INFORMATION (INFO)

INFO-601 Foundations of Information - (3 Credits)
This foundational course focuses on the intersection of people, information, and technology and the theoretical and conceptual foundations of the information field. Students will be introduced to ideas and ethical and inclusive principles that will inform future specializations in their course of study and provide them with concrete strategies for ongoing professional growth and development in their area of interest. Through analysis of professional and scholarly discourse, students will practice expressing their points of view on issues vital to the field.

INFO-606 Digital Accessibility - (3 Credits)
This course teaches students to apply accessibility standards and inclusive design principles to the design of digital technologies. Students will learn the language of accessibility and inclusion, how to create accessible interfaces and content, and relevant techniques for designing technologies that consider the full range of human diversity.

INFO-607 Management and Leadership - (3 Credits)
The course prepares information professionals to work effectively at the individual and organizational levels by learning the principles of information economy, and applying management theories to solving practical problems. The course focuses on developing studentsmanagement skills and competencies, including, but not limited to, planning, organizing, leading, influencing, making ethical decisions, fostering diversity, budgeting, assessing, and implementing change.

INFO-608 Human Information Interaction - (3 Credits)
Human information interaction (HII) investigates how people interact with information in various contexts. The course introduces multidisciplinary theories and methods for understanding human relationships with information and technology, and prepares students to analyze, design, and improve information products and services. This is a highly interactive course where students routinely lead class discussions and conduct real-world research projects.

INFO-609 Introduction to Spatial Thinking & GIS - (3 Credits)
Geographic Information Systems (GIS) are tools for managing, describing, analyzing, and presenting information about the relationships between geographically referenced information. This course provides a strong foundation and overview of many of the underlying concepts in GIS as well as a practical skill set utilizing GIS software and data. Additionally, the course focuses on map design to maximize the message and impact of map output. Finally, students are introduced to spatial metadata standards and best practices for long term preservation.

INFO-610 Introduction to Statistics - (3 Credits)
This course introduces students to statistics and quantitative information. The course surveys probability theory, hypothesis testing, descriptive statistics and visualizations, and inferential statistics such as correlation and regression. Students will explore applications of statistics within information professions, learning to think critically about and with quantitative data.

INFO-611 Information Policies & Politics - (3 Credits)
The course will be concerned primarily with access to and dissemination of information. Students will discuss the range and scope of information policies as they affect society today, among them freedom of information, intellectual property, privacy, and government information. Students will be shown how tensions between conflicting laws and policies are resolved on a legal and pragmatic level and will rely on both primary and secondary source materials, including statutes, case law, law reviews, scholarly journal articles, books and popular press.

INFO-612 Advanced GIS - (3 Credits)
This course presents more sophisticated GIS analytical methods and tools, including vector and raster data in GIS modeling, network analysis, density analysis, and 3D environments. Students will also learn how to use coding to efficiently clean and organize data, and to streamline analytical processes. Additionally, students will hone their cartographic design and visual communication skills through weekly critiques.

INFO-614 Programming Interactive Web Maps - (3 Credits)
This course prepares students to build dynamic, web-based maps and data visualizations of GIS analytical output. Students will learn how prepare spatial data for use in web mapping, how to think about interactive versus static map communication techniques, and how to apply user experience considerations to map-based websites. They will then build a thoughtfully designed website that incorporates maps, graphics and text to tell a story with spatial data.

INFO-615 Spatial Statistics for GIS - (3 Credits)
This course covers specialized methods and models that have been created for performing statistical analysis on spatial data. Students will learn basic statistical concepts and how to apply them to geographical data through computation and coding. Course exercises and assignments will focus on practical applications for studying spatial clustering, spatial sampling, temporal analysis and hypothesis testing. Special emphasis will be placed on creating analytical output via charts, tables and maps.

INFO-616 Programming Interactive Visualizations - (3 Credits)
Interactive visualizations are increasingly common ways of creating engaging experiences with data and facilitating exploration of large and complex datasets. While some interfaces are created using visualization software, many require custom coding using front-end languages and specialized libraries (e.g., the D3 JavaScript framework). This course will cover methods and tools for developing interactive visualizations through a hands-on approach. Course topics will include data-interchange formats, development environment and workflow, server-side scripting, interaction design, data storytelling, principles of universal design and accessibility, and version control. Students will have the opportunity to create interactive visualizations on a topic related to their professional interests.

