

LIS17407GE-WEB 2.0 TECHNOLOGIES: UTILITY AND IMPACT
(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
1	1	0	2

Unit-I Web 2.0 Basics

- 1.1 Web 2.0: Concept, Development and Features
- 1.2 Introduction to Web 2.0 Technologies (Blogs, Podcasts, Content Sharing Sites etc.)
- 1.3 Educational Benefits of Web 2.0 tools
- 1.4 Web 2.0: issues and Challenges

Unit-II Web 2.0 and Social Media

- 2.1 Social Media: Concept and Development
- 2.2 Web 2.0 and Social Networking services: An overview
- 2.3 Social Networking tools for academics – ResearchGate, Academia.edu etc.
- 2.4 Future Technologies: Opportunities and challenges

Suggested Reading

- Addey, D. (2002). Content management systems. Birmingham: Glasshaus.
- Arthur, M. H. (2006). Expanding a digital content management system: For the growing digital media enterprise. Amsterdam: Elsevier Focal Press.
- Bergen, J. .(2008). Content management. Amsterdam: StichtingArchis.
- Boiko, B. (2005). Content management bible. Indianapolis, IN: Wiley Pub.
- Cole, J. R. (2008). Using Moodle.Farnham: O'Reilly.
- Derr, M., & Symes, T. (2009). Joomla!. Berkeley, CA: Peachpit Press.
- Eden, B. L. (2008). Content management systems in libraries: Case studies. Lanham, Md: Scarecrow Press.
- European Commission, & Joint Research Centre. (2011). Learning 2.0: The Impact of Web 2.0 Innovations on Education and Training in Europe. Saarbrücken: Dictus Publishing. Available at <http://ftp.jrc.es/EURdoc/JRC55629.pdf>
- Foulonneau, M., & Riley, J. (2008). Metadata for digital resources: Implementation, systems design and interoperability. Oxford: Chandos Pub.
- Haynes, D. (2004). Metadata for Information Management and Retrieval. London: Facet Pub.

LIS15304DCE - OPEN ACCESS ENVIRONMENT
(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objective

- To sensitize the students with OA movement and its tool, resources, challenges and opportunities

Unit-I Scholarly Communication Process

- 1.1 Research Lifecycle
- 1.2 History and Evolution of Scholarly Communication
- 1.3 Status and Trends
- 1.4 Role of Stakeholders

Unit-II Open Access: History and Developments

- 2.1 Open Access: Definition, Philosophy and Evolution
- 2.2 Approaches to Open Access
- 2.3 Benefits of Open Access
- 2.4 Arguments against Open Access and Responses
- 2.5 Open Access Business Models
- 2.6 Long-Terms Preservation Models

Unit-III Rights and Licenses

- 3.1 Intellectual Property Rights
- 3.2 Open Licenses
- 3.3 Support Tools and Services

LIS17305 DCE -AGRICULTURE INFORMATION SYSTEM

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objectives

- To understand development of Agricultural science, resources and information systems useful to various stakeholders in accessing information.

Unit-I Agriculture Science and Organizations

- 1.1 Agricultural Science: Concept
- 1.2 Scope of agricultural sciences
- 1.3 Agricultural Science Organizations and Institutions. National and International. .
 - 1.3.1 Indian Council of Agricultural Research. (ICAR)
 - 1.3.2 Food and Agricultural Organization. (FAO).
- 1.4 Information needs and information seeking pattern of Agricultural Science Professionals: An overview.

Unit-II Agricultural Information Systems and Networks: International and National.

- 2.1 FAO Databases and Information Systems,
- 2.2 USDA Databases,
- 2.3 Consortium of International Agricultural Research Centers (CGIAR),
- 2.4 IARI and ICAR initiated databases.

**IS17307DCE -Academic Writing
(4 Credits)**

Credit Pattern

Lecture	Tutorial	Practical	Total
2	2	0	4

Objective (s)

- To focus on the academic writing processes
- To explore the possibilities of getting published

UNIT-I Academic Writing

- 1.1 Academic Writing: Purpose
- 1.2 Key Actors in Academic Writing
- 1.2 Academic Writing as Knowledge production

UNIT-II Academic Writing Platforms and Publishing

- 2.1 Platforms and Types of Academic Writing
- 2.2 Academic Writing Obstacles
- 2.3 Publishing in Academic Journals

UNIT-III Academic Review Process

- 3.1 Manuscript Evaluation and Editorial Evaluation
- 3.2 Review Process and Reviewer Qualities
- 3.3 Recommending Reviewers
 - 3.3.1 Types of Review
 - 3.3.2 Editorial Feedback
 - 3.3.3 Revisions and Submissions

UNIT-IV Research Ethics, Research Outreach and Performance

- 4.1 Ethical guidelines for Publishing
- 4.2 Publishing Companies, Publishing Fees, and Open Access Journals
- 4.3 Increasing the research visibility

Suggested Readings

Bailey, S. (2003). *Academic writing: A practical guide for students*. England: Nelson Thornes Ltd.

De Silva, P. U. K. & Vance, C. K. (2017). *Scientific Scholarly Communication The Changing*

LIS17308DCE- OPEN SOURCE TECHNOLOGY
(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objective

- To focus on various aspects of Open Source Technology and develop skills for installing and using different Open Source Software.

Unit-I Open Source: Basics

- 1.1 Open Source: Concept and Development.
- 1.2 Open Source Initiative
- 1.3 Open Source Licensing: An overview
- 1.4 Open Source: Issues and Challenges

Unit-II Open Source Software

- 2.1 Open Source Software: Definition and Characteristics.
- 2.2 Open Source Software in different Setups: An overview
- 2.3 Benefits of Open Source Software Technology

Unit-III Open Source Environments

- 3.1 Open Source Operating Systems: Ubuntu, and FreeBSD.
- 3.2 Apache OpenOffice, LibreOffice and NeoOffice
- 3.3 Open Source Database tools: MySQL, PostgreSQL and SQLite.

