Course Description for the Bachelors Degree in Library and Information Science

807120 Introduction to Information Science and Libraries: (3 credit hours)

Information age and knowledge, information society, types of libraries and information centers, information sources, traditional and electronic catalogs and cataloging, classification, information services, information systems, information technology, information storage and retrieval, information networks and the INTERNET, and professional ethics.

807121 Information Sources Development: (3 credit hours)

Definition, importance and forms of information sources, the concept of information sources development, basics of information sources development, user studies, collection development policy: selection acquisition, evaluation, and weeding information sources, cooperative acquisition, acquisition via the Internet, management of information sources.

807210 Principles of Management of Information Centers and Libraries:(3 credit hours)

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.

807220 Descriptive Cataloging: (3 credit hours)

Cataloging and Catalogs, definition of descriptive cataloging, rules and standards, entries, bibliographic description, cataloging records, MARC, metadata, practicum.

807221   Information Sources: (3 credit hours)

Importance and types of printed and audiovisual information sources, information sources in humanities, social sciences, pure sciences, and applied sciences. Environment, electronic libraries, electronic publishing, the concept of electronic information sources and their importance in libraries and information centers. Types of electronic information sources on the Internet: methods of selection, acquisition, retrieval, and evaluation. Databases and online searching, information networks, information communication and exchange, information security and secrecy, rights of intellectual property. Practicum.

807222   Information Centers and Institutions: (3 credit hours)

Types of libraries and information centers, national libraries, public libraries, school and children's libraries, academic and special libraries. Electronic 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.

807310   Thesauri and Subject Cataloging: (3 credit hours)

Subject analysis, thesaurus; its characteristics, and importance, the differences between thesaurus and lists of subject headings, selection of terms and descriptors and their relations. Building thesaurus; structure, development and updating. Arabic and foreign thesaurus. Retrieval languages. The concept of subject cataloging, functions and importance. Principles and selections of subject headings. Forms of subject headings and structures, and cross-references. Arabic lists of subject headings, and practicum.

807311   Essentials of Automation of Information Centers and Libraries:(3 credit hours)

The concepts and definitions, technological environment, automating library functions: the administration, acquisition, cataloging and classification, serials control, information services, integrated software packages used in information centers and libraries such as WINISIS, information networks, online searching, examples of automated information centers and libraries in Jordan.

807320 Digital Libraries :   (3 credit hours)
The course discusses the digital library: its aims and characteristics, electronic publishing, digital / electronic information sources and development, management of digital / electronic information sources; services and technical processes, functions of digital libraries and activities, digitization and digital storage, intellectual property, security of digital information sources, multimedia and applications, the Internet and digital libraries, the digital libraries National systemization, financing, staff training and development, local and universal models.

807321 Classification-I: **(3 credit hours)**
Definition, importance and functions of classification, relationship to cataloging, classification concepts, issues in classification, notations, methods and ways of classification, basic skills for classification, building and analyzing numbers, recent developments, practicum.

807322 Introduction to Information Services: (3 credit hours)
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, users education (training), information marketing, the use of Internet, and evaluation of information services.

807324   School Libraries and   Resource Information Centers:
           (3 credit hours)
           Modern concept of school libraries, and their relations with the educational system. School libraries as information and educational resource center; aims, functions and values. Collections development, organization, services, management and activities. School library community and users, public relations and performance assessment, and budgeting. Information technology and information networks.

807325   Special Information Centers and Institutions: (3 credit hours)
           The Concept and nature, development, requirements, goals, functions, types (medical, law, business, agriculture, etc), collection development, organization, services, management, finance, information technology, information networks, human resources training and development, performance assessment. Local, Arabic and international models.

807410   Electronic Cataloging : (Prerequisite 807220 + 807310)
           (3 credit hours)
           Theories, principles, and practices of bibliographic description, application of international standards such as Anglo-American cataloging Rules (AACR2), the International Standard Bibliographic Description (ISBD), and machine-Readable Cataloging (MARC21) to the creation of bibliographic records and to the construction of

catalogs in libraries and other information environments, the structure of MARC 21 formats and records, construction of bibliographic records for materials of different formats using the MARC 21 format, automated systems, on line catalogs, copy cataloging.

807411   Classification-II: **(3 credit hours) (Prerequisite 807321)**

Advanced practical applications in building class numbers and analysis in Dewey Decimal Classification System and its main sub-divisions, basic rules in practical classification; issues, problems and solutions in practical classification, computerized classification and the use of the Internet.

807412   Fundamentals of Information Retrieval: (3 credit hours)

The concept of information retrieval and values. Information systems components, inputs and outputs. Information cycle, problems and factors affecting information retrieval. Information retrieval languages. Automation and retrieval via the Internet. Current developments in automated information retrieval systems.

807415   Special Topics in Information Centers and Libraries
Management: (3 credit hours)

Basic specific topics in library and information centers management: management of change, strategic management, knowledge management, organizational behavior, leadership, electronic management, accountability, time management, management by objectives, and some other issues.

