

BACHELOR OF SCIENCE IN LIBRARY AND KNOWLEDGE MANAGEMENT

1. INTRODUCTION

The field of information sciences and in particular, library and information studies is expanding at a faster rate than was anticipated. In addition, the information needs of the users have become dynamic and versatile necessitating a need for highly qualified librarians, documentalists, archivists, record managers and other information related professionals in libraries and information centres. The Bachelor of Library and Information Science program seeks to train students on the management of information system and the techniques of effective organisation of knowledge and use of information resources.

The four year undergraduate course program has been designed to impart students with both theoretical and practical knowledge and skills in information organization, access, storage, and dissemination. The course will expose the students with practical aspects by undertaking industrial attachment and case studies in their professional career. It is envisaged that the graduates of this degree programme will be employed in libraries and information centres.

.The course is in line with the Kenya Government policy and strategy of vision 2030 in training students to enhance provision of information with an emphasis in employing Information and Communication Technology best practices as demanded by the information society.

2. AIMS AND OBJECTIVES

The broad objective of this program is to equip the students with appropriate technical knowledge, skills and develop necessary attitudes in library and information science. The specific objectives are:

- (a) To impart students with knowledge and skills essential to acquire, organize and disseminate information.

- (b) To enhance the development of skills in scientific research and writing.

- (c) To prepare students for further studies in areas of library, information communication and technology (ICT) and other related fields

3. ADMISSION REQUIREMENTS

Candidates must satisfy the minimum University entry requirements. In addition they should meet the following requirements:

-) Have at least a mean grade of C+ in Kenya Certificate of Secondary Education (KCSE) or its equivalent. In addition candidates should have passed with a C+ or above in Mathematics and English and satisfy the Joint Admission Board's subject cluster.

OR

-) Holders of KACE with two principal passes in relevant subjects and at least a credit in mathematics and English.

OR

-) Have a Diploma in Library and Information Studies and other related discipline from a recognized institution.

4. CREDIT TRANSFER

- (a) Transfer of academic credits shall be accepted on individual basis for courses undertaken and successfully completed by students at accredited universities/institutions who request to transfer the same to the university, for incorporation into the Degree course and final classification of the certificate.
- (b) The relevant academic body as approved by the University Senate shall make official evaluation and transfer of credits.
- (c) The number of hours, content and grading of courses for which credit transfer is sought should be similar to the courses offered at the University.
- (d) Only a maximum of one-third (1/3) or equivalent of the study program at the university can be transferred.
- (e) Such courses are to satisfy the requirements of the first and second years of study only.

5. COURSE STRUCTURE AND DURATION

- (a) The Degree program will run for a period of minimum four years and maximum of eight years.
- (b) A candidate will be deemed to have passed an academic year after successful completion of all the units offered in that year.
- (c) Courses shall be offered in units. A course unit is defined as that part of a semester subject described by coherent syllabus and taught normally over a period of a semester. It is designated as a total of 42 hours of study in a semester. For this purpose, one 1-hour lecture is equivalent 2-hours tutorial or 3-hours practical or any combination as may be approved by the Board of the School of Informatics and Innovative Systems.
- (d) Part-time students shall be allowed to take not less than 50% of the courses prescribed for the year.
- (e) All course units will be taught for a total of 42 contact hours, including examinations except industrial attachment which will take 480 hours of practical work in a relevant industry.
- (f) Students shall be required to undertake Industrial Attachment of 480 hours at the end of third year semester.

6. EXAMINATIONS REGULATIONS

University Examinations rules and regulations shall apply.

7. COURSE DISTRIBUTION

YEAR ONE: SEMESTER ONE

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3111	Libraries and information centres	42	0	42	1C
IISL 3112	Introduction to knowledge management	28	14	42	1C
IISL 3113	Managing Collection & Access	42	0	42	1C
IISL 3114	Information Technology	28	14	42	1C
SMA 3113*	Logical Functions	42	0	42	1R
SMA 3114*	Analytical Methods for Computing	42	0	42	1R
EEL 3115*	Communications Skills	42	0	42	1R
SBI 3114*	HIV and AIDS	42	0	42	1R
Total		140	196	336	8

YEAR ONE: SEMESTER TWO

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3121	Cataloguing I	28	14	42	1C
IISL 3122	Classification I	28	14	42	1C
IISL 3123	Publishing and book trade	42	0	42	1C
IISL 3124	Records Management	42	0	42	1C
IISL 3125	Information Sources	42	0	42	1R
IISL 3126	Information Literacy	42	0	42	1R
SLB 3111*	Development Studies	42	0	42	1R