Unit-IV Open Source Software and Libraries

- 4.1 Open Source Software for Digital Libraries and Institutional Repositories.
- 4.2 Open Source Content Management Systems: An overview
- 4.3 Open Harvester Systems for Libraries.

Websites (Illustrative):

Apache OpenOffice(2017).Apache OpenOffice.Available at

<https://www.openoffice.org/>

Drupal(2017).Drupal.Available at

<https://www.drupal.org/>

LIS17405DCE-Web Resources for Research

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
03	0	01	04

Objectives

- To acquaint students with the problems faced by research community in using web Based information
- To acquaint students with Tactics and Strategies for dealing with such sources
- To acquaint students with sources and tools dealing with web based information

UNIT-I Problem in Scientists Current Practices of Using Web-Based Information

- 1.1 Web information Sources: Concept and Need
- 1.2 Challenge to Harnessing Web-Based Information
 - 1.2.1 Information Overload and Resources Evaluation
 - 1.2.2 Web Site Navigation, Reliability and Browsability issues
 - 1.2.3 Preprints
 - 1.2.4 Financial Concerns
 - 1.2.5 Scholarly Misconduct and Misinformation
 - 1.2.6 Copyright issues

UNIT-II Tactics and Strategies for Dealing with Web-Based Information

- 2.1 Artificial Intelligence: Concept and Importance
- 2.2 Heuristic Search Strategies and Navigational Query Formulation
- 2.3 Controlled Vocabularies and Web Site Evaluation
- 2.4 Search Strategies and Refinement Techniques in Online Databases

LIS17404DCE-PROJECT REPORT

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
0	1	3	4

Objective

- The main objective of the “project report” is to pursue a current problem in the field of Library & Information science to explore its facets thoroughly and come out with solutions or ways in a scientific way. This will prove useful to the student in applying knowledge and experience acquired during the academic session to real, live and emerging problems in the field.

Method of Instruction

Each student or a group of two students only (depending upon the scope of the problem) will be required to submit a project report on an approved topic of current research and application. The report is to be submitted both in hard and soft format. The student(s) will work under the supervision of one or two experts/ guides from the Department or any other department of the university/ other recognized research institutes for successful completion of the project. The areas and topic will be finalized and approved by the Departmental research cum ethics committee to be constituted for the purpose, comprising Head of the Department, two senior colleagues and two approved supervisors on rotation basis.

Each report will be evaluated by the external and internal examiner and marks/grades for evaluation will be on presentation, methodology and inputs put in the work. The viva voce will also be conducted by the committee comprising HOD, External Examiner and two senior faculty members.

The Project will be of 100 marks out of which 80 marks will be awarded to project report evaluation and 20 marks will be for viva voce by the said committee. There will be no internal assessment. The Project Report is to be submitted not beyond 2 months after completion of 4th semester examination.

LIS17104DCE PUBLIC LIBRARY SYSTEM

4 credits

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objectives

- To foster the development of professional knowledge to successful public librarianship
- To educate and train about range of professional challenges associated with public library administration and management

Unit I

- 1.1 Public Library: Concept, Origin and Growth
- 1.2 Role of Library Associations and Organizations in Development of Public Library System at National: RRRLF, ILA & International Level: IFLA, UNESCO.
- 1.3 National Library Policy and Library Legislation
- 1.4 Public Library system in relation to mass education: Political, industrial, economic life, Cultural advancement and Youth Development

Unit II

- 2.1 Development Plans and Resource Mobilization: Private-Public Partnership.
- 2.2 Architecture Planning and Administration of Public Libraries
- 2.3 Collection Development and Management: Emerging Trends: E-Consortia, Free and Open Access Sources.
- 2.4 Public Library Norms, Standards and Guidelines
- 2.5 Role of Advocacy and Pressure Groups in Public Library Development.

LIS17105 DCE-SCHOOL LIBRARY SYSTEM
(4 credits)
Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objectives

- To provide an overview of principles and practices in school library systems.
- To understand the challenging roles of school libraries and media specialists.

Unit I

- 1.1 School Library System: Basic Concept.
- 1.2 Major objectives of School Libraries.
- 1.3 Components of School Libraries.
 - 1.3.1 Collection.
 - 1.3.2 Basic Infrastructure.
 - 1.3.3 Staff

Unit II

- 2.1 Role of School libraries in promoting and supporting Education.
- 2.2 Role of School Librarian.
- 2.3 Qualities of School Librarian.

Unit- III

- 3.1 Management of School Libraries.
- 3.2 Services provided by school library
- 3.3 Major Problems Faced by School Libraries.

Unit IV

- 4.1 Impact of ICT on School Libraries.
- 4.2 School Library Automation
- 4.3 Internet and school libraries with emphasis on important search engines for different age groups.

LIS17106DCE-ORIENTAL LIBRARY SYSTEM
(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objectives

- To understand development and emergence of oriental libraries, value of their Collection and preservation etc.
- To plan, maintain and work in oriental library.

Unit I

- 1.1 Oriental Libraries: Concept, Growth and Development
- 1.2 Select Oriental Library at Global Level

UnitII

- 2.1 Organization of oriental literature
- 2.2 Metadata standards for digitized manuscripts and other oriental literature.
 - 2.2.1 Dublin core
 - 2.2.2 Encoded Archival Description
 - 2.2.3 TEI P5 Manuscript Description for Cataloguing Digitized Manuscripts.