INFO-619 Information and Human Rights - (3 Credits)
As information technologies make information more available, people rely and expect information to support their social interactions, education, employment, civic participation and other aspects of their lives and to view information as a de facto right. This course will provide students with in-depth understanding of information as a human right and will equip them to understand how to use and communicate law, technology, professional standards and information sources to promote information rights and equitable access to users. The course will begin by exploring the right to information as human right by examining the legal and ethical support it information rights. We will examine how information affects social, cultural, economic and legal structures and improves people's lives. Similarly, we will answer these questions by examining cases in both the United States and abroad and providing tools to assist specific communities. The course will explore the importance of information to humans political, social and economic rights through a series of past and current case studies.

INFO-625 Management of Archives and Special Collections - (3 Credits)
An examination of the nature of archives and the principles underlying their management. The acquisition and processing of archival material; appraisal principles and techniques; conservation of textual and non-textual materials, including control of the physical environment; use of archival materials; and administration of archival repositories are studied in depth.

INFO-628 Data Librarianship and Management - (3 Credits)
The world of data is seemingly a new frontier for libraries, yet in some ways, data and data sets are comparable to other print and electronic resources that librarians historically have been charged with locating, teaching, collecting, organizing, and preserving. This course asks how best we can serve the needs of a burgeoning community of data users/producers while meeting the new challenges that data present to our existing skillsets, workflows, and infrastructure. Topics will include data reference and literacy; archives and repositories; formats and standards; ethics and policy. Statistical/GIS software and research data management are also explored.

INFO-630 Human-Centered Research Design & Methods - (3 Credits)
The course covers the fundamentals of the human-centered research process and prepares students to plan, design, and conduct their own studies. Students in this course will work alongside their instructor and peers as part of a research team for a semesterlong research project. Students will gain hands-on experience with quantitative and qualitative research methods through a design and execution of a project. The concepts of inference, sampling, validity, reliability, research ethics, and inclusive research practices, as well as survey, interview, ethnography, focus group, diary, and other methods will be covered. Students will learn to develop actionable and relevant research questions and choose the best research method to address them. The course will prepare students to critically evaluate research and share findings through compelling stories. This course will be of interest to students who want to hone their research, data analysis and writing skills, as well as students interested in pursuing more advanced degrees.

INFO-631 Academic Libraries and Scholarly - (3 Credits)
This course will provide a survey of scholarly communication past and present with a particular emphasis on the changes in scholarly communication in the past ten years. Students will examine the interaction between society, technology and scholarly communication, the theory and practice of the communication of knowledge in academic and research environments and how these trend developments of publishing and communication are affecting changes in scholarly communications

INFO-632 Conservation and Preservation - (3 Credits)
An introduction to the preservation of library and archival materials using a comprehensive approach that includes theoretical, technical, and practical aspects of preservation. It covers the historical development of preservation in libraries and archives, including permanence and durability, ideas that support preservation of cultural material and preservation methods such as conservation treatments, preservation microfilming, digitization, and other types of reformatting. Students also examine holdings maintenance and rehousing techniques, preservation selection, conditions and needs of assessment surveys, handling and storage techniques, environmental controls, and disaster planning and salvage methods.

INFO-634 Conservation Lab - (3 Credits)
It is essential for today's archival professional to have a comprehensive understanding of techniques and tools available to them to preserve the unique holdings under their management. Working in tandem with the conservator in the library's conservation laboratory, students will handle, analyze, and treat original material-thereby gaining invaluable hands-on experience. Students will be introduced to the varied treatments of paper based materials available to protect an insure that historic records survive for the generations of researchers.

INFO-635 Archives Appraisal, Acquisition & Use - (3 Credits)
This course wrestles with some key issues that pertain to archival collection policy. Students will explore why materials are being accepted or solicited for an archive; how society or an organization is \"Documented.\" How archival materials will be used; who will use archival materials and why. Students should be able to design an appraisal or acquisition policy for a collecting institution that will serve the archives larger mission at the end of the course.

INFO-636 Conversational User Experience Design - (3 Credits)
Advances in artificial intelligence and voice technologies have enabled the creation of platforms and tools that support conversational interactions between people and devices. This course teaches students how to design effective and usable conversational interfaces from a human-centered perspective. From chatbots to intelligent personal assistants and other voice user interfaces (VUIs), students will learn the state of the art and science of conversation design, explore the conversational design process, and reflect on the ethical implications of designing conversational agents.

