تفاصيل مقررات قسم نظم معلومات المكتبات

رمز المقرر		
المجال المعرفي	نظم المعلومات	
اسم المقرر بالعربي	مبادئ نظم معلومات المكتبات	
اسم المقرر بالانجليزي	Foundations of Library and Information Science	
المتطلب السابق	نظم المعلومات	
وصف المقرر	An introduction to the profession of Library and Information Science (LIS), this required LIS course provides an historical framework and summary of the role of libraries and other information agencies in modern society, describes the general knowledge creation and distribution cycle, introduces major issues of information policy and ethics, provides examples of libraries, library types, other information institutions, and introduces aspects of research and professional accomplishment and careers.	
اهداف المقرر	• Articulate important developments in library and information science as a discipline and profession; • Assess the relative importance of services offered by a variety of information agency types; • Describe the role of diversity as it applies both to the range of information-related institutions and to the broad spectrum of populations served by the profession; • Analyze relationships between information technologies and the research and practice associated with library and information science; • Assess the impacts of important social and political issues on the profession and the role of the profession in society; • Describe and evaluate relevant aspects of the activities and goals of the profession as a whole and select sub-groups within the profession; • Articulate the importance of professional statements or codes of ethics.	
الساعات المعتمدة	3(2.2.0)	
المفردات	Introduction; Course overview; fundamental concepts of information	
	LIS definitions;	
	History of information agencies and technologies	
	Information agencies: public, academic, school, corporate, governmental, archives, and records centers	
	The LIS Profession	
	LIS Education	
	LIS and allied areas	
	Information needs and user behavior; types of users and their needs; Models of information seeking behaviour	
	Information services; Reference/research services; Collection development; Organization of information	
	Information technology and the information professions	
	Digital libraries; Electronic publishing	
	Information policy, Public policy	

Information policy: Intellectual freedom		
Information ethics; the Digital Divide		
The Information cycle; The Future of LIS		
		المراجع

		رمز المقرر
		المجال المعرفي
تعدين النصوص		اسم المقرر بالعربي
Text Mining		اسم المقرر بالانجليزي
		المتطلب السابق
Introduces concepts and methods for knowledge discovery from large amount of text data, and the application of text mining techniques for business intelligence, digital humanities, and social behavior analysis		وصف المقرر
Describe basic concepts and methods in text mining, for example document representation, information extraction, text classification and clustering, and topic modeling; - Use benchmark corpora, commercial and open-source text analysis and visualization tools to explore interesting patterns;- - Understand conceptually the mechanism of advanced text mining algorithms for information extraction, text classification and clustering, opinion mining, and their applications in real-world problems; - Choose appropriate technologies for specific text analysis tasks, and evaluate the benefit and challenges of the chosen technical solution		اهداف المقرر
		الساعات المعتمدة
Introduction	1.	المفردات
Converting text to numbers	.2	
Corpus statistics and context	.3	
Naïve Bayes	.4	
Model evaluation	.5	
Sklearn	.6	
SVMs + feature	.7	

ranking	.8	
Human Annotation	.9	
Text categorization applications: student presentation	.10	
Document clustering	.11	
Topic modeling	.12	
Project idea presentation	.13	
Project progress workshop	.14	
Final project presentation	.15	
		المراجع
Cambridge University		
Stanford University		

		رمز المقرر
		المجال المعرفي
تطبيقات الحوسبة السحابية في المكتبات		اسم المقرر بالعربي
Application of Cloud Computing For Libraries		اسم المقرر بالانجليزي
		المتطلب السابق
		وصف المقرر
So turning to cloud computing and libraries, are there real problems that can be solved? The answer is yes. The library community can apply the concept of cloud computing to amplify the power of cooperation and to build a significant, unified presence on the Web. This approach to computing can help libraries save time and money while simplifying workflows. A brief list of potential areas of improvement could include:		اهداف المقرر