Unit III

- 3.1 Historical perspective of Preservation and conservation
- 3.2 Rehabilitation of documents
- 3.2 Digitization: Basics & IFLA guidelines

Unit 1V

- 4.1 Preservation of manuscripts
- 4.2 Preservation program of manuscripts:assessment of initiatives in India
- 4.3 Preservation program: challenges and issues

**LIS17107DCE-HEALTH INFORMATION SYSTEM: INTRODUCTION TO HISTORY AND
POLICIES
(4 Credits)**

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objective

- To understand the working procedures and policies of Health Information Systems

UNIT I

- 1.1 Health and Healthcare Information: Introduction
- 1.2 Health Information Systems: Overview
- 1.3 History and Evolution of Health Care Information System

UNIT II

- 2.1 Health Informatics as a Discipline
- 2.2 Health Informatics as a Profession
- 2.3 Health Information System: Models

Unit III

- 3.1 Health Information Technology
- 3.2 Information Technology Adoption & Challenges
- 3.3 Quality of Health Information Systems

Unit IV

- 4.1 Health information systems in developing countries: benefits, problems, and prospects
- 4.2 Public health and Web 2.0
- 4.3 Knowledge, Attitude and Practice of Health Information System

Suggested Readings

Anna D. Cleveland & Donald B. Cleveland. (2009). *Health Informatics for Medical Librarians*. New York: Neal-Schuman Publishers

Kathryn J. Hannah & Marion J. Ball. (Series Editor). (2011). *Health Information Systems Architectures and Strategies*. London: Springer.

LIS17108DCE-INFORMATION TECHNOLOGY - THEORY

(4 credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objective

- To familiarize with basic concepts and components of Information technology, software tools and database management systems useful for information management.

Unit I

- 1.1 Information Technology: Foundation & components.
- 1.2 Computer: Genesis, Components & Functions.
- 1.3 Computer: Development & Generations.
- 1.4 Peripheral Devices:
 - 1.4.1 Memory: Primary and Secondary.
 - 1.4.2 Storage Devices, Communication Devices, Multimedia Devices.

Unit II

- 2.1 Operating System: Genesis, Development and Functions.
- 2.2 MS DOS: Introduction, Structure and Commands.
- 2.3 Windows: Features.
- 2.4 Linux: Features and brief commands.
- 2.5 Windows NT: Components and Features.
- 2.6 SERVER: Functions & Client Server Architecture

LIS17205DCE-UNIVERSITY LIBRARY SYSTEM
(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objective

- To acquaint students with University Library system itsComponents, Services and problems.

Unit-I University Library

- 1.1 University Libraries: Concept, Need & Importance
- 1.2 University Libraries: Mission & Goals
- 1.3 Functions and Objectives

Unit-II University Library: Components

- 2.1 Collection
- 2.2 Staff.
- 2.3 Finance,
- 2.4 Physical Infrastructure, users, etc.

Unit-III University Library: Services

- 3.1 Services in modern era
- 3.2 Role of ICT in University Libraries
- 3.3 E-Learning in University set-ups

Unit-I University Library: problems

- 4.1 Role of UGC in promoting university libraries
- 4.2 Problems faced by university libraries
- 4.3 Model university libraries – features

Suggested Readings:

Buckland, M. K. (2014). *Library services in theory and context*. Elsevier.

Kraft, D. H. (1983). *The journal selection problem in a university library system*.

Ram, M. (2015). *University library system*.

LIS17206DCE-PRESERVATION AND CONSERVATION TECHNIQUES
(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objectives

- To understand the nature of preservation and conservation management, its components and implications.
- To understand the physical composition of reading material and causes of deterioration.
- To understand preservation and conservation standards
- To identify technological options in the preservation.

Unit-I

- 1.1 Preservation/conservation: purpose, components and Implications.
- 1.2 Principle carriers of information: major causes of loss, damage, deterioration, current methods and best practice for loss preventing or mitigating.

Unit-II

- 2.1 Preservation program in libraries and archives: core activities
- 2.2 Understand the principles of preservation assessment and planning, including budgeting for preservation activities.

Unit-III

- 3.1 Digital preservation: Foundation
- 3.2 Strategies of Digital preservation
- 3.3 Large-scale digital preservation initiatives (LSDIs)

Unit-IV

- 4.1 Digital preservation: Issues and challenges
- 4.2 Threats to Digital Materials
- 4.3 Organizational Issues & Resourcing Issues

**LIS17207DCE -WEB TECHNOLOGIES AND TECHNIQUES: HEALTH INFORMATION
NETWORK SYSTEMS
(4 Credits)**

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objective

- To focus on various web based technologies used for enhancement of health-related information

UNIT-I

- 1.1 Health Information System Networks: Introduction
- 1.2 Health Information System Networks: Types
- 1.3 Health Institutions and Information Processing

UNIT-II

- 2.1 Organizational Structures of Information Management in Health Care Networks
- 2.2 Healthcare Information Management Systems
- 2.3 Ethical and Legal Issues in health Information Networks

UNIT-III

- 3.1 Health Science Librarians and Health Informatics
- 3.2 New Roles and Opportunities
- 3.3 Health Science Librarians and Research

UNIT-IV

- 4.1 Quality of Health Information Systems
- 4.2 Strategic Information Management in Health Care Networks
- 4.3 HIT Impact on Patient Safety

Suggested Readings

Anna D. Cleveland & Donald B. Cleveland. (2009). *Health Informatics for Medical Librarians*. New York: Neal-Schuman Publishers

Kathryn J. Hannah & Marion J. Ball. (Series Editor). (2011). *Health Information Systems Architectures and Strategies*. London: Springer.

Lyn Robinson. (2010). *Understanding Healthcare Information*. London: Facet Publishing.

M Sandra Wood. (2008). *Introduction to health science librarianship*. London: Routledge, Taylor and Francis.

LIS17208DCE -DIGITAL LIBRARY TECHNOLOGY
(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	0	1	4

Objective

- To focus on various aspects of Digital Libraries and develop skills for building and managing Digital Collections.

Unit-I Introduction to Digital Libraries

- 1.1 Digital Libraries: Introduction and Features.
- 1.2 Digital Library Resources and Five Laws of Library Science
- 1.3 Digital Libraries: Issues and Challenges
- 1.4 Digital library Initiatives: Overview of Digital Libraries at National and International level.