807416   Information Society: (3 credit hours)

Definition, characteristics and importance of information, information revolution, theory of information society. Information-society interrelations, information literacy, intellectual and information property and censorship, the information gap, information economy, information and communications technology and their effect on society, the Internet and society, knowledge society, intellectual freedom and control. Information issues in the Arab society.

807421   Indexing and Abstracting: (3 credit hours)
The concept of indexing and abstracting and their role in information retrieval, subject analysis, bibliographic control, types, forms and functions of indexes. Sorts of traditional and computerized indexes. Lists of subject headings and thesaurus and uses. Indexing languages, indexing and indexes evaluation. Technical and practical indexing processes. Abstracting and abstracts: aims and functions. Components of abstracts and processes, types of abstracts and evaluation. The use of computers, databases and networks on the Internet. Practicum.

807440   Practicum :   (Prerequisite : Department Approval) :
(3 credit hours)
Student to be trained in different types of libraries (academic, public, schools, national, special and information centers) in Jordan, on different   library functions such as technical services, information services, computer applications and databases .

1604201 Principles of Marketing :   (3 credit hours)
Concept and definition of marketing, managing customer relationship, marketing strategy, marketing environment, marketing information and research, consumer behavior, market segmentation, target marketing, positioning, product, services and branding strategies, marketing

channels, advertising, sales promotion, public relations, personal selling and direct marketing.

1604431   Service Marketing :   (3 credit hours)
The concept of service marketing, the development of services marketing, the characteristics of services and its marketing applications. Marketing planning for services, the service marketing mix elements, services quality & productivity, international marketing of services and management of marketing of services & control.

1901260   Developing Electronic Information Sources on the Internet: (3 credit hours)
Using the internet to develop the information sources (Library) related materials video conferencing, remote learning, information retrieval, and developing web pages. Using the internet for virtual libraries, using various ways in producing library related materials. Designing library related applications using the computer, developing library related multi-media, way of evaluating produced library related materials, and evaluating its suitability to users needs.

1901360   Introduction to Computer Networks: (3 credit hours)
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).

1901460Computer Security : **(3 credit hours) (Prerequisite 1901360)**
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

1902201   Introduction to Visual Programming: **(3 credit hours)**
Introduction to Visual Basic and Visual Studio environment: Controls, components, wizards; Language constructs and structures: Variables, assignment, arithmetic, selection, repetition, arrays, functions; Advanced controls: Frames, labels, Boxes and others; MDI models; Vbasic DB: Data Report, data designer, data form, data object, queries, intellilist; Classes; ActiveX: Encapsulation, relationships, interfaces, automation, tools; API Applications: windows API, keyboard, mouse, display; Applications. Weekly practice in the lab.

1902220   Introduction to Database Systems: (3 credit hours)
Data Base (DB) Environment; DBMS architecture; Data modeling: Conceptual model, Entity relationship model (ERM); Relational DBs; Data Base design; Data Base language: Structured Query Language (SQL); Views; Data Dictionary; Normalization process: 1NF, 2NF, 3NF; Introduction to Object-Oriented DBMSs; Centralized and distributed Database systems; Case study. Weekly practice in the lab.

1902356 Introduction to Graphic Design for Visual Media: (3 credit hours)
The use of computer graphics, animation and visual literacy in educational settings. Topics include: processes of design, composition, color utilizing, psychology of color utilizing, and visual literacy; Using computer for visual design and production, projected and non-projected media, two-dimension and three-dimension design; Animation, Simulation, and Computer human interactive. The students will use software such as Photoshop for development of E-learning materials both in print and for web.

1902370   Introduction to System Analysis: (3 credit hours)
(Prerequisite 1902220)

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.

1903101   Fundamentals of Information Technology:(3 credit hours)
Information Technology components, computer hardware: memory, CPU, machine cycle. Numbering system: decimal, binary, octal, hexadecimal, operations, data representation, coding. Communications and networks multimedia, E-business, system software and applications, information system: analysis and development, problem solving: algorithm, flowchart, pseudo code. Weekly practice in the lab.

1903121   Web Application Developments (1) :   (3 credit hours)
(Prerequisite 1903101)
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.

1903232   Fundamentals of Management Information Systems (MIS):
(3 credit hours)   (Prerequisite 1903101)
Fundamentals of Information Systems; Types and levels of MIS; IT in Business; Business Application of Information Technology; Managing Information Technology: global management, planning and information change; Security and protection issues. Weekly practice in the lab.

1903235   Information Resources Management: (3 credit hours)

(Prerequisite 1903101)

Roles of information systems in the overall strategy and management of organizations; Organization management; Information resources: Personnel, planning and control, technological trends, management implications, managing MIS department; Outflow of information; Documents generation and distribution; Team management; New issues in MIS. Weekly practice in the lab.

1903345   Computer Ethics: (3 credit hours) (Prerequisite 1903101)

Identifying ethical problems; Reaching decisions; Legal constraints; professional organization and codes of conduct; Systems management and hacking; Ethical, social, political, legal and economic aspects of the application of computers; Customer rights; Copy rights; Ownership; Protocols and agreements; Security and ethical issues; Viruses detection; Protection and ethical issues; Internet and ethical implications; Computer crimes. Weekly practice in the lab.