



हिमाचल प्रदेश केंद्रीय विश्वविद्यालय Central University of Himachal Pradesh

(Established under Central Universities Act 2009)

अस्थाई शैक्षणिक खण्ड, शाहपुर, जिला काँगड़ा, हिमाचल प्रदेश - 176206

Temporary Academic Block, Shahpur, Distt. Kangra (HP) - 176206

Website: www.cuhimachal.ac.in

Department of Library and Information Science

Programme of Study: Master of Library and Information Science (M.Lib.I.Sc.)

Courses Offered in Third (3rd) Semester

Winter Session, 2020

SN	Course Code	Course Name	Credits	Faculty Name
1.	LIS-416A	Information Retrieval	4	Dr. Dimple Patel
2.	LIS-501A	Library Automation and Networks (Theory)	4	Mr. Nimmala Karunakar
3.	LIS-502A	Library Automation and Networks (Practical)	4	Mr. Nimmala Karunakar
4.	LIS-430	Information Access and Services	4	Dr. Pawan Kumar Saini
5.	LIS-525A	Web-based Library and Information Services	4	Mr. N. Muruli



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Tel: 01892-229330, 237285, Fax: 01892-229331,

Website: www.cuhimachal.ac.in

Course Code: LIS-416A

Course Name: Information Retrieval

Credits Equivalent: 4 Credits (One credit is equivalent to 10 hours of lectures / organised classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:

To acquaint students with:

- Information Retrieval Systems (IRS)
- Search strategies and techniques
- Information retrieval models, languages and techniques
- Multilingual and Multimedia IRS
- Evaluation of IRS

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

1. Mid Term Examination: 25%
2. End Term Examination: 50%
3. Continuous Internal Assessment: 25%
 - Assignment/Library Work/Class Test/Surprise Test/Quiz/Seminar: 15%
 - Class Attendance: 10%

Course Contents

UNIT - I: Information Retrieval

Information, Information Representation, Information Retrieval

Information Retrieval Systems: Purpose, Components, Functions.

Natural language vs. Controlled Vocabulary

Information representation: Indexing, Categorization, Summarization

Subject Analysis and Representation: Contributions of Cutter, Kaiser, Ranganathan, Farradane and Coates.

UNIT - II: Information Retrieval Techniques and approaches

Search Techniques – Basic and advanced

Searching: types, strategies

Preparing Search Plan

Browsing: types, strategies

Integrated Retrieval

UNIT - III: Information Retrieval Models

Structural model

Probabilistic model

Cognitive model

Vector space model.

UNIT - IV: Indexing Techniques

Subject Indexing: Definition, need, purpose, concept, principles.

Pre-coordinate indexing: Chain Indexing, PRECIS, POPSI;

Post-coordinate indexing: Uniterm indexing

Derived Indexing: KWIC and KWOC

Citation indexing

Web indexing

UNIT - V: MLIR/CLIR, MIRS and Evaluation of IRS

Multilingual Information Retrieval (MLIR), Cross-lingual Information Retrieval (CLIR)

Multimedia Information Retrieval Systems

Ontology-based Information Retrieval Models

Criteria for evaluation of Information Retrieval Systems

Prescribed Texts:

1. Korfhage, Robert R. Information Storage and Retrieval, New Delhi: Wiley, 1997.
2. Rajan T.N. (Ed.) Indexing Systems : concepts, models and techniques. 1981.
3. Choudhry G.G.: Information retrieval systems. 1994.
4. Chowdhury, G.G. Introduction to Modern Information Retrieval. 2nd Ed. London, Facet Publishing, 2003.
5. Chu, Heting. Information Representation and Retrieval in the Digital Age. ASIST Monograph Series, 2003.
6. Christopher D. Manning, Prabhakar Raghavan and Hinrich Schütze (2009). An Introduction to Information Retrieval. Cambridge University Press, Cambridge, England.
<http://nlp.stanford.edu/IR-book/pdf/irbookprint.pdf>
7. Foster, Allen and Rafferty, Pauline. Innovations in information retrieval: perspectives for theory and practice. Facet publishing, 2011.