– Most library computer systems are built on pre-Web technology. – Systems distributed across the Net using pre-Web technology are harder and more costly to integrate. – Libraries store and maintain much of the same data hundreds and thousands of times. – With library data scattered across distributed systems the library's Web presence is weakened. – With libraries running independent systems, collaboration between libraries is made difficult and expensive. – Information seekers work in common Web environments, and distributed systems make it difficult to get the library into their workflows. – Many systems are using only to 10 % of their capacity. Combining systems into a cloud environment reduces the carbon footprints, making libraries greener.		
		الساعات المعتمدة
Introduction	.1	المفردات
Cloud computing can transform the way systems are built and services delivered, providing libraries with an opportunity to extend their impact	.2	
What is cloud computing?	.3	
How is cloud computing different?	.4	
Why are businesses and organizations adopting	.5	
cloud computing solutions?	.6	
What can cloud computing solutions do for libraries?	.7	
Technology improvements	.8	
Data efficiencies	.9	
Community power	.10	
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	.13	
		المراجع

		رمز المقرر
		المجال المعرفي
المكتبات الرقمية		اسم المقرر بالعربي
Digital Libraries		اسم المقرر بالانجليزي
		المتطلب السابق

وصف المقرر		An interdisciplinary study of fundamental issues, problems and approaches to the creation and maintenance of digital libraries. Emphasizes the new approaches and techniques of collection building, organization, storage, and access of digital material and the evaluation of digital projects.
اهداف المقرر		- Understand the evolution, nature and different contexts of digital libraries - Gain competencies with varied techniques for collection building -Understand the strength and limitations of current approaches in organizing digital materials -Become familiar with the technologies for storing, delivering and disseminating digital materials in networked environment -Evaluate digital libraries by applying various usability and performance criteria -Explore social and economic issues of digital libraries and explore the limitation and trend of future digital libraries
الساعات المعتمدة		
المفردات	.14	Introduction, syllabus review, and what are digital libraries?
	.15	Digital library initiatives and international projects
	.16	Digitalization: Forms and processes
	.17	Collection development
	.18	Techniques and technologies for multimedia storage and access
	.19	Organizing digital materials: metadata standards
	.20	Interface design and evaluation
	.21	Digital archiving and preservation
	.22	Access issues: information retrieval and reference services
	.23	Social, economic and legal issues in managing digital libraries
	.24	Evaluation of digital libraries
	.25	Digital libraries: e-books, social media, profession, problems, limitations, and trends for the future
	.26	and presentations Final project testing
المراجع		
		Lesk, M. (2004). *Understanding Digital Librarie*s. 2nd Ed. Amsterdam: Morgan-Kaufmann.

رمز المقرر		
المجال المعرفي		

		اسم المقرر بالعربي
Xml For Libraries		اسم المقرر بالانجليزي
		المتطلب السابق
The student will acquire a knowledge of key features of the most common languages in the XML standard family. The student will fully understand the definition and structure of the Extensible Markup Language (XML), and tree structures in data organisation. Understanding functional programming based on XSLT.		وصف المقرر
Core content level learning outcomes (knowledge and understanding) Familiarity with the principles of electronic documentation and structured documents, particularly the XML standard family. Understanding and capacity to use encoding, tools and standards related to XML, the XML tree structures, XPath, DTD, XML Schema, and CSS. Knowledge of functional programming using XSLT. Knowledge of XML parsers, validators and processors. Additionally, the student has knowledge of some practical applications of XML such as electronic commerce, Web Services, multichannel publishing and XSL-FO, RSS and semantic Web. Core content level learning outcomes (skills) The unit gives an ability to plan and implement XML based applications, and to apply functional programming in document conversion. The student has an ability to use most important tools and standards related to XML, particularly DTD, XML Schema, CSS and XSLT. The student is familiar with some XML parsers, Schema validators and XSLT processors like Visual Studio.		اهداف المقرر
		الساعات المعتمدة
Introduction		
CSS style sheets,	1.	المفردات
XML definions	.2	
XML Schema and DTD document definions	.3	
XSLT transformations and programming,	.4	
other XML related standards like XHTML,	.5	