ESD 3121*	Social Ethics and Integrity	42	0	42	1R
Total		140	196	336	8

*Senate approved courses

YEAR TWO: SEMESTER ONE

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3211	Archives Administration	42	0	42	1C
IISL 3212	Cataloguing II	28	14	42	1C
IISL 3213	Repackaging of Information	42	0	42	1C
IISL 3214	Internet Services	28	14	42	1C
IISL 3215	Abstracting and Indexing Services	28	14	42	1R
IISL 3216	Quantitative Methods	42	0	42	1R
IISL 3217	Information Seeking Behaviour	42	0	42	1R
IISL 3218	Information Society	42	0	42	1R
Total		140	196	336	8

YEAR TWO: SEMESTER TWO

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3221	Media Informatics	28	14	42	1C
IISL 3222	User Studies	42	0	42	1C
IISL 3223	Monitoring & Evaluation of Information Services	28	14	42	1C
IISL 3224	Information Services	42	0	42	1C

IISL 3225	Digital Libraries and Information Portals	42	0	42	1R
IISL 3226	Managing Electronic Resources	42	0	42	1R
IISL 3227	Classification II	28	14	42	1R
IISL 3228	Reference Sources and Services	42	0	42	1R
Total		140	196	336	8

YEAR THREE: SEMESTER ONE

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3311	Preservation of Information Resources	28	14	42	1C
IISL 3312	Management of Libraries and Information Centres	42	0	42	1C
IISL 3313	Principles and Practices of Management	42	0	42	1C
IISL 3314	Database Management I	28	14	42	1C
IISL 3315	Multimedia Information Resources	42	0	42	1R
IISL 3316	Fundamentals of Networking in Information Centres	28	14	42	1R
IISL 3317	Disaster Management	28	14	42	1R
IISL 3318	Copyright & Access to Knowledge	42	0	42	1R
Total		140	196	336	8

YEAR THREE: SEMESTER TWO (Core courses)

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3321	Information Resource Management	42	0	42	1C
IISL 3322	Data Communication and Networks	28	14	42	1C
IISL 3323	Database Management II	28	14	42	1C
IISL 3224	Research Methods	42	0	42	1C

ELECTIVES (Specialization)***Elective I: Library and Knowledge Management**

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3325	Information Services for Users with Special needs	28	14	42	1E
IISL 3326	Quality Assurance in Libraries & Information Centres	28	14	42	1E
IISL 3327	Electronic Cataloguing	28	14	42	1E
IISL 3328	Entrepreneurship in Libraries & Information Work	42	0	42	1E

Elective II: Records and Archives Management

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3329	Management of Records Centres	28	14	42	1E
IISL 3331	Management of Electronic Records	28	14	42	1E

IISL 3332	Legal Issues in Records Management	28	14	42	1E
IISL 3333	Office Records and Registry Management	28	14	42	1E

YEAR THREE: SEMESTER THREE

Industrial Attachment

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3335	Industrial Attachment	0	480	480	1C

YEAR FOUR: SEMESTER ONE (Core Courses)

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3411	Financial Management for Libraries & Information Centres	28	14	42	1C
IISL 3412	Systems Analysis and Design	28	14	42	1C
IISL 3413	Ethics & Information Systems	28	14	42	1C
IISL 3414	Research Project	28	14	42	1C

ELECTIVES (Specialization)*

ELECTIVE I: Library and Knowledge Management

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3415	Communication and Information Society	28	14	42	1E

IISL 3416	Management of User Services	28	14	42	1E
IISL 3418	Library Automation	28	14	42	1E
ICT 3416*	Introduction to Knowledge Management	28	14	42	1E

ELECTIVE II: Records and Archives Management

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3419	Management of Legal Records	28	14	42	1E
IISL 3431	Management of Health Records	28	14	42	1E
IISL 3432	Management of Personnel Records	42	0	42	1E
IISL 3433	Management of Business Records	42	0	42	1E

YEAR FOUR: SEMESTER TWO (Core Courses)

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3421	Computer Networks	28	14	42	1C
IISL 3422	Information Security	28	14	42	1C
IISL 3423	ICT Management	28	14	42	1C
IISL 3424	Human Resource Management	28	14	42	1C

ELECTIVES (Specialization)*

ELECTIVE I: Library and Knowledge Management

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3425	Marketing of library and Information Services	28	14	42	1E
IISL 3427	Web Design for Information Centres	28	14	42	1E
IISL 3428	Sectoral Librarianship	28	14	42	1E
ICT 3424*	Knowledge Management	28	14	42	1E

ELECTIVE II: Records and Archives Management

Course Code	Course Title	Contact Hours			Weight (Units)
		Lecture	Practical	Total	
IISL 3429	Advanced Records Management	28	14	42	1E
IISL 3431	Advanced Archives Administration	28	14	42	1E
IISL 3432	Marketing of Records, Products and services	28	14	42	1E
IISL 3433	Records management and open governance	28	14	42	1E

C: Core course, which is central to the discipline of study.