Prescribed Journal Articles

1. Multiple terminologies: an obstacle to information retrieval.
<http://www.emeraldinsight.com/journals.htm?issn=0024-2535&volume=53&issue=6&articleid=859782&show=html>
2. Towards user-centered indexing in digital image collections.
<http://www.emeraldinsight.com/journals.htm?issn=1065-075X&volume=22&issue=4&articleid=1580862&show=html>
3. OGIR: an ontology-based grid information retrieval framework.
<http://www.emeraldinsight.com/journals.htm?issn=1468-4527&volume=36&issue=6&articleid=17065559&show=html>
4. Flickr and Democratic Indexing: dialogic approaches to indexing.
<http://www.emeraldinsight.com/journals.htm?issn=0001-253X&volume=59&issue=4/5&articleid=1626452&show=html>
5. Meta-tag: a means to control the process of Web indexing
<http://www.emeraldinsight.com/journals.htm?issn=1468-4527&volume=27&issue=4&articleid=862221&show=html>
6. Image indexing and retrieval: some problems and proposed solutions
<http://www.emeraldinsight.com/journals.htm?issn=0307-4803&volume=96&issue=6&articleid=859918&show=html>

Additional Readings

1. Kumar, P. S.G. A Student's Manual of Library and Information Science (on the lines of the Net syllabus of UGC. Delhi, B.R.Pub., 2004
2. Olson, Hope A. and Boll, John J. Subject analysis in online catalogs. 2nd Ed. US: Libraries Unlimited.
3. Kumar, PSG. Knowledge organization, information processing and retrieval. New Delhi: BR Publications, 2004.
4. Kumar, PSG. Information analysis, repackaging and consolidation. New Delhi: BR Publications, 2004.
5. Atherton, Pauline. Handbook for information systems and service, Paris: UNESCO, 1977.
6. Vickery, B.C. Techniques of Information Retrieval. Butterworth, London, 1970.

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PO Box: 21, Dharamshala, District Kangra - 176215 (HP)

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Course Code: LIS501

Course Name: Library automation and networks (Theory)

Credits Equivalent: 2 Credits (One credit is equivalent to 10 hours of lectures / organised classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:

On successful completion of the course the students will be able to do the following:

- To acquaint the students with the planning and management of automated library systems
- To impart practical training in the housekeeping operation

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

1. Mid Term Examination: 25%
2. End Term Examination: 50%
3. Counseling, Activities and Tutorials (CAT): 25%
 - i. Assignment: 5%
 - ii. Library Work: 5%
 - iii. Surprise Test: 5%

Course Contents

- UNIT - I: Library automation (4 Hours)**
- Definition, need, purpose and advantages, historical development
 - Identifying goals and objectives of automation
 - Areas of Automation: Acquisition, technical services, OPAC, Administrative routines, Circulation and Serial Control
 - Application of barcoding, RFID in libraries
- UNIT - II: Evaluation of library automation systems (5 Hours)**
- Criteria for selection of library automation software: open sources ,property, customize
 - Criteria for selection of hardware specification
 - Evaluation techniques
 - Study of standards relevant to library automation
- UNIT - III: Automation Procedure (3 Hours)**
- Steps in Automation: Developing a basic Technology Plan
 - Assessing needs and priorities, Preparing strategic Plan, Feasibility Study, Describing existing library services and technology
 - Retrospective conversation techniques and process
 - Integrated Library Management System
- UNIT - IV: Library networks and information systems (4 Hours)**
- Library Networks- OCLC, BLAISE, INFLIBNET, STN, RLIN
 - Information Systems: NISCAIR, DESIDOC, SENDOC, NASSDOC
 - PADIS, ENVIS, INIS
 - AGRIS, BIOSIS, MEDLARS
- UNIT - V: Case study of Library automation software (4 Hours)**
- Comparative study of Library automation software's
 - Current trends in Library automation software's
 - Case study of KOHA
 - Case study of SOUL

Prescribed Text Books:

1. R.S.Aswal.Librray Automation for 21 st Century, New Delhi, Ess Ess Publication.
2. Desiree Webber and Andrew Peters. Integrated Library Systems: Planning, Selecting, and Implementing, London: Libraries Unlimited, 2010.
3. Thomas R. Kochtanek and Joseph R. Matthews . Library Information Systems: From Library Automation to Distributed Information Access Solutions, London: Libraries Unlimited, 2002
4. H. K. kaul. Library Networks: An Indian Experience, New Delhi: Virgo Publications, 1992.

