, Organisation and Presentation of Data
- Case Studies: Preparation of Short Communications, Review Articles, Technical Reports, Monographs, Project proposals, dissertations and House Bulletins

Unit III: Technical Editing and Editorial Tools

- > Editor
- Editorial process
- Editorial Tools

Unit IV: Publication Process and Ethics

> Planning, Preparation, and Production of Technical Information products



- > Dissemination of Technical Information products
- Publication Ethics: Copy Right
- > IPR, Legal Issues and Professional Ethics

- Elbow, Peter. Writing without teachers. New York. Oxford University Press. 1973.
- 2. Gowers, Sir. Ernest. The complete plane words. London: HMSO. 1954.
- 3. Holsinger, Donald C. A classroom laboratory for writing history. Social studies review. 31(1), 1991. pp. 59-64.
- 4. Kapp, Ro. The presentation of technical information. London: Constable 1948.
- 5. Kirkman, John. Good style for scientific and engineering writing. London: Pitman. 1980.
- 6. Parry, John. The psychology of human communication. London. University of London Press. 1967.
- Ramage John D and Bean John C. The allyn and bacon guide to writing. 2ed. London, Allyn and Bacon. 2000. pp. 658.
- 8. Turk, Christopher and Kirkman, John. Effective writing: Improving scientific, technical and business communication. 2ed. London: Spon Press. 2007.
- 9. Winokur, Jon. Ed. Writers on Writing. Philadelphia running press: 1986.