R: required course, which is supportive or beneficial to the program.

E: Elective course, optional courses central to the discipline of study.

9. COURSE DESCRIPTION

YEAR ONE: SEMESTER ONE

IISL 3111 Libraries and Information Centres (42 hrs)

Types of libraries and information centers, national libraries, Public libraries, school and children's libraries, academic and special Libraries. its goals and objectives, functions, Collection development, management and marketing information. Services, public relations, assessment of functions and services, Information technology and information networks.

IISL 3112 Introduction to Knowledge Management (42 hrs)

Distinguishing information and knowledge, information management and knowledge management. Formatting and structuring knowledge, knowledge organization, database and multimedia, text analysis relationships with librarianship, information science and knowledge management.

IISL 3113 Managing Collection & Access (42 hrs)

Key concepts related to collection development and management include the selection of print and online materials, formats of materials, collection development policies, acquisitions of materials and approval plans, cooperative collection development, collecting for particular communities of users, , diversity of information, licensing, digital rights management and access issues with information resources, the role of government information in collections, publishing and e-publishing, and the evaluation of collections.

IISL 3114 Information Technology (42 hrs)

The onward march of technology and loss of core business in libraries for unprepared change beyond technology. Introduction to telecommunication and Networks, overview and differences of communication and telecommunication system, functions of telecommunication software, types of networks, topologies, protocols, architecture and networks. Introduction to internet and www basics. Intranets and extranets and their role in organizations and business enterprises. Online on managing organizational data and information. Role of telecommunication and networks to the library and its related agents such as resources centres.

SMA 3113 Logical Functions***(42 hrs)**

Overview of basic algebra: Extracting relationships from data, manipulation, solving simple equations, rearranging formulae. Number: Number types and their representation in computing. Number bases, binary and hexadecimal, and arithmetic operations. Sets: definitions, laws of operation, Venn diagrams, product set and projection mappings. Propositional logic: Translation between natural language and logic, truth tables, laws of propositional calculus. Validity of arguments; Boolean algebra: application to circuits. Predicate logic: Predicate Logic as generalized Propositional Logic, Scope of quantifiers, N-place predicates. Application of logic in programming.

SMA 3114 Analytical Methods for Computing***(42 hrs)**

Functions: Function definitions and types, function composition and inversion. Logarithmic, exponential and trigonometric functions. Introduction to Algorithms: Structure and interpretation of algorithms. Issues of computability, efficiency, complexity. Matrices and Vectors: Vectors, matrices and arrays. Applications of matrices to solve equations and to effect 2D graphical transformations. Graphs and Networks: Definitions, Spanning trees, Algorithms, Application to paths and searches. Calculus: Definitions of integration and differentiation. Manipulation of simple functions. Application to area under a curve and gradient. Complex numbers: Definition of i . Manipulation of complex numbers. Representation on the Argand diagram.

EEL 3115 Communication Skills***(42 hrs)**

Study Skills: planning study time, making references, filing notes; preparing for examinations. Library Skills: organizations; classification, shelving; using reference books, listening in lectures, speeches and instructions, understanding lectures, note taking, speaking skills, asking and answering questions in lectures and seminars, making and defending arguments, agreeing and disagreeing, explaining points clearly, academic reading skills, skimming and scanning, understanding footnotes and bibliographical references.

SBI 3114 HIV and AIDS* (42 hrs)

Introduction, historical background and magnitude of HIV/AIDS, general organization of the human body, immune system (human physiology) and other factors; sex and sexuality; the biology of the human immunodeficiency virus and viral transmission; stages of infection and the development of HIV/AIDS; opportunistic infections; HIV/AIDS prevention and infection control; peer education for HIV; treatment options and vaccine development; blood transfusion and HIV/AIDS; Factors that influence the spread of HIV/AIDS in Africa; case studies in selected countries in Africa; HIV/AIDS as a national disaster impacts; myths and emerging issues on HIV/AIDS.