Unit-II Digital Library: Design and Management

- 2.1 Digital Libraries: Planning and Design.
- 2.2 Web 2.0 and Digital Libraries.
- 2.3 Safeguarding Digital Library surrogates.
- 2.4 Digital Libraries and Open Education.

Unit-III Resource Discovery and Digital Library Software

- 3.1 Interoperability and Metadata Standards.
- 3.2 Metadata Harvesting and OAI-PMH
- 3.3 Features and utilities of prominent Digital Library Software.

Unit-IV Digital Preservation

- 4.1 Digital preservation: Need and Importance
- 4.2 Digital preservation initiatives at global level: An Overview
- 4.3 Cultural Heritage and Digital Preservation.

LIS17310GE- ONLINE SEARCH STRATEGY & TECHNIQUES
Credit Pattern

(4 Credits)

Lecture	Tutorial	Practical	Total
01	01	0	02

Objectives

- To make students understands online search environment and natty-gritty offormulating a successful search strategy.
- To sensitize stakeholders of different searching techniques available throughvarious search engines and their utility.

Unit-I

- 1.2 Online Searching – Concept, Need and Significance
- 1.2 Resources: Types and features
- 2.3 Formulation of Search Strategy

Unit-III

- 2.1 Search Techniques: Overview
- 2.2 Boolean Search Operators & Nesting
- 2.3 Truncation, Limiting Search and Proximity Search
- 2.4 Navigational Queries

Suggested Readings

- Arasu, A., Cho, J., Garcia-Molina, H., Paepcke, A., &Raghavan, S. (2001). Searching the web. *ACM Transactions on Internet Technology (TOIT)*, 1(1), 2-43.
- Armstrong, C., & Large, J. A. (2001). Manual of online search strategies: Vol. 3. (Manual of online search strategies.)Aldershot [etc.: Gower.
- Dorigo, M., Maniezzo, V., Colorni, A., &Maniezzo, V. (1991).Positive feedback as a search strategy.
- Hartman, K., Ackermann, E. C., & Hartman, K. (2010). *Searching & researching on the Internet and the World Wide Web*. Sherwood, OR: Franklin, Beedle& Associates.
- Goldsborough, R. (1999). Searching the Web. *RN*, 62(3), 23-25.

LIS17110GE-EMERGING CHANNELS OF SCHOLARLY COMMUNICATION
(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
02	0	0	02

Objective

- To acquaint the students with Scholarly Communication, Research ethics, Writing Research Papers, Plagiarism etc.

UNIT I

- 1.1 Scholarly Communication: Overview
- 1.2 Forms of Scholarly Communication
 - 1.2.1 Research Papers
 - 1.2.2. Review Papers
 - 1.2.3. Technical Papers
 - 1.2.4. Case Studies
 - 1.2.5. Conceptual Papers
- 1.3 Scholarly Communication: Barriers, Challenges and Crisis

UNIT II

- 2.1 Scholarly Communication and research Ethics
- 2.2 Writing a Research Proposal and a Research Paper
- 2.3 Peer Review and Editorial Procedures
- 2.4 Plagiarism Detection and Anti-Plagiarism software

Suggested Readings

Cummings, A. M., & Andrew W. Mellon Foundation. (1996). *University libraries and scholarly communication: A study prepared for the Andrew W. Mellon Foundation*. Binghampton, NY: Haworth Press.

Gilman, I. (2013). *Library scholarly communication programs: Legal and ethical considerations*. Oxford: Chandos Pub.

In Smith, K. L., & In Dickson, K. A. (2017). *Open access and the future of scholarly communication: Implementation*.

Kling, R., & Callahan, E. (January 01, 2002). Electronic journals, the Internet, and scholarly communication. *Annual Review of Information Science and Technology*, 37, 127-177.

LIS17210GE-ONLINE INFORMATION RETRIEVAL TOOLS
(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
1	1	0	2

Objectives

- To sensitize student with various retrieval tools available on World Wide Web.
- To sharpen skills of students for selecting right retrieval tool for discovering different types of information on the Web.

Unit-I

- 1.1 Information Retrieval: Concept and Development
- 1.2 e- Resources and their features
- 1.3 Search Engine: Development and Growth
- 1.4 Types of Search Engines
 - 1.4.1 On the Basis of Retrieval Mechanism - Primary Search Engines, Meta Search Engines
 - 1.4.2 On the basis of retrieval document type – Special Search Engines, Deep Web Search Engines

Unit-II

- 2.1 Subject Gateway – Concept, features and significance
- 2.2 Subject Gateways and Role of Volunteers
- 2.3 Web Directories
 - 2.3.1 Utility of web Directories in teaching and research
 - 2.3.2 Study of Prominent Web Directories.

**LIS17406GE-Content Management
(2 Credits)**

Credit Pattern

Lecture	Tutorial	Practical	Total
1	1	0	2

Objective

- To focus on various aspects of Content Management and develop skills for building and managing Digital Collections. Using different Content Management Systems

Unit-I Content Management Systems: Basics

- 1.1 Content Management: Concept and Importance
- 1.2 Understanding Key concepts in Content Management: Portal, Container, Module, Content, Role, User, Permissions etc.
- 1.3 Prominent Content Management Systems: Features and functionalities

Unit-II Content Management: Process and Evaluation

- 2.1 Steps in Content Management: Content Creation, Processes, Metadata, Platforms/Environment, Quality, Implementation.
- 2.2 Content Management tools: Web Browsers, Image editors, text editors, web based video tools, and web based presentation tools.
- 2.3 Evaluation of Prominent Content Management Systems in different setups.

LIS17306DCE-WEB 2.0 & ADVANCED TECHNOLOGIES

Credit Pattern

Lecture	Tutorial	Practical	Total
3	0	1	4

Objectives

- To acquaint students with changing features of web in the service of educational, research, business and media settings.
- To develop hands on exposure of web2.0 tools, technology and services.