INFO-637 Programming User Interfaces - (3 Credits)
This course will introduce students to designing and building web-based user interfaces in a user-centered context. Students will learn common techniques for web design including: Web page markup and styling, responsive web design, and programming languages for building interactive user interfaces. Students will apply universal design and accessibility principles, as well as iteratively evaluate and revise their designs through usability testing. Students will have the opportunity to create and usability test an interactive project website.

INFO-638 Web Development - (3 Credits)
Modern websites in the information professions are highly interactive, consisting of dynamic web pages generated by client-and server-side scripts and database queries. This course will cover the basic methods and tools for developing database-driven web sites, through a hands-on approach. Topics covered will include: Internet architecture; development environment and workflow; server-side scripting; database design and development for website data management; and version control. Students will hat the opportunity to create a database driven website on a topic relation to their professional interests.

INFO-639 Database Design and Development - (3 Credits)
Database applications serve a vital role in today's information world, providing structured storage, access, and retrieval of organizational data. This course will explore the principles and practices of database design, implementation, and management. An emphasis will be placed on the social, technological and organizational needs in database design. Course topics include: entity-relationship models, relational database models, normalization, structured query language (SQL), physical database design, and MySQL databases. Students will be given extensive hands-on experiences with current database management technologies.

INFO-640 Data Analysis - (3 Credits)
This course develops skills to uncover data patterns for making informed decisions. The course reinforces statistical analysis skills, leading to more advanced statistical techniques such as non-linear regression, time-series and spatial statistics, quasi-experimental methods, and machine learning. Students will use quantitative data management tools that are common in information-centric fields. The course also reinforces research design skills, asking students to think critically about data quality and data ethics.

INFO-641 Visual Communication & Information Design - (3 Credits)
This course explores the principles and practices of visual communication as it pertains to displaying information of different types and in different formats. The course will cover basic theories of graphic design, including concepts related to typography, color, layout, and composition, how to analyze and conceptualize visual messages, and how to recognize and create a strong visual hierarchy. Students will gain skills necessary for practical application, learn how to establish and follow brand/identity guidelines, and prepare work for print or web production. Throughout the course, students will improve their basic aesthetic sensibilities, learn how to create a cohesive visual language, and develop strong visual thinking skills.

INFO-642 Content & Information Strategy - (3 Credits)
Sitting at the intersection of business strategy, technology, user experience design, branding, communications, and publishing, the discipline of content strategy examines the purpose behind content in all manifestations and how that content supports business, institutional, organizational, and user goals. Once solely the province of website development, content strategy has rapidly evolved and now encompasses a much broader set of considerations to address content creation, publication, distribution, and governance across all communications channels within an organization, especially the interplay among digital, social, and traditional (i.e. \"print\") media. Designed for information professionals from a variety of backgrounds and specialties, this course will provide students with a broad and solid understanding of the discipline of content strategy. Through a comprehensive and robust series of readings, exercises, simulations, assignments, and discussions, students will gain practical experience in creating and working with the tools, techniques, principles, and processes of content strategy.

INFO-643 Information Architecture & Interaction Design - (3 Credits)
This course provides students with practical knowledge and hands-on experience designing digital interfaces from a user-centered perspective through an exploration of the dual practices of information architecture and interaction design. Students will go through the entire user-centered design life cycle, from concept to prototype, and in the process will 1) learn about and employ a variety of design methods aimed at understanding users and their contexts and 2) learn about and use appropriate tools and media to create a range of design deliverables that effectively communicate design insights. At the conclusion of this course, students will have a foundation of knowledge and skills that will prepare them to do practical design work in a variety of settings and organizations.

INFO-644 Usability Theory & Practice - (3 Credits)
This course provides the theoretical and practical foundations for evaluating digital interfaces from a user-centered perspective. Through lectures, in-class activities, readings and individual and group assignments, students will learn and apply usability principles and gain hands-on experience with several common usability evaluation methods, including traditional user testing plus inspection- and field-based methods. Because the goal of evaluation is always to improve the underlying usability of an interface, the course will focus on effectively communicating evaluation results. At the conclusion of this course, students will possess the knowledge and skills necessary for successfully planning, conducting, and leading usability evaluations in a variety of settings and organizations.

INFO-645 Advanced Usability and UX Evaluation - (3 Credits)
This course covers advanced concepts, techniques and tools to conduct usability research and user experience (UX) evaluation. Students will gain hands-on experience with several common usability advanced evaluation methods, including eye tracking, digital analytics, heatmaps, A/B and multivariable testing and usability benchmarking studies. Students will develop skills in the usage of these tools working with real data and running their own studies in the Usability Lab. The course will have a strong focus on the communication of user research and evaluation results and a range of reporting methods will be explored and practiced during the course.