and DOM interface	.6	
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		رمز المقرر
		المجال المعرفي
ميتاداتا		اسم المقرر بالعربي
Metadata		اسم المقرر بالانجليزي
		المتطلب السابق
Principles and applications of metadata for digital resource representation and retrieval using various schemes. Includes metadata creation, management, and dissemination, especially for digital libraries.		وصف المقرر
1. Articulate important concepts, issues, and terminology related to metadata theory, standards, and applications relevant to cultural heritage institutions; 2. Analyze and critically apply different approaches to metadata creation, storage, management, and dissemination within different information communities for different purposes; 3. Critically analyze and compare different metadata standards and their applicability to different contexts; 4. Create descriptive metadata for digital resources using selected metadata structure, content, value, and encoding standards; 5. Design and document metadata schemes and application profiles to meet the functional requirements of specific collections, projects, organizations, and communities;		اهداف المقرر

6. Apply basic metadata quality metrics to evaluate the quality, interoperability, and shareability of different types of descriptive metadata; 7. Be equipped with knowledge and skills relevant to entry-level metadata librarian and metadata specialist positions in cultural heritage organizations.		
3(2.2.0)		الساعات المعتمدة
Introduction to metadata for digital collections. Introduction to digital resource description.	.1	المفردات
Introduction to Dublin Core. Resource ID & responsibility metadata.	.2	
Resource content and relationship metadata. Subject analysis and representation.	.3	
Controlled vocabularies for improved resource discovery.	.4	
XML-encoded metadata. OAI DC XML; MODS XML.	.5	
MODS: Metadata Object Description Schema. Mapping between DC and MODS.	.6	
Spectrum of metadata schemes. oXygen; XML schemas, file validation, XSLT.	.7	
Library metadata: MARC, MARCXML, FRBR, RDA. MarcEdit. TEI. Books and Media metadata: ONIX, IPTC/XMP, MPEG, etc.	.8	
Museum metadata: VRA, CCO, CDWA. Archives metadata: EAD, EAC.	.9	
Metadata interoperability, shareability, OAI harvesting, quality.	.10	
Designing and documenting a metadata scheme. Application profiles.	.11	
Metadata, Linked Data, and the Semantic Web; ontologies; RDF, SKOS.	.12	
Administrative, preservation, rights, and structural metadata; METS.	.13	
Ethics and diversity in metadata. Metadata and the Web.	.14	
		المراجع

رمز المقرر		
المجال المعرفي		
اسم المقرر بالعربي		استرجاع المعلومات
اسم المقرر بالانجليزي		**Information Retrieval**
المتطلب السابق		
وصف المقرر		Advanced aspects of Information Retrieval and Search Engine
اهداف المقرر		To study advance aspects of information retrieval and working principle of search engine, encompassing the principles, research results and commercial application of the current technologies.
الساعات المعتمدة		3(2.2.0)
المفردات	.1	Unit 1.Introduction, History of Information Retrieval, The retrieval process, Block diagram and architecture of IR System, Web search and IR, Areas and role of AI for IR
	.2	Unit 2. Basic IR Models: Introduction, Taxonomy of information retrieval models, Document retrieval and ranking, A formal characterization of IR models, Boolean retrieval model, Vector-space retrieval model, probabilistic model, Text-similarity metrics: TF-IDF (term frequency/inverse document frequency) weighting and cosine similarity.
	.3	Unit 3. Basic Tokenizing, Indexing, and Implementation of Vector-Space Retrieval: Simple tokenizing, Word tokenization, Text Normalization, Stop-word removal, Word Stemming (Porter Algorithm), Case folding, Lemmatization, Inverted indices (Indexing architecture), Efficient processing with sparse vectors, Sentence segmentation and Decision Trees
	.4	Unit 4. Experimental Evaluation of IR: Relevance and Retrieval, performance metrics, Basic Measures of text retrieval (Recall, Precision and F-measure)
	.5	Unit 5. Query Operations and Languages: Relevance feedback and pseudo relevance feedback, Query

