

Information Science

Spring 2022 Course List

LIS 503LEC Information Architecture

Registration #17773

Students will learn how to configure systems that help ensure that any task uses all applicable information. The course will review user requirements analysis and then discuss the components needed to meet the requirements and how these components work together: sources for many types of information, principles of organizing information in the sources and for the user, including metadata schemes and taxonomies, methods for retrieval and determining relevance, and support for a positive user experience in interacting with information through search, navigation, and understanding. Students will collaborate on applying these principles in a concrete example and developing a prototype of a website.

LIS 503LEC Equity, Diversity, Justice, and Inclusion in LIS

Registration #21692

This course focuses on issues of diversity, equity, and inclusion in librarianship and information science. Through discussion, research, and self-reflection, students will develop their cultural competence; critically examine information work through discussion of race and power and social justice; and explore the role of information professionals as allies, advocates, and co-conspirators.

LIS 503LEC Preservation in Archives and Special Collections

Registration #21166

This course is an introduction to the guiding principles, policies and tools of preservation through the lens of Archives and Special Collections. We will learn to identify print and non-print materials and issues commonly found in Archives and Special Collections and cover policies and practices that ensure maximum usable life. Students will get hands-on experience with a range of preservation techniques and learn when and how to use them. In addition, we will cover preservation as a management function including advocacy, prevention, environment, stacks maintenance and disaster planning.

LIS 503LEC Ontologies, Linked Data, & Sem

Registration #23468

This course introduces ontologies and entity-relationship modeling as the conceptual basis for the Resource Description Framework (RDF) and linked data. It introduces Knowledge Organization Systems (KOS) including ontologies, especially vocabularies for relationships and entities that are widely used on the Web and gives an overview of the vast array of linked data sets and how to find relevant datasets. Students will learn how to query multiple linked data sets to answer reference questions using SPARQL (SPARQL Protocol and RDF Query Language).

LIS 503LEC Intro to Data Science for LIS

Registration #24386

Data science is a fast-growing field. In this course, students will learn basic concepts, techniques and tools of data science that are more and more important for all information-centric fields. The course will introduce data collection and integration, exploratory data analysis, predictive modeling, descriptive modeling, model interpretation and evaluation. Behaviors, organizations, policies, and society issues around data will also be discussed. The emphasis will be placed on integration and synthesis of concepts and their application to solving problems.

LIS 503LEC Information Retrieval

Registration #23756

This course provides an introduction to information retrieval. Students will learn about theories and techniques for automatically processing, storing, and retrieving documents. Topics include indexing data structures and algorithms, retrieval models (geometric, logic-based, and probabilistic), query languages, search user interfaces, methods of system evaluation, and ethical issues, such as bias, censorship, and privacy. Students will apply their knowledge to a number of domains, for example: conversational search, digital libraries, multimedia search, recommender systems, and search engines.

LIS 507LEC Information Life Cycle

Registration #18971, 19512, 23345

Introduces students to the nature of information and ways in which its structure and representation affect information retrieval. The course lays the theoretical foundation for understanding and applying a range of concepts and techniques for both creating and using traditional, modern, and future information systems. Major knowledge organization, metadata, and retrieval systems are introduced and students are guided in their practical application. The course emphasizes the importance of the user in system design. Students are introduced to the roles of information preservation, information security, and digital curation. Barriers to equity of access and retrieval resulting from cultural, linguistic, and gender biases are also be examined [sic].

LIS 508LEC Information Users and Uses

Registration #18972, 21684

Information services and systems must be designed on the basis of information behavior, i.e., what is known about how people think about, access, evaluate, and use information. This course introduces students to that knowledge base, to prepare them to design and deliver systems and services that match the needs of diverse information users.

LIS 523LEC Information Literacy Instruction Registration #21686

LIS 523 introduces principles, theories, and practical applications of user education, including design, delivery, and assessment of information literacy methodologies and resources. Emphasis is given to current and effective teaching practices in a variety of library and information center environments.

Information literacy instruction (ILI) is a core public and educational service of libraries, and is an increasingly critical one. It is a vibrant subfield of librarianship, filled with energetic librarians who are passionate about teaching and learning. A great deal of the abundant literature addresses ILI in academic libraries, but those interested in school or public libraries will have the opportunity to tailor their learning in this course for those settings. While this course will be challenging, my hope is that this immersion into ILI will excite and engage you, and show you the possibilities of this aspect of librarianship.