INFO-646 Digital Product Design - (3 Credits)
This course focuses on the process, practices, and tools for designing engaging, understandable, and technically feasible digital products. Students will learn about and apply advanced techniques and tools relevant to the entire product design lifecycle, including identifying, investigating, and validating design problems, as well as crafting, designing, and testing digital solutions. Students will also learn how to visualize and effectively communicate design insights to various stakeholders.

INFO-647 Visual Resources Management - (3 Credits)
This course will cover all aspects of visual resources management: description, access, and curatorship. Keeping in mind how best to serve the needs of users for discovery and access of visual materials, particularly in digital formats, the course will be geared toward the acquisition of practical knowledge and cover such topics as: managing legacy collections and metadata in analog and digital formats; collection development; metadata schemas, content standards and authorities for art and non-art images; interface and database design considerations; digital asset management and preservation workflows; and the history and future of careers in visual resources. Readings, lectures, and discussion will be augmented with hands-on assignments using actual image resources and cataloging tools, as well as a final project of a larger scope that will entail creating an online collection of visual materials.

INFO-648 Mobile Interaction Design - (3 Credits)
This advanced course covers the fundamental concepts, techniques, practices, and guidelines associated with the design of mobile applications. Students will learn and apply user experience (UX) and user interface (UI) guidelines for popular mobile operation systems, as well as best practices for conduction formative evaluations of interactive mobile prototypes. Interface and interaction patterns for each platform are also examined. Through hands-on exercises and assignments, students will apply an iterative, user-centered process to create unique, engaging mobile interfaces that take into account relevant content requirements, device/platform limitations, and use cases.

INFO-649 Practical Ethnography for User Experience - (3 Credits)
This advanced course focuses on applied qualitative research methods used to inspire and shape the design of digital products and services. Students will gain hands-on experience with several ethnographic research methods commonly used in the User Experience profession and also learn how to form appropriate design research questions, analyze qualitative data to identify human-centered insights, and effectively communicate research finding to various stakeholders.

INFO-650 Speculative Design - (3 Credits)
As organizations, governments, and corporations face rapid change and uncertain times, new ways of designing for a far-off future are imperative. Human-centered design and design thinking focus on near future, this course will look at how to design for the longer-term. In this course, students will learn speculative design research techniques and gain hands-on experience with a variety of forecasting methods, including trendspotting, quantitative modeling, and STEEP analysis.

INFO-651 Emotional Design - (3 Credits)
This course covers the fundamental concepts, methods, and practices of emotional design and the emerging field of emotion technology, or affective computing. Students will learn how to conduct research on the emotional experience of interactive products using a variety of techniques. Student will gain skills in designing for emotion with a combination of emerging industry best practices, analogous thinking, and ethical guidelines. Through hands-on exercises and assignments, students will apply an iterative, user-centered design process to create a range of emotionally intelligent products, from apps to chatbots to connected home devices.

INFO-652 Reference and Instruction - (3 Credits)
Librarians serve individuals and their communities by providing information sources and teaching users to navigate information environments. This course prepares students to work directly with users in a variety of formats, including in one-on-one interactions, in instruction-based interactions, and through information products such as digital tools. This course aims to prepare students for their role of providing communities with equitable information access and promoting justice by applying ALA standards, resisting censorship, rejecting neutrality, demystifying open, identifying place, interrogating the librarian standpoint, and responding to community needs.

INFO-653 Knowledge Organization - (3 Credits)
This is an introductory course to key concepts, systems, and tools to organize, provide access to and share information resources. The course covers basic principles and applications of descriptive cataloging, classification, and indexing for physical and digital resources. Also covered are metadata, thesauri and emerging knowledge organization systems and practices, including linked data and social tagging. It will provide an introduction to the ways these systems are impacted by cultural biases which may require reparative or remediation work. The course provides the foundation for further studies in library, archive, and museum cataloging, reference, information retrieval, database management, and information architecture.

INFO-654 Information Technologies - (3 Credits)
This course introduces core computing technologies, including hardware, software applications, Internet/web technologies, and assistive technologies. Topics essential to the work done by information professionals will be highlighted: web technologies, database concepts, markup languages, data management, and design and accessibility. Students will conduct frequent hands-on activities to acquire skills that are immediately applicable to working with information technologies. Students will critically assess information technologies, through the evaluation of technology-related current events and computing trends, including the potential for ethical, environmental, and/or societal impacts.