Suggested Extra Readings:

1. Satyanarayana, N. R. A manual of computerization of libraries. New Delhi: Viswa Prakashan, 1995.
2. John M. Cohn, Ann L. Kelsey and Keith Michael Fiels .Planning for library automation: A Practical Handbook, London : Library Association, 1998.
3. [Michael D. Cooper](#), Design of Library Automation Systems: File Structures, Data Structures, and Tools, London: John Wiley & Sons

LECTURE PLAN

Lectures	Topics	Prescribed Text Book	Chapter No.
Lecture - 1	Definition, need, purpose and advantages, historical development	Book - 1	Part-I
Lecture - 2	Identifying goals and objectives of automation	Book - 1	Part-I
Lecture - 3	Areas of Automation: Acquisition, technical services, OPAC, Administrative routines, Circulation and Serial Control	Book - 1	Part-I
Lecture - 4	Areas of Automation: Acquisition, technical services, OPAC, Administrative routines, Circulation and Serial Control	Book - 1	Part-I
Lecture - 5	Application of bar-coding, RFID in libraries	Book - 1	Part-V
Lecture - 6	Criteria for selection of library automation software: open sources ,property, customize	Book - 1	Part-III
Lecture - 7	Criteria for selection of library automation software: open sources ,property, customize	Book - 1	Part-III
Lecture - 8	Criteria for selection of hardware specification	Book - 2	Part-II
Lecture - 9	Evaluation techniques	Book - 2	Chapter - 2
Lecture - 10	Study of standards relevant to library automation	Book - 2	Chapter - 2
Lecture - 11	Steps in Automation: Developing a basic Technology Plan and technology	Book - 2	Chapter - 1
Lecture - 12	Assessing needs and priorities, Preparing strategic Plan, Feasibility Study, Describing existing library services	Book - 2	Chapter - 2
Lecture - 13	Retrospective conversation techniques and process	Book - 4	Chapter - 3
Lecture - 14	Integrated Library Management System	Book - 4	Chapter - 1
Lecture - 15	Library Networks- OCLC, BLAISE,	Book - 4	Chapter - 2

	INFLIBNET, STN, RLIN		
Lecture - 16	Information Systems: NISCAIR, DESIDOC, SENDOC, NASSDOC	Book - 4	Chapter - 1
Lecture - 17	PADIS, ENVIS, INIS ,AGRIS, BIOSIS, MEDLARS	Book - 4	Chapter - 2
Lecture - 18	Comparative study of Library automation software's	Library automation software related websites	
Lecture - 19&20	Case study of KOHA& Case study of SOUL		

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Course Code: LIS502

Course Name: Library and automation network (practical)

Credits Equivalent: 2 Credits (One credit is equivalent to 10 hours of lectures / organised classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:

- To impart practical training in the use software to develop bibliographic databases
- To give practical training in the use of library automation software

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

1. Mid Term Examination: 25%
2. End Term Examination: 50%
3. Counseling, Activities and Tutorials (CAT): 25%
 - i. Assignment: 5%
 - ii. Surprise Test: 5%
 - iii. Mini Project: 15%

Course Content:

UNIT - I: Hands-on experience with the KOHA

UNIT-II: Hands-on experience with the KOHA

UNIT-III: Hands-on experience with the Demo SOUL

UNIT-IV: Hands-on experience with servers and networking

UNIT-V: Mini project

Text Books:

1. KOHA Manual
2. SOUL Manual



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Course Code: LIS-430

Course Name: Information Access and Services

Credits Equivalent: 4 Credits (One credit is equivalent to 10 hours of lectures / organised classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:

To acquaint students with:

- Types of information sources
- Criteria for selection of information sources
- Various information access tools
- Information services, types
- National and International Information systems and programmes

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

4. Mid Term Examination: 25%
5. End Term Examination: 50%
6. Continuous Internal Assessment: 25%
 - Assignment/Library Work/Class Test/Surprise Test/Quiz: 15%
 - Class Attendance: 10%

Course Contents

UNIT – I: Information Sources

- Types of Information sources: Documentary - Primary, Secondary, Tertiary; Non-documentary – organizations and humans.
- Published sources of information: Books, Academic Journals, Newspapers, Magazines, Research Monographs; Reference works/sources - Encyclopedia, Dictionaries, Geographical sources, Biographical sources, Bibliographical sources, Indexing and Abstracting sources, Handbooks, Yearbooks, Gazettes
- Unpublished sources: Dissertations / Theses, Reports, Grey literature, Email, Blogs, Wikis, Social media.
- Standards, Patents, Trade Catalogs
- Review Sources, State-of-Art Reports, Trend Reports, Technical digests
- Criteria for selection of information sources