Unit-I

- 1.1 Web 2.0: concept, development and features.
- 1.2 Web2.0 tools and technology: Blogs, Wikis, RSS feeds.
- 1.3 Social Networking: Podcasting, photo sharing, Mash-ups, General and professional SNS, video sharing sites

Unit-II

- 2.1 Web 2.0 and library: application and challenges
- 2.2 Managing scholarly communication in web 2.0 environment
- 2.3 Social networking services: trends, benefits and software for information professionals

Unit-III

- 3.1 Use of Cloud Computing: storage and collaboration
- 3.2 Create a mashup by adding a YouTube video and a Google map to a web page
- 3.3 Social book-marking, Folksonomies and User-Based Tagging

LIS17309GE-WEB RESOURCES FOR RESEARCH
(2Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
01	01	0	02

Unit-I Problem in Scientists Current Practices of Using Web-Based Information

- 1.1 Web information Sources: Concept and Need
- 1.2 Challenges to Harnessing Web-Based Information
 - 1.2.1 Information Overload and Resources Evaluation
 - 1.2.2 Web Site Navigation, Reliability and Browsability issues
 - 1.2.3 Preprints
 - 1.2.4 Financial Concerns
 - 1.2.5 Scholarly Misconduct and Misinformation
 - 1.2.6 Copyright issues
- 1.3 Controlled Vocabularies and Web Site Evaluation

Unit-II Tactics and Strategies for Dealing with Web-Based Information

- 2.1 Artificial Intelligence: Concept
- 2.2 Heuristic Search Strategies and Navigational Query Formulation
- 2.3 Search Strategies and Refinement Techniques in Online Databases
- 2.4 Information Sources - Subject Directories, e-Journals, e-Books, Databases and ETD's

Suggested Readings

- Hoggan, D. B. (2002). Challenges, strategies, and tools for research scientists: using Web-based information resources. *Electronic Journal of Academic and Special Librarianship*, 3(3).
- Korf, R. E. (1990). Real-time heuristic search. *Artificial intelligence*, 42(2-3), 189-211.
- Metzger, M. J. (2007). Making sense of credibility on the Web: Models for evaluating online information and recommendations for future research. *Journal of the Association for Information Science and Technology*, 58(13), 2078-2091.
- Pearl, J. (1984). Heuristics: intelligent search strategies for computer problem solving.
- Russell, S., Norvig, P., & Intelligence, A. (1995). A modern approach. *Artificial Intelligence*. Prentice-Hall, Englewood Cliffs, 25, 27.

LIS17109GE-CITATION AND REFERENCING TECHNIQUES
(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
01	01	0	02

Objective

- To have an understanding of various citation styles in the scholarly communication procedures.

UNIT I

- 1.1 Citations and References: Definition and need
- 1.2 Citation and Referencing Principles
- 1.3 Citation Reference Styles

UNIT II

- 2.1 Bibliographic and Descriptive Elements of References
- 2.2 Prominent Citation Styles
 - 2.2.1 APA
 - 2.2.2 MLA
 - 2.2.3 Chicago
- 2.3 Citation conversions & Reference Management Tools: An Overview

Suggested Readings

- Bailey, S. (2003). *Academic writing: A practical guide for students*. England: Nelson Thornes Ltd.
- De Silva, P. U. K. & Vance, C. K. (2017). *Scientific Scholarly Communication The Changing Landscape*. Switzerland : Springer.
- Fox, T., Johns, J., & Keller, S. (2007). *Cite it right: The SourceAid guide to citation, research, and avoiding plagiarism*. Osterville, MA: SourceAid LLC.
- Hacker, D., Sommers, N. I., & Carbajal, V. H. M. (2011). *A writer's reference*. Boston: Bedford/St. Martins.
- Heath, M. (2010). *MLA made easy: Citation basics for beginners*. Santa Barbara, Calif: Libraries Unlimited.
- Johns, J., Keller, S. J., & SourceAid, LLC. (2006). *Cite it right: The SourceAid LLC guide to citation, research, and avoiding plagiarism*. Osterville, MA: SourceAid, LLC.
- Kanvaria, V. K. (2015). *Plagiarism, citation and referencing: Issues and styles*. Lexington, KY: Create Space.

LIS17209GE-CITATION AND REFERENCE MANAGEMENT SOFTWARE
(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
2	0	0	2

Objectives

- To sensitize students with reference management software.
- To sharpen their skills in one such reference management software for education and research purpose.

Unit-I

- 1.1 Reference Management: Concept and Importance
- 1.2 Reference Management Software: Zotero, Mendeley, EndNote, Refworks, etc.
- 1.3 Citation and Referencing Styles (APA, MLA, etc.)

Unit-II

- 2.1 Primary Literature Indexing Databases: Web of Science, Scopus, Google Scholar etc.
- 2.2 Mendeley: Features and functions.
- 2.3 Mendeley: Management, synchronization, generating citations, bibliography, creating groups, etc.

LIS 17311OE-INFORMATION LITERACY: ADVANCED
(2Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
01	01	0	02

Unit – I

- 1.1 Concept and importance of information literacy
- 1.2 Information sources: Concept, print and online
- 1.3 Documentary (Primary, Secondary and Tertiary) and Non-documentary: Specialists, Experts, Consultants; etc

Unit- II

- 2.1 Evaluation of information sources: Criteria
- 2.2 Information search strategies: Introduction and types
- 2.3 Formulation of search strategy
- 2.4 On-line searching.