INFO-655 Digital Preservation & Curation - (3 Credits)
This course will provide a historical foundation and critical framework for evaluating digital information. The class incorporates computer history, digital preservation theory, and strategic planning methods to provide students with the tools and knowledge that are critical for running libraries, archives and museums.

INFO-656 Machine Learning - (3 Credits)
Machine learning is a rapidly growing field that develops algorithms for tasks such as data classification and prediction. These algorithms are programmed to operate and adjust themselves independently of human intervention (i.e., to learn), allowing data work to occur quickly and at scale. Machine learning is a key technology behind the automation across many social areas today, often branded AI. This course offers an introduction to machine learning as a practical tool that we can use, and as a technological field with social implications. We will learn about key concepts in machine learning; survey a few key machine learning techniques, such as supervised methods for machine learning (regression and classification), which attempt to map data onto desired outputs, and unsupervised methods (clustering and association), which attempt to find structure within data itself; use openly available tools to implement these techniques on text and image data; learn how to assess the effectiveness of different techniques on particular datasets; and discuss basic issues that confront all machine learning methods

INFO-657 Digital Humanities - (3 Credits)
This course examines the history, theory, and practice of digital humanities, paying special attention to the ways in which digital humanities are transforming research, disciplines, and even the academic itself. Topics include contrasts and continuities between traditional and digital humanities; tools and techniques used by digital humanists; the processes of planning, funding, managing, and evaluation digital humanities projects; ways in which the digital humanities impact scholarly communication and higher education; and the special roles of libraries and information professionals in this growing movement.

INFO-658 Information Visualization - (3 Credits)
This course examines the art, science and practice of information visualization. Particular emphasis is placed on the ways in which position, shape, size, brightness, color, orientation, texture, and motion influence perception of information and facilitate comprehension and analysis of large and complex bodies of information. Topics include cognition and visual perception; the aesthetics of visual media; techniques for processing and manipulating information for the purpose of visualization; studies of spatial, relational, multivariate, time-series, interactive, and other visual approaches; and methods for evaluating information visualizations.

INFO-659 Advanced Projects in Digital Humanities - (3 Credits)
This course explores advanced methods and tools in the digital humanities,including digital curation and preservation, databases and content management systems, text encoding and analysis, geospatial analysis, network analysis,usability, and open content creation and publishing platforms. Particular emphasis is placed on formulating research questions, critically evaluating data quality and project design, and disseminating knowledge artifacts for diverse audiences.

INFO-660 Collection Development - (3 Credits)
A study of methods and techniques for the development of a collection policy and practice to meet the needs of diverse user groups. The course includes collection policy development, censorship, methodology of user group identification, standards, budget allocations, selection, media and weeding.

INFO-661 Art Documentation - (3 Credits)
This course explores current methodologies in the documentation, description, and management of artist records and their works of art in order to gain an understanding of current trends and best practices. The course will provide a foundation for students to develop localized standards to serve different stakeholders across the fine arts spectrum so that international standards are leveraged for particular needs. By investigating the complexities in documenting the artist and their works of art, students will learn the information gathering need for contextualizing artist's work through the retention, acquisition, and processing of core documents. The course will also address use patterns and reference practices of art documentation for museums, artist's studios, foundations and estates, and academic stakeholder communities. Additionally, key elements that define core concepts of documentation standards for a large body of artists' work, such as data elements that comprise an artist's catalogue raisonne, will bring to focus the necessary tools needed to document, contextualize, and implement proper documentation strategies for the artist. This class will bridge theory into practice by providing students a forum to develop their skills by researching case scenarios of audience sectors in the fine arts and incorporating those findings using software platforms for dissemination.

INFO-662 Advanced Cataloging/Classification - (3 Credits)
Students study advanced theory and practice in cataloging and classification with an emphasis on the Library of Congress classification schedules and cataloging of non-book media, and metadata for Web-based sources.

INFO-663 Metadata Design - (3 Credits)
Students will explore the principles of resource description with an overview of metadata standards commonly used in digital collections and cultural heritage setting. The overview covers metadata structure standards, metadata value standards (cataloging rules and controlled vocabularies), and metadata syntaxes. Students will develop metadata application profiled, with an emphasis on the design of documentation and metadata entry forms. Additional topics include: Technical and preservation metadata, rights metadata, metadata interoperability, metadata for local contexts, and Linked Data.