UNIT – II: Information Access Tools

- Library Catalogs, OPACs
- Bibliographic Databases: Ei Compendex, Index Medicus, Inspec, MathSciNet, SciFinder, Scopus, Web of Science
- Web Search Engines: working, features, Google, Google Scholar
- Metadata harvesting services: concept, importance, working. NDL, OAIster

UNIT – III: Information Services

- Reference Service: definition, concept, need, types: ready reference and long range reference services; Reference interview and search techniques.
- Referral Service
- Alerting services: CAS, SDI services
- Information Intermediaries: characteristics, functions, types. Librarians, Reference Librarians, Information officers, Information filters, Invisible colleges, Extension workers, Expert systems, Information brokers, Information consultants, Technological gatekeepers,

UNIT - IV: Information Systems and Documentation Centres

- International:
 - INIS
 - AGRIS
 - MEDLARS/MEDLINE
- National:
 - NASSDOC
 - ENVIS

UNIT - V: Current trends in information access and services

- Web-based information sources – Websites, Blogs, Wikis, Digital Libraries, Digital Archives, Institutional Repositories
- Web-based information services – Ask a Librarian, Email and Chat reference services, Social media as information access tools
- Organizations involved in information access and services programmes:
 - UNESCO
 - IFLA
 - OCLC
 - NISCAIR



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Website: www.cuhimachal.ac.in

Course Code: LIS 525A

Course Name: Web-based Library and Information Services

Credits Equivalent: 4 Credits (One credit is equivalent to 10 hours of lectures / organised classroom activity / contact hours; 5 hours of laboratory work / practical / field work / Tutorial / teacher-led activity and 15 hours of other workload such as independent individual/ group work; obligatory/ optional work placement; literature survey/ library work; data collection/ field work; writing of papers/ projects/dissertation/thesis; seminars, etc.)

Course Objectives:

- To acquaint the students with various web information resources
- To train the student in finding, locating and accessing web information resources

Attendance Requirements:

Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.

Evaluation Criteria:

- Mid Term Examination: 25%
- End Term Examination: 50%
- Continuous Internal Assessment : 25%
 - Assignment/Library Work/Class Test/Surprise Test/Quiz: 15%
 - Class Attendance: 10%

Course Contents

UNIT - I: Information Resources

- Categories of information: Primary, Secondary, Tertiary
- Documentary and Non-documentary Information Resources
- Information Generation Cycle
- Literature Search: Importance and steps

UNIT - II: Web-based Information Services

- Origin, characteristics, features of Internet, WWW
- Overview of Web 1.0, Web 2.0 and Web 3.0.
- Websites (Personal/Institutional)
- Networking sites: Social, Professional, Academic.
- Blogs and Microblogs, Wikis, RSS, Podcasts, Media sharing sites

UNIT - III: Web-based Scholarly Information Resources

- E-Books: features, merits and demerits
- E-Journals: features, merits and demerits
- Library consortia: e-ShodhSindhu, CSIR Labs, FORSA
- Web-based Reference Sources: General and subject-based

UNIT - IV: Open Access Scholarly Information Resources on the Web

- Open Access: Concept, need and importance
- Open Educational Resources: concept, need and importance, examples
- OA Digital Repositories: concept, need and importance, examples

UNIT - V: Discovery Services and Evaluation of Web Resources

- Library OPACs: Library of Congress, WorldCat, INDCAT
- Internet Search Engines: Origin, development, types, working.
- Academic Search Engines; Subject Gateways
- Discovery tools for OA scholarly information: DOAJ, DOAB, OAIster, ROAR, OpenDOAR.
- Evaluation criteria for Web-based Information Resources

Reading List

1. Krishna Kumar: Reference Service, Ed.5 New Delhi, Vikas, 2003.
2. Open Access – SPARC. <https://sparcopen.org/open-access/>
3. Suber, Peter. Open Access Overview. <http://legacy.earlham.edu/~peters/fos/overview.htm>
4. e-ShodhSindhu. <http://www.inflibnet.ac.in/ess/index.php>
5. Online Dictionary for Library and Information Science
http://www.abc-clio.com/ODLIS/odlis_A.aspx
6. WorldCat. <http://www.worldcat.org/>
7. DOAJ. <https://doaj.org/>
8. DOAB. <http://doabooks.org/>
9. OAIster. <http://www.oclc.org/en/oaister.html>
10. OpenDOAR. <http://opendoar.org/>
11. ROAR. <http://roar.eprints.org/>