YEAR ONE: SEMESTER TWO

IISL 3121 Cataloguing I (42 hrs)

The universe of knowledge and methods of knowledge organization. Cataloguing and catalogues. Cataloguing, rules and standards, entries, bibliographic description, cataloguing records, MARC, metadata.

IISL 3122 Classification I (42 hrs)

Classification concepts and theory of library classification. Definition and functions of classification. Issues classification. Notation. Methods and ways of classification. Basic skills for classification. Building and analyzing numbers. Recent Developments. Principles and theories of metadata development in digital environment. Design and application of metadata schemas for distinct domain. Metadata interoperability, vocabulary control, quality control and evaluation. Examination and practices of international standards of description and encoding; Anglo-American cataloguing rules and MARC 21 formats; Standards and tools for subject analysis; Dewey decimal classification and Library of Congress subject headings. Practices on Dewey Decimal Classification and Library of Congress. Dublin Core practices and standards.

IISL 3123 Publishing and Book Trade (42 hrs)

Introduction, definitions, scope and importance of publishing and book trade. Organization of publishing houses, relating differences in operation to various types of publishers. Analysis of editorial functions and main kinds of editorial activities. Production, marketing and distribution of books to bookshops and libraries. Market for books readership, structure, size and output of book publishing industry.

IISL 3211 Archives Administration

(42 hrs)

Acquisition and registration of archives; principles of archival arrangement and description of archives, administrative structure, principle of provenance, finding aids, automation of archival records, archival registration and regulations; search room operations, access to archives, access policy, history and development of archival practices in Kenya.

IISL 3212 Cataloguing II

(42 hrs)

Bibliographic description of different formats including non-book material, A/V material, CD-ROMS, maps, atlases, identification and rendering different access points, preparation of main, added and analytical entries using AACR IIR code or its higher version, description of subject using Sear’s List or Library of Congress Subject Headings List. Minimum 100 items to be catalogued as class work during one academic year. Preparing indicative and informative abstracts and key word index from newspaper and journal articles.

IISL 3213 Repackaging of Information

(42 hrs)

Introduction and definition of information repackaging and consolidation. Description and role of information in development. Information consolidation activities. Information products, design and development, and marketing. Content analysis, repackaging and consolidation. Abstracting, types of abstracts, rules, guidelines and standards for abstracting. Basics of information retrieval, indexing languages, pre- and post-coordinated systems, vocabulary control. Use of subject headings, indexing systems like chain indexing, PRECIS and POPSI; guidelines for abstracting; thesaurus construction and search strategy.

IISL 3214 Internet Services

(42 hrs)

Review of LAN and WAN technologies. Internetworking concepts, architectures, and protocols. The internet protocol (IP) and the transport control protocol (TCP). Client-server interaction and the socket interface. Network programming. Application layer of TCP/IP protocol suite, creating static, dynamic, and active World Wide Web (www) documents, study of different web programming and scripting language including Java, VB, CGI, ASP, VBscript, CSS, HTML, XML, Jscript, and Perl. Three tier systems, user interface, business logic and database tiers. Students will be expected to build a simple web-based information system using a 3 tier solution.

IISL 3215 Abstracting and Indexing Services

(42 hrs)

Fundamentals of indexing and abstracting theory and practice, formation of vocabularies. Construction of a thesaurus. Systems of indexing. Effects of systems upon information retrieval. Style and format of abstracts. Evaluation of abstracting services and requirements of users of abstracts.

IISL 3216 Quantitative methods (42 hrs)

Introduction, Foundations of Statistics, Probability Theory, Probability Distributions, Correlation Studies, Sampling Methods, Testing of Hypothesis, on-Parametric Tests Analysis of Variance, Bibliometrics, Origins of Bibliometrics, Bibliometric Distributions, Characteristics of Bibliometric Distribution, Other Bibliometric Studies.

IISL 3217 Information Seeking Behaviour (42 hrs)

Acquisition, storage, and use information they receive from their, environment. Behavioural, cognitive, and affective aspects of information-seeking. Applications to information systems and user instruction. Information organization, storage and retrieval, production, circulation, use of information from IR perspective, history of information retrieval, fundamental approaches, theories and techniques in information retrieval, Information retrieval systems and services relating to information technology.

IISL 3218 Information Society (42 hrs)

Definition, characteristics and importance of information, Information revolution, theory of information society. Information society Interrelations, the information gap, information Economy, information and communications technology and their Effect on society, the Internet and society, knowledge society, Intellectual freedom and control.