expansion/reformulation (with a thesaurus or WordNet, Spelling correction like techniques), Query languages (Single-Word Queries, Context Queries, Boolean Queries, Natural Language)		
Unit 6. Text Representation: Word statistics (Zipf's law), Morphological analysis, Index term selection, Using thesauri, Metadata, Text representation using markup languages (SGML, HTML, XML)	.6	
Unit 7. Search Engine: 6 Hrs. Search engines (working principle), Spidering (Structure of a spider, Simple spidering algorithm, multithreaded spidering, Bot), Directed spidering(Topic directed, Link directed) ,Crawlers (Basic crawler architecture), Link analysis (e.g. hubs and authorities, Page ranking, Google Page Rank), shopping agents	.7	
Unit 8. Text Categorization and Clustering: Categorization algorithms (Rocchio; naive Bayes; decision trees; and nearest neighbor), Clustering algorithms (agglomerative clustering; k-means; expectation maximization (EM)) ,Applications to information filtering; organization	.8	
Unit 9. Recommender Systems: Personalization, Collaborative filtering recommendation, Content-based recommendation and integrating specialized information on the web.	.9	
Unit 10. Information Extraction and Integration. Information extraction and applications, Extracting data from text, Evaluating IE Accuracy, XML and Information Extraction, Semantic web (purpose, Relation to hypertext page), Collecting	.10	
Unit 11. Advanced IR Models with indexing and searching text Probabilistic models, Generalized Vector Space Model, Latent Semantic Indexing (LSI), Efficient string searching, Pattern matching	.11	
Unit 12. Multimedia IR Introduction, multimedia data support in commercial DBMSs, Query languages, Trends and research issues	.12	
	.13	
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		المراجع
1. Modern Information Retrieval, Ricardo Baeza-Yates, Berthier Ribeiro-Neto.		

2. Information Retrieval; Data Structures & Algorithms: Bill Frakes		

		رمز المقرر
		المجال المعرفي
		اسم المقرر بالعربي
document design		اسم المقرر بالانجليزي
		المتطلب السابق
Document design and production unites several disciplines, including technical writing, information architecture, and graphic design. The important thing to understand about the ways documents are designed and produced as we begin this class is that there are is ever-proliferating range of media that information fits into, including: • Websites • Mobile apps • Enterprise apps • Social media channels • Search engines • Paper documents (reports, newsletters, books, etc.) • Electronic documents (pdf reports, pdf or email newsletters, ebooks, etc.) • Device-specific content (i.e. Apple Watch updates) • Etc., etc., etc		وصف المقرر
		اهداف المقرر
		الساعات المعتمدة
	.1	المفردات
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رمز المقرر		
المجال المعرفي		
اسم المقرر بالعربي		إدارة السجلات
اسم المقرر بالانجليزي		Records Management
المتطلب السابق		Organization of Information
وصف المقرر		A comprehensive introduction to the field of records and information management. Topics covered include: records creation, evaluation, maintenance and control; issues related to the maintenance, storage and disposition of records; and electronic records management.
اهداف المقرر		The history and current status of the records and information management profession • The relationship between records and information managers and archivists • Records inventory procedures • Records retention policies • File classification systems • Management of electronic records • Preservation and recovery of vital records • Confidentiality and security of records • eDiscovery • Access to information and privacy regulations • Managing social media records • Managing records in the cloud
الساعات المعتمدة		3(2.2.0)
المفردات	1.	Introduction to records management (RM) Components of RM Programs Records and record life Cycles

Generally Accepted Recordkeeping Principles Information governance The RIM profession Legal requirements for keeping business records	.2	
Records Inventory	.3	
File capture ,File classification	.4	
Functional classification systems	.5	
Records appraisal, retention, and disposition	.6	
Managing electronic records Enterprise Content Management Systems	.7	
Managing email and social media records	.8	
Managing records in the Cloud	.9	
Managing the Big Data environment Data analytics Artificial intelligence	.10	
Access to information & Privacy ,Data privacy ,Managing data breaches	.11	
eDiscovery, admissible information, and litigation	.12	
Vital records, business continuity planning, and disaster recovery Inactive records management	.13	
	.14	
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