Suggested Readings

- Plotnick, E., & ERIC Clearinghouse on Information & Technology. (1999). Information literacy. Syracuse, NY: Clearinghouse on Information & Technology.
- Grassian, E. S., &Kaplowitz, J. R. (2009). Information literacy instruction: Theory and practice. New York: Neal-Schuman Publishers.
- Godwin, P., & Parker, J. (2012). Information literacy beyond Library 2.0. London: Facet Pub.
- Films Media Group,,& Motion Masters Film & Video Production. (2016). Introduction to Information Literacy.
- Chodhury, C.G. (2004). Introduction to Modern Information Retrieval. (2nd ed.). London: Facet Pub.
- Katz, William. (1982).Introduction to reference work: Basic information Sources.(7thed.). (V. 3).New York: McGraw Hill.
- Lancaster, F.W. (2003). Indexing and Abstracting in Theory and practice (3rd ed.). London: Facet Pub.
- Riedling, A. M. (2004). Information literacy: What does it look like in the school library media center. Westport, Conn: Libraries Unlimited.
- Blanchett, H., Powis, C., & Webb, J. (2012). A guide to teaching information literacy: 101 practical tips. London: Facet Publishing.

LIS17111OE-LIBRARY AND INFORMATION SERVICES
(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
1	01	0	02

Unit – I

- 1.1 Role of Libraries
- 1.2 Categories of Libraries: Salient Features

Unit – II

- 2.1 An overview of Library and Information services.
- 2.2 Reference services.
- 2.3 CAS, SDI – Concept and nature.

Suggested Readings

- American Library Association. (1991). *Libraries and information services today*. Chicago: American Library Association.
- Kumar, P.S.G.(2003) Foundations of Library and Information Science. Paper I of UGC Model Curriculum. New Delhi: Manohar.
- Jain, M K (Ed) 50 years: *Library and information services in India*. Delhi :Shirpa Publications.
- Kumar, PSG and Vashishth .(Ed). *Library and information science in India*. Delhi : Sterling Publishers.
- Penna, C. V. (1982).UNESCO.In*Encyclopedia of Library and InformationScience*.(Vol. 3,p-3 New York: Marcel Dekkar

LIS17211OE INFORMATION LITERACY: BASICS
(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
1	1	0	2

- To acquaint with the concept of Information Literacy, its role and impact on modern Libraries and on student's information seeking behavior.

Unit-I Information Literacy: Introduction and importance

- 1.1 Information Seeking Behavior: Overview
- 1.2 Information Literacy: Concept, Need and Objectives
- 1.3 Areas of Information Literacy
- 1.4 Standards in Information Literacy

Unit-II Information Literacy and Libraries

- 2.1 Role of Libraries in promoting Information literacy
- 2.2 Impact of information literacy on the use and services of library resources
- 2.3 Information Literacy Products: Library Brochures, Pamphlets etc.

Suggested Readings

- Grassian, E. S., &Kaplowitz, J. R. (2009). *Information literacy instruction: Theory and practice*. New York: Neal-Schuman Publishers.
- Iannuzzi, P., Mangrum, C. T., &Strichart, S. S. (1999). *Teaching information literacy skills*. Boston: Allyn and Bacon.
- Mackey, T. P., & Jacobson, T. E. (2011). *Teaching information literacy online*.
- Wilson, G., & Solomon, A. (2015). *100% information literacy success*.
- Watts, M. M. (2008). *Information literacy: One key to education*. San Francisco, CA: Jossey-Bass.

LIS17312OE-INTELLECTUAL PROPERTY RIGHTS (IPR)

(2Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
2	0	0	2

Objective

- To acquaint the students with Intellectual Property Right (IPR), Plagiarism etc.

Unit-1 Intellectual Property Right (IPR): Concept & Organization

- 1.1 Intellectual Property Right (IPR): Concept& Importance
- 1.2 Functions & Objectives of IPR
- 1.3 World Intellectual Property Organization (WIPO): Features & Functions

Unit-II Intellectual Property Right (IPR)& Plagiarism

- 2.1 Copyright, Patents& Trademarks: Concept, Need& Importance
- 2.2 Infringements of IPR: Plagiarism
- 2.3 Types of Plagiarism
- 2.4 Anti-Plagiarism Software (iThenticate, Plagiarism Checker, Viber etc.)

Suggested Readings

Engdahl, S. (2010).Intellectual property rights. Detroit, MI: Greenhaven Press

Dutfield, G., Correa, C. M., UNCTAD/ICTSD Project on IPRs and Sustainable Development., United Nations Conference on Trade and Development., & International Centre for Trade and

LIS17112OE-OPEN SOURCE SOFTWARE
(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
02	0	0	02

Unit 1 Open Source Software: Basics

- 1.1 Open Source: Concept and Development.
- 1.2 Open Source Software: Concept and Characteristics.
- 1.3 Open Source Software in different Setups: An overview
- 1.4 Open Source Software: Benefits and challenges

Unit 2 Open Source Environments

- 2.1 Open Source Operating Systems: Ubuntu, and FreeBSD etc.
- 2.2 Apache OpenOffice, LibreOffice and NeoOffice
- 2.3 Open Source Content Management Systems: An Overview
- 2.4 Open Source Database tools: MySQL, PostgreSQL and SQLite.