LIS 532LEC Curriculum Role of the Media Specialist Registration #13677

This course examines the curricular role of the school's library media program. By means of clinical experiences, students learn from practitioners in a school library in their geographical area. A student-centered approach is used to design information literacy lesson plans and assess student learning outcomes based upon the Common Core Learning Standards (CCLS) and AASL's Standards for the 21st Century Learner as well as other research-based inquiry models. Students engage in an interactive professional community and receive feedback from practitioners and peers. Discussions focus on problem solving, collection development, curriculum design, CCLS, AAPR, and instructional methods.

LIS 535LEC Resources and Services for Young Adults Registration #13712

A study of literature and other media produced for young adults. Includes an introduction to adolescent psychology, lifestyles, and interests and how these impact young adults and their reading/viewing habits. Students will learn to evaluate and promote materials according to their various uses, both personal and curricular, and according to the needs of individual young adults.

LIS 560LEC Emerging Technology in Library Studies Registration #24265

Library and information professionals are often required to learn and determine how emerging technologies can best be used to meet client needs. This class will guide students in examining technology trends of the 21st century such as mobility, openness, and literacy. Students will examine how emerging technologies promote new ways of thinking about information and productivity. Students will be expected to be familiar with IT and online instruction.

LIS 563LEC Digital Libraries Registration #23472

The course examines both theoretical concepts and practical techniques of digital libraries. Topics covered include digitalization, organization, access management, evaluation and preservation in digital libraries, as well as social, economic and legal environments of digital library. Trends into the future of digital libraries will be discussed.

LIS 568LEC Computer Applications in the School Library Media Center

Registration #20602

This course focuses on state-of-the-art technologies used to enhance productivity, efficiency, and collaboration in teaching information literacy and managing a school library. A student-centered approach is used to employ effective strategies and techniques in the field. An interactive Center professional community is employed as candidates collect feedback from K-12 students and practitioners. Discussions focus on the role of technology, computer applications, and emergent technologies in the context of school libraries.

LIS 569LEC Database Systems

Registration #21165

Study of microcomputer-based data management techniques and systems, including evaluation of software packages, for the organization, manipulation, and retrieval of information. Examination of relational database techniques such as sorting, searching, indexing, report generation, and data transfer using DBMS command language. Projects include development of a working system.

LIS 571LEC Information Organization

Registration #17527

Introduces students to the nature and structure of information. It lays the theoretical foundation for understanding and applying a range of concepts and techniques for creating and using traditional, modern, and future information systems, from paper libraries to linked data. It covers the conceptual structures in the organization of data, information, knowledge, language, and text. It introduces major knowledge organization systems and metadata systems and guides students in their practical application in cataloging library and other materials, both paper and digital, and in searching many different information sources. The course emphasizes the importance of user requirements in designing information systems. It has students analyze cultural, linguistic, and gender biases that hinder equity of access.

LIS 575LEC Introduction to Research Methods

Registration #18973, 21379

Study of research, problem-solving, and evaluation of services in library, media and information environments. Students will learn to identify and define problems requiring systematic analysis and to review, evaluate, synthesize, appreciate, and use existing reports of research. Study includes librarianship and the philosophy of science, theory and hypothesis testing. Problems include evaluation of circulation, effectiveness, collections and overlap, online services, budgeting allocation, status of librarians, salaries, citation analysis, bibliometrics. Not a statistics course; background in mathematics and statistics is not required.

**LIS 581LEC Management of Libraries and Information Agencies
Registration #16911**

Explores management theory and practice applicable to varied information agencies at the supervisory, middle, and top management level through lecture, case studies, problem analysis, role playing, and course assignments. Connection to and sustainability within communities through evidence-based decision-making, planning and advocacy is emphasized. Equal opportunity employment guidelines and diversity in employment and in the people served are discussed.

**LIS 585LEC Management of School Library Media Centers
Registration #13534**

This course focuses on the leadership and management of school libraries. Through clinically-based experiences in a school library in their area, students are exposed to a variety of methods used to evaluate the effectiveness of a school library's programs, services, budget, policies and procedures. Students study leadership in the context of advocating for the school library program at the local, state, and national levels. National and state school library standards are used as a framework for understanding the components of an effective, quality school media program.

**LIS 587LEC Collection Management
Registration #18974**

Investigates current and traditional approaches to collection development in libraries of all kinds. Topics considered include: philosophic and ethical foundations; strategies for defining community needs and collection goals; formulation of collection development policies; approaches to materials selection and acquisition; collection evaluation; problem materials and censorship; interlibrary cooperation, resource sharing, and document delivery systems; collection maintenance, preservation, and management; and impact of new technologies.