YEAR TWO: SEMESTER TWO

IISL 3221 Media Informatics

(42 hrs)

Introduction and background to media informatics. Definition and importance of media informatics in the society. Growth and Concepts of media and informatics. Information media; books, journals, patents, information flow, communication channels, and multimedia. Social functions, technical characteristics, and discourses of information media. Epistemological and ontological perspectives of information in relation to the transmission, service and retrieval of information.

IISL 3222 User Studies

(42 hrs)

Totality of human behaviour in relation to sources and channels of information; information needs and barriers; information seeking; use and dissemination of information; information poverty and information overload

IISL 3223 Monitoring & Evaluation of Information Services

(42 hrs)

Subject analysis, thesaurus, its characteristic, and importance. The difference between thesaurus and lists of subject headings. Selection of terms of and descriptors and their relations. Building thesaurus, structure, development and updating. Retrieval languages. The concepts of subject cataloguing, functions and importance, principles and selection of subject headings. Forms of subject heading and structure, and cross reference. Library of congress list of subject headings

IISL 3224 Information Services

(42 hrs)

The concept and importance of information services, planning and developing information services. Direct information services: circulation, reference services and periodicals. Indexing and Abstracting, and bibliographic services. Other services: current Awareness and selective dissemination of information, information Retrieval, online searching, translation, user's education (training), Information marketing, the use of Internet, and evaluation of Information services.

digitalization, microfilming, photocopy etc. Principles of preservation, restoration, repair and conservation. Preservation policy, disaster management, disaster planning. Academic trip.

IISL 3312 Management of Libraries and Information Centres (42 hrs)

The concept nature importance, levels and types of Management of information centers and libraries, managers: their traits, types and skills, functions of management of information. Centers and libraries: planning, organizing, supervising and Coordinating, controlling, and decision making, personnel Management of electronic environment, case studies.

IISL 3313 Principles & Practices of Management (42 hrs)

Current trends and practices in management. Scientific management. Principles of management. Techniques and principles of human relations. Problem solving. Methods of minimising common managerial pitfalls. Leadership and management styles. Evaluation of library and knowledge Management operations. Human resource management, financial management, reporting, and system analysis. Total Quality Management (TQM), Library housekeeping operations, planning. Managing change and innovation.

IISL 3314 Data Base Management I (42 hrs)

Database management theory and application. Implementation of computer based applications. Overview of database models including: hierarchical, network, distributed, object oriented, and Extensible Mark-up Language (XML) database models. Data modelling using the entity-relationship diagram. Relational database model. Database design. Database operations. Web access to databases. Data warehousing. Database administration. Transaction processing and concurrence control.

IISL 3315 Multimedia Information Resources (42 hrs)

This course tracks the convergence and shifting alliances between the broadcasting networks, the telecommunications companies, newspapers, and the entertainment industry, technological, public policy, indexing & access, marketing of services, social, cultural,etc., structure and interaction by the various new information technologies, language and discourse, multimedia and partnerships (individually, as consortia, or through marketers), systems designs, (particularly metadata), integrated delivery of images, texts from a diverse, new multimedia and networking information systems and other disciplines.

IISL 3316 Fundamentals of Networking in Information Centres (42 hrs)

Information organization, storage and retrieval, production, circulation, use of information from IR perspective, history of information retrieval, fundamental approaches, theories and techniques in information retrieval, Information retrieval systems and services relating to information technology. Functions and elements of information retrieval systems, database services, text searching. Overview of information retrieval, architecture of search engines, information retrieval utilities. Meaning and definitions of information retrieval. Types of Information retrieval. Structured (relational database attributes values) or unstructured (text, video, image, sound, and geospatial) data. Index structures, retrieval strategies (Boolean, fuzzy sets, vector space, probabilistic), relevance feedback, compression of inverted indexes and efficiency techniques. Information retrieval utilities such as thesauri, semantic networks (Word Net),

IISL 3317 Disaster Management (42 hrs)

Introduction to disaster management. Types of disasters in information centres. Processes and procedures of disaster preparedness/ management. Policies, objectives and evaluation.

IISL 3318 Copyright & Access to Knowledge (42 hrs)

Introduction to copyright, foundations of copyright as it applies to libraries, Fair use, Personal Use, print on demand, Copy shops, library copying, reserves, interlibrary loan, the showing of movies and managing copyright in the public, academic and school environments. Licensing, ICT related provisions, International and National Intellectual Property Organisations, e.g. World Intellectual Property Organisation (WIPO), Kenya Copyright Board (KCB), The Reproduction Rights Society of Kenya (KOPIKEN), Kenya Copyright Act 2001.