References

FreeBSD(2015). FreeBSD. Available at

<https://www.freebsd.org/>

Joomla (2015).Joomla.Available at

<http://www.joomla.org/>

LibreOffice(2015). LibreOffice.Available at

<https://www.libreoffice.org/>

MySQL(2015). MySQL.Available at

<https://www.mysql.com/>

NeoOffice(2015). NeoOffice. Available at

<https://www.neooffice.org/neojava/en/index.php>

OpenCms(2015). OpenCms. Available at

<http://www.opencms.org/en/>

Ubuntu(2015). Ubuntu. Available at

LIS17212OE-SOCIAL NETWORKING AND EDUCATION
(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
1	1	0	2

Unit-I Introduction to social networking

- 1.1 Social Media: Concept and Importance
- 1.2 Social Media: Tools and Features
- 1.3 Social Networking: Concept and Development
- 1.4 Social Networking tools and features

Unit-II Social Networking and Education

- 2.1 Social Networking in Research: An overview of Scholarly Networking Sites
- 2.2 Role of Social Networking in education
- 2.3 Social Network Analysis
- 2.4 Mobile Social Networking
- 2.5 Social Networking: Issues and Challenges

Suggested Readings

- Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer- Mediated Communication*, 13(1), 210-230.
- Engdahl, S. (2008). *Online social networking*. Farmington Hills, MI: Greenhaven Press.
- Garofalo, D. A. (2013). *Building communities: Social networking for academic libraries*.
- Griffith, S., & Liyanage, L. (2008). *An introduction to the potential of social networking sites in education*.
- Purcell, M. A. (2012). *The networked library: A guide for the educational use of social networking sites*.
- Suffolk University. (2012). *Social networking sites: Law, policy, and practical strategies*. Boston, Mass: Advanced Legal Studies, Center for CLE & Academic Conferences.
- Swang, M. D. (2011). *From Facebook to gradebook: An examination of the relationship between teen use of social networking sites and academic achievement*.

LIS17408OE-OPEN EDUCATIONAL RESOURCES: BENEFITS AND IMPACT
(2 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
1	1	0	2

Objective

- To focus on various aspects of Open Education and develop skills for using, modifying, repurposing and redistributing Open Educational Resources for enriching life-long learning.

Unit-I Open Education and Open Educational Resources (OER)

- 1.1 Open Education: Concept and Importance.
- 1.2 Open Educational Resources (OER): Concept, Genesis and Development.
- 1.3 Open Licences: An overview
- 1.4 Open Educational Resources: Challenges and Issues

Unit-II Open Educational Resources: Use and Impact.

- 2.1 OER initiatives at Global level: An overview
- 2.2 Open Educational Resources: Asian Perspective
- 2.3 Quality Assurance in OERs.
- 2.4 OER repository Software: Features and Utilities.

Suggested Readings

- AchalPrabhala. (2010). Copyright and Open Educational Resources.
- Baker, Judy. (2005). Introduction to Open Educational Resources.
- Catherine Casserly, & Marshall Smith. (2006). The Promise of Open Educational Resources.
- Commonwealth of Learning (COL), United Nations Educational, Scientific and Cultural Organization (UNESCO), Kanwar, Asha, Uvalić-Trumbić, Stamenka, & Butcher, Neil. (2011). A basic guide to open educational resources (OER). Vancouver : Commonwealth of Learning ; Paris:UNESCO.Available at <http://www.col.org/PublicationDocuments/Basic-Guide-To-OER.pdf>
- Susan D'Antoni. (2008). Open Educational Resources: The Way Forward.

McGreal, Rory, & Anderson, Terry. (n.d.). Open Educational Resources.

Schaffert, S. & Geser, G. (2008). Open Educational Resources and Practices. *eLearning Papers*, (7).

Retrieved from:

<http://learn.creativecommons.org/wp-content/uploads/2008/05/open-educational-resources-and-practices.pdf>

UNESCO. (2009). *Open Educational Resources: Conversations in Cyberspace*. Retrieved from:

<http://libros.metabiblioteca.org/bitstream/001/302/8/978-92-3-104085-6.pdf>

UNESCO(2011). Guidelines for open educational resources (OER) in higher education. Available at

<http://unesdoc.unesco.org/images/0021/002136/213605e.pdf>

LIS15304DCE - OPEN ACCESS ENVIRONMENT
(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objective

- To sensitize the students with OA movement and its tool, resources, challenges and opportunities

Unit-I Scholarly Communication Process

- 1.1 Research Lifecycle
- 1.2 History and Evolution of Scholarly Communication
- 1.3 Status and Trends
- 1.4 Role of Stakeholders

Unit-II Open Access: History and Developments

- 2.1 Open Access: Definition, Philosophy and Evolution
- 2.2 Approaches to Open Access
- 2.3 Benefits of Open Access
- 2.4 Arguments against Open Access and Responses
- 2.5 Open Access Business Models
- 2.6 Long-Terms Preservation Models

Unit-III Rights and Licenses

- 3.1 Intellectual Property Rights
- 3.2 Open Licenses
- 3.3 Support Tools and Services

LIS17302CR-INFORMATION TECHNOLOGY (PRACTICE)

(4 credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
0	0	4	4

Objective

- To impart practical, know-how of different Operating Systems, word processors, Spreadsheets and developing bibliographic databases using select packages.

Unit-I

1.1 MS DOS

Practical 1.1.1 Introduction to DOS Command Prompt. Working with Directory commands MD, CD, RD, and TREE.

Practical 1.1.2 Introduction to Internal DOS Commands

Practical 1.1.3 Introduction to External DOS Commands

Practical 1.1.4 Batch Commands and XCopy commands.

Practical 1.1.5 Wild cards in Dos and Dos help.

1.2 WINDOWS (latest available)

Practical 1.2.1 Introduction to Windows, Windows Desktop, Icons, Taskbar and Start Button.

Practical 1.2.2 Using Scroll Bars, Dialog Boxes and Toolbars, Files and folders.

Practical 1.2.3 Using Control Panel for customizing Windows.

Practical.1.2.4 Introduction to Windows Accessories, Search and Run Features.

Practical 1.2.5 Add remove Programs/Hardware

LIS17401CR-RESEARCH METHODS

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objectives

- To acquaint with foundation of research, various methods, planning, designing, reporting in the field of Library and Information Science.

Unit-I

- 1.1 Research: Foundations, Need & Ethics with special reference to online ethics.
- 1.2 Research: Types and Steps.
- 1.3 Barriers in Research.

Unit-II

- 2.1 Research Design/Research Proposal: Structure and preparation of a model synopsis.
- 2.2 Hypothesis: formulation, types.
- 2.3 Citation and Reference Styles with Special emphasis on APA Style.
 - 2.3.1 Online Citation and Reference Management Tools (Mendeley etc.)