YEAR THREE: SEMESTER TWO (Core courses)

IISL 3321 Information Resource Management (42 hrs)

Introduction to information resource management (IRM), Meaning, definitions and concepts of IRM. Staffing of the library and information centres. Increasing complexity of human resource management. information resources environment (global, industry, organization, management and social impacts). Overview of information management. Infrastructure design, information assets and managing information. Information as an organizational resource. Management of organizational data and information to support decision making. Role of information management in organizational strategy and change. concepts of management control and their applications to information resources, for example budgeting, performance measurement, etc.

IISL 3322 Data Communication and Networks (42 hrs)

Computer networks and data communications. Network technology and standards. Applications and the computer network systems. Network design and management. Network security, telecommunication systems and the Internet. Trends in data communication and network technologies.

IISL 3323 Database Management 11 (42 hrs)

Database management theory and application. Implementation of computer based applications. Overview of database models including: hierarchical, network, distributed, object oriented, and Extensible Mark-up Language (XML) database models. Data modelling using the entity-relationship diagram. Relational database model. Database design. Database operations. Web access to databases. Data warehousing. Database administration. Transaction processing and concurrence control.

IISL 3324 Research Methods (42 hrs)

Introduction to the research process, the role and value of research in libraries and information resource centres. The role of research in professional practice. Major philosophies of research. Components of a research study. Planning research and using literature sources; quantitative and qualitative research methods. Research design. Introduction to statistical methods of data analysis. Introduction to qualitative data analysis. Data presentation and interpretation of research results. Report writing and referencing techniques. Ethical issues.

ELECTIVES (Specialization)

ELECTIVE I: Library and Knowledge Management

IISL 3325 Information Services for Users with Special needs (42 hrs)

Selection and evaluation of library materials for people with special needs, Examination of information needs of special groups, role of library in serving the under-served, Sources of information: print, non-print, electronic materials and media, Nature, characteristics, utility and evaluation of different type of information sources, Non documentary information sources, categories: primary, secondary, and tertiary information sources, reference services for special groups, types of reference service: short range and long range reference service, criteria for evaluation of information sources for special groups.

IISL 3326 Quality Assurance in Libraries & Information Centres (42 hrs)

Fundamentals of indexing and abstracting theory and practice, formation of vocabularies. Construction of a thesaurus. Systems of indexing. Effects of systems upon information retrieval. Style and format of abstracts. Evaluation of abstracting services and requirements of users of abstracts.

IISL 3327 Electronic Cataloguing (42 hrs)

Theories, principles and practice of bibliographic description. Application of international standards such as Anglo-American cataloguing Rules (AACR2). The International standard bibliographic description (ISBD) and machine- readable cataloguing (MARC 21) to the creation bibliographic records and the construction of catalogues in libraries and other environments. The structure of MARC 21 formats and records, construction of bibliographic records of materials of different formats using the MARC 21 format. Automated systems, online catalogues, copy cataloguing

IISL 3328 Entrepreneurship in Libraries & Information Work (42 hrs)

Introduction to entrepreneurship. Entrepreneurship and knowledge management. Characteristics of entrepreneurship. Entrepreneur and World Wide Web. Shifting paradigms and setting of entrepreneurial standards. Ethical issues in entrepreneurship. Entrepreneurial manager and workplace. Tangible payoffs and entrepreneurial rewards.

ELECTIVE II: Records and Archives Management

IISL 3329 Management of Record Centres (42 hrs)

Introduction to Records Centre Concept. Types of record centres: on-site, off-site, public, private and commercial. Record centre functions: acquisition, transfer, processing, maintenance, storage, preservation, access, use and disposition. Nature of record centre buildings: purpose-built and converted buildings design and lay-out, construction, materials and environmental considerations. Record centre resource needs: personnel, finance, equipment and supplies. Application of information technology to record centre functions. Disaster management in record centres. Evaluation of record centre functions.

IISL 3331 Management of Electronic Records (42 hrs)

Selection, acquisition, vendor relations, negotiation, licensing, work flow, librarian – technician relations, administrative modules, underlying technologies including OpenURL and federated searching, evaluation, statistics, preserving access and presentation of e-resources to users. All librarians benefit from a better understanding of the complications and challenges presented by electronic resources.

IISL 3332 Legal Issues in Records Management (42 hrs)

An over view of legal systems in Kenya. Legal issues in records and archives; privacy, copy rights, intellectual property rights, freedom of information and censorship distribution, use, and possession of sensitive records and information. Legal requirements in the provision of records archival services. Archival legislations. An academic trip.

IISL 3333 Office Records and Registry Management (42hrs)

Introduction. Office environment. Office organization. Departments in an organization. Record keeping. Filing. Reprography. Concepts, records management policy, Records management justification. Principles of records management. Records retention and disposition schedules and scheduling. Organization of records, Records appraisal, records disposal and destruction. ICTs in records and archives management. Forms, directives and reports management. Confidentiality and access to different types of records e.g. courts orders. Disaster preparedness, response and recovery.

YEAR THREE: SEMESTER THREE

IISL 3335 Industrial Attachment

(480 hrs)

Students will liaison with their designated departmental supervisor and the respective onsite supervisor at the designated industrial attachment organization, to determine a suitable project or task to be pursued during the industrial attachment for twelve weeks. Students' may also work in groups on a predetermined project/task. During the Industrial Attachment, students will work under company supervision and will account for 25%; while oral examination will account for 25% upon return. Students will maintain a logbook of daily activities and will be required to submit a comprehensive final report for assessment and will account for 50%. Students will be visited at their work place twice by their Lecturers.

YEAR FOUR: SEMESTER ONE (Core Courses)

IISL 3411 Financial Management for Libraries and Information Centres

(42 hrs)

Introduction to financing in Universities. Capital structure, sources of finance. Capital management, operating budgets, Fundraising, Financial planning, Control

IISL 3412 Systems Analysis and Design

(42 hrs)

Introduction to systems development; software life cycle; System Development feasibility; Data gathering; Context diagram; Data flow diagram; Data dictionary; Installation; Training; Development Tools: Documentation, Maintenance, Conceptual design, DB design, Graphical User interface, Case study. Weekly practice in the lab.

IISL 3413 Ethics and Information Systems

(42 hrs)

Basic concepts of ethics. Ethical challenges in the context of information and its use. Ethical norms to the production, dissemination, and use of information. Professional ethics in all relations with communities and individuals; and 5. Application of ethical norms within librarianship and libraries (and all information agencies). Classical, medieval, Enlightenment, and modern ethical concepts. Norms and the effects of violation of the norms. Ethical Scrutiny in building and maintenance of collections and access mechanisms. Professional ethics. Duties and responsibilities librarians have. Professional associations. The practice of intellectual freedom. Accuracy and completeness of responses represent duties.

IISL 3414 Research Project**(42 hrs)**

A written research report on a topic or problem related to the students chosen area of interest in the information field. Choice of topic will be made by students in consultation with lecturers who have relevant expertise and assigned to supervise them. The research report will demonstrate the use of appropriate subject content, methodology, proper presentation of results, evidence of originality and deduction of valid conclusions from the study.

ELECTIVES (Specialization)**ELECTIVE I: Library and Knowledge Management****IISL 3415 Communication and Information Society****(42 hrs)**

Introduction and background of communication and information society. Meaning and definitions of communication and information society. Techniques to communicate and gather information in society. Approaches to present communication and information- written presentation, software and online. Flow of information within and across communities. Methods of managing organizational knowledge. Communication and information society in the digital divide. Digital technology and social inclusion – community technology. Learning organization and knowledge management- e-government and e-business. Social shaping of technology. Mobile technologies. Information society infrastructure (National and supra-national information society strategy – Rural inclusion, regional agencies) Information society strategies and policies – new approaches, co-creation

IISL 3416 Management of User Services (42 hrs)

Introduction to user information services. Planning, survey, architectures, types, professional, tools, facilities and equipments. Implementing and Evaluation. Types of information user services. Circulation, literature searching, information desk, reference services. Introduction to services for special users with special needs. Meaning, types of needs, user surveys, analysis, needs assessment

IISL 3418 Library Automation (42 hrs)

Library automation with a central emphasis on the design, development, management and uses of the OPACs. Integrated library systems. Selection, evaluation and use of computer based systems for acquisitions, cataloguing, circulation, serials control and other library processes. Evaluation of automated systems. System migration. Radio Frequency Identification (RFIDs) systems, local system design, and authority control. Standards and protocols.

ICT 3416 Introduction to Knowledge Management (42 hrs)

Introduces Knowledge Management concepts, examine the characteristics and applications of systems that support knowledge management at personal, group and corporate levels. Focus on the electronic representation of knowledge, the components of systems that embody or support knowledge processing, the use and value of such systems: systems for transaction and information management, decision support, management exploration, intelligence gathering, and computer supported cooperative work. The business and system issues associated with the analysis, design, construction, deployment, management and evaluation of knowledge management systems are addressed.