Unit-III

- 3.1 Review of Literature (Tools and Techniques)
- 3.2 Research Methods:
 - 3.1.1 Historical: Definition, Characteristics and Stages
 - 3.1.2 Descriptive: Definition, Characteristics and Stages (Survey, Case Study etc)
 - 3.1.3 Experimental: Definition, Characteristics, Steps/Procedures,
 - 3.1.4 Spiral of Scientific Method

Unit-IV

- 4.1 Data Analysis Software and Applications: SPSS Overview
- 4.2 Research Report: Form, Structure and guidelines.
- 4.3 Research Communities: With Special Reference to Virtual Research Communities (VRC's)

Suggested Readings

- Arora, P.N., & Arora, S. (2000). *C A Foundation course statistics*. (4th Rev.ed.) New Delhi: S.Chand.
- Allan, B. (2010). *Supporting Research Students*. London: Facet
- Baker, L. (2006). *Research methods*. U.S.A: John Hopkins University Press.
- Barry, C.A. (1997). Information Skills for an Electronic World: Training Doctoral Research Students. *Journal of Information Science*, 23 (3), 225-238.
- Busha, C.H., & Harter, S. H. (1988). *Research Methods in librarianship: techniques and interpretation*. New York: Academic Press.
- Chiang, K.H. (2003). Learning experiences of doctoral students in U.K Universities. *International Journal of Sociology and Social Policy*, 23 (1/2), 4-32.
- Croxtan, F. E. (1969). *Applied general statistics*. (3rd ed). New Delhi: Prentice Hall.
- Denzin, N. K., & Lincoln, Y. S. (1994). *Handbook of qualitative research*. Thousand Oaks: Sage Publications.
- Elhance, D.N. (2005). *Fundamentals of statistics*. Allhabad: Kitab Mahal.
- Frankfort, C., & Nachmias, D. (1999). *Research methods in social sciences*. (6th ed. New York: Worth Publishers.
- Goode, W. J., & Hatt, P. K. (1952). *Methods in social research*. New York, McGraw-Hill.
- Gosh, B.N. (1984). *Scientific method and social research* (2nd ed.). Delhi: Sterling.
- Goswami, P. R. (1996). *Statistical information system and libraries*. New Delhi: Anmol Pub.
- Gupta, S.C., & Kapoor, V.K. (2001). *Fundamentals of mathematical statistics*. New Delhi: Sultan Chand.

LIS17101CR FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE
(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objectives

- To acquaint students with the library as a social institution for knowledge generation, creation and dissemination
- To make understanding of the philosophical and social foundations of Library and information centers.

Unit I

- 1.1 Library: Basic concept with Historical foundation of libraries.
- 1.2 Types of libraries and their distinguishing features.
- 1.3 Information society: Genesis, Characteristics and implications.
- 1.4 Library: Role in contemporary Society.

Unit II

- 2.1 Five Laws of Library Science: Foundation and Implications.
- 2.2 Library development in India with particular reference to post Independence period.
- 2.3 Library legislation – Need and purpose. Library legislation in India – problems andprospects.
- 2.4 Intellectual Property Right: Basic Concept and issues withspecial emphasis on copy rightAct in Indian context

Unit III

- 3.1 Profession: Concept and attributes.
- 3.2 Librarianship: Professional ethics
- 3.3 Professional Associations
 - 3.3.1 National Associations in India: ILA, IASLIC, IATLIS and SIS
 - 3.3.2 International and other important Associations: IFLA, CILIP (UK), ALA (USA)
- 3.4 Library and information Science education and research in India

LIS17103CR-LIBRARY OPERATIONS

(4 Credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
3	1	0	4

Objective

- To acquaint with essential routines and operations performed in various types of libraries for providing effective services.

Unit I

- 1.1 Different Operations: Mechanism and components.
- 1.2 Collection Development: Purpose and Policy.
- 1.3 Selection: Principles.
- 1.4 Selection tools: print and non-Print Materials.
- 1.5 Acquisition: Mechanism of Procurement, functions.
- 1.6 Problems in Acquisition.

Unit II

- 2.1 Technical Processing: Need, Role and procedure.
- 2.2 Accessioning.
- 2.3 Classification.
- 2.4 Cataloguing.
- 2.5 Labeling.
- 2.6 Shelving and Display.
- 2.7 Maintenance.

Unit III

- 3.1 Serials: Concept and types.
- 3.2 Serials: Selection and Procurement
 - 3.2.1 Planning.
 - 3.2.2 Selection.
 - 3.2.3 Ordering.

LIS17203CR- INFORMATION SOURCES

(4 credits)

Credit Pattern

Lecture	Tutorial	Practical	Total
2	1	1	4

Objectives

- To provide an overview of different categories of references and information tools in order to choose appropriate source for meeting reference queries.
- To Understand the criteria for evaluation of reference and information sources (online and offline).
- To acquaint students with access options and techniques of various web based resources.

UNIT I Information Sources: An Overview

- 1.1 Information sources: Concept, print and online
- 1.2 Documentary (Primary, Secondary and Tertiary) and Non-documentary: Specialists, Experts, Consultants; etc
- 1.3 Evaluation: Criteria (online and offline resources)
- 1.4 Relate types of reference queries to their corresponding reference tools
- 1.5 Identification of sources of information as documentary and non-documentary in the Library and on the web
- 1.6 Evaluation of the select websites on the basis of standard criteria

UNIT II Reference Sources

- 2.1 Dictionaries-Types and uses
 - 2.1.1 Language dictionaries, Major online dictionaries
- 2.2 General Encyclopedias (Encyclopedia Britannica, Encyclopedia Americana), Subject specific encyclopedias (Access science, etc), Free online encyclopedias
- 2.3 Collaborative encyclopedias, Subject oriented wikis