ELECTIVE II: Records and Archives Management

IISL 3419 Management of Legal Records (42 hrs)

Introduction to legal records. Context, scope of legal records. Principles and challenges of managing legal records. Legal system and legal records. Disposal of legal records. Access policy on legal on legal records. Application of Information Communication Technology in the management of legal records.

IISL 3431 Management of Health Records (42 hrs)

Context of hospital records, health care system in Kenya, nature of health records, patients case notes, x- rays, pathological specimens and preparations, patient indexes and registers, pharmacy, and drug records, administrative records, nursing records, educational records; management of hospital records; legal status of health records: access, storage, preservation, appraisal and disposition: ICT and management of health records.

IISL 3432 Management of Personnel Records (42 hrs)

Personnel records, types of personnel records in support of public good. Accountability and good governance. Access to personnel records, Authenticity and reliability of electronic personnel records. Identification and management of confidential personnel records is also covered.

IISL 3433 Management of Business Records (42 hrs)

Introduction and background to business information management. Organizational management, theories of human motivation, management styles and processes. Data and information systems, information requirement analysis, role of hybrid information management, information mapping, information economics, developing information strategy. Information management and organizational change.

YEAR FOUR: SEMESTER TWO (Core Courses)

IISL 3421 Computer Networks (42 hrs)

File transfer protocol (FTP), hyper text transfer protocol (HTTP), simple mail transfer protocol (SMTP), real time protocol (RTP), computer networks classification, computer networks Topologies, an introduction to the transfer control protocol and user Datagram protocol (UDP and TCP).

IISL 3422 Information Security (42 hrs)

Security protocols, authentication protocols, data integrity, Digital signatures, key management and distribution. Introduction to Cryptographic algorithms: Secret Key Encryption, Public Key Encryption (RSA), Message Digest; Spoofing and denial of service; Application layer security: HTTPS, secure email

IISL 3423 ICT Management**(42 hrs)**

Nature of Management Information Systems. Use and role in planning, organizing, staffing, directing and controlling a business organization. Role of information systems within organizational strategy. Impact of IT on end-user working in business. Information organization, storage and processing using IT. Impact of computer networks and the Internet on business and the process of analysis. Design and development of a management Information system. Introduction and drawback of the traditional MIS. Fundamentals of Information. Concept of Information. Conceptual framework of information system. Database technology and the Internet. Information system planning and management.

IISL 3424 Human Resource Management**(42 hrs)**

Applications of staff management principles to library situations. Includes staff roles in current and future operations, application of library performance measures to determine staff effectiveness; preparation of staff manuals: problems of special classes of library workers, such as volunteers and students.

ELECTIVE (Specialization)**ELECTIVE I: Library and Knowledge Management****IISL 3425 Marketing of Library and Information Services****(42 hrs)**

Need for marketing and information technology. Marketing of organizations. Development and managing of appropriate products, services and strategies. Information management in line with social, ethical and environmental responsibilities. Incorporation of information technology. Current issues and electronic marketing. Trends in marketing. Electronic marketing, emerging interactive technologies, implications for marketers. Communication and direct marketing technologies. Basics of e-business technology. Legal issues and security. Languages and formats supporting e-business

IISL 3427 Web design for Information Centres**(42 hrs)**

The course introduces students to the tools and techniques used for building Web-based applications. Students will gain an understanding of the fundamental workings of the Web.

Students will be taught how to develop web applications using client-side tools such as HTML and Java Script and server-side tools such as ASP. Weekly Practice in the lab.

IISL 3428 Sectoral Librarianship (42 hrs)

Principles and practices of non-technical libraries (public, national, academic, school) and special libraries (Children, Law, Medical, Military, Braille, and Industry). Management of service through funding; staffing, marketing and performance evaluation. Philosophy of selection based on information needs. Evaluation of print and electronic resources. Stock development and presentation. Principles and strategies of access to library services. Library design, display, promotion and community outreach.

ICT 3424 Knowledge Management

Contemporary issues in knowledge management, knowledge engineering, technology management, and intelligent systems. Overview of knowledge acquisition, intelligent database design, decision support systems, artificial intelligence technologies, designs and tools, and collaborative development.

ELECTIVES II: Records and Archives Management

IISL 3429 Advanced Records Management (42 hrs)

Theories and principals of records management, managing records as strategic resource, developing of an integrated records management programs. Management analysis techniques in records management and restructuring of records management systems. Practical in specialized resources centres.