INFO-664 Programming For Cultural Heritage - (3 Credits)
This course examines the emerging field of linked open data and its application in the world of digital and/or physical libraries and museums. The overall objective for the classroom as a whole is to ideate and then create a linked open data project. This will require not only reading and research on existing projects and standards but also the acquisition of software and programming skills needed to make the project work. Students will be required to learn a computer programming language (Python), this course will not serve as a general introduction to programming or computer science, but using it in the context of the class will serve as an excellent starting point for further study.

INFO-665 Projects in Digital Archives - (3 Credits)
This course introduces students to all aspects around the move of archives into the digital world. Topics covered include digitizing materials (such as moving image and sound collections and visual media like photography), managing born-digital collections, digital preservation, archival metadata and standards, legal issues, archival interfaces, web archiving, diversity equity and inclusion (DEI) and environmental sustainability. This course provies an opportunity for students to learn how to create a digital archive, and practice the implementation of such a digital archive with an archival collection.

INFO-666 Writing for Digital Experiences - (3 Credits)
Text has a significant impact on user experience, whether it's words on a website, microcopy on an app, or spoken language in a voice interaction. Writing in general is a valuable skill for any UX writer, designer, or anyone working in technology and information. This course teaches students how to craft effective, accessible, and inclusive text for digital experiences. Students will draft, test, and iterate on copy for a variety of interfaces.

INFO-667 Art Librarianship - (3 Credits)
This course examines a wide range of information in the history of art, including printed and online resources. Course will explore the unique characteristics of art publications and the basics of art book publishing and the art book trade topics, including overview of various kinds of art and design libraries. It will include a wide range of information resources relating to the history of art, including print and online resources.

INFO-670 Linked Open Data for Libraries Archives and Museums - (3 Credits)
This course examines principles and practices for enhancing access to cultural heritage materials and making digital content easier to find and use. Students will be provided the opportunity to explore, analyze, and evaluate state-of-the-art and emerging trends in the description and access of digital heritage collection in libraries, archives, and museums. The goal of this course is to introduce students to the range of theoretical and practical issues relates to heritage data organization.

INFO-671 Sustainable Interaction Design - (3 Credits)
This course provides students with foundational knowledge in the area of sustainable interaction design, with an emphasis on contemporary work in human-computer interaction and related design fields. This course will provide a theoretical foundation in contemporary environmental thought as well as practical experience in researching, concepting, and designing for sustainability outcomes. This course will cover areas of design that are important to the UX field, including agriculture and food, animals and conservation, land, ocean, and air pollution, materiality, production, and biomimicry, as well as issues of environmental and social justice related to these areas. Students will engage with hands-on projects that put theory into practice as they explore the ideas presented in this course. Final projects will provide an opportunity to produce a creative project, such as a design prototype or a research-based project. At the end of this course, students will be able to engage with the sustainable interaction design discourse and will be prepared to contribute research and/or design work in a wide variety of environmental settings.

INFO-672 UX Design Systems - (3 Credits)
A user experience (UX) design system is a version-controlled collection of reusable user interface patterns and a set of associated guidelines, principles, and standards. A UX design system allows design teams to efficiently create consistent experiences across a range of digital products. Combining concepts from systems thinking, pattern languages, and atomic design, in this course students will learn how to analyze, use, and create a UX design system. Topics will also include coding and designing for accessibility, creating and using brand and voice guidelines, and design system governance policies and processes.

INFO-673 Literacy & Instruction - (3 Credits)
This course examines literacy theories, including critical literacy, digital literacy, media literacy, information literacy and trans literacy. Students will explore the implementation of literacy-related programs in public libraries, academic libraries, archives, museums and other cultural institutions with a focus on assessing patron needs and using culturally relevant pedagogy.

INFO-674 Genealogy and Local History - (3 Credits)
Genealogy is an increasingly popular topic, with a high media profile. Americans come to libraries looking for information and expert help with genealogy research, or else they hire professional genealogists who use libraries and archives. In Genealogy and Local History INFO 674 students will hear from experienced information professionals, including librarians, archivists, and professional genealogists, as they learn how to conduct genealogical research, and how to apply those skills to reference, instruction, and collection development in the workplace. There will be site visits to The New York Public Library, the National Archives in New York City, and the New York Genealogical and Biographical Society.

INFO-675 Museum and Library Outreach - (3 Credits)
In this course, we will the study the design and implementation of outreach programs to educational communities by libraries and museums. We will pay special attention to the ways in which currents in museum education can be applied to librarianship. Topics to be considered will include contemporary pedagogical and curatorial theory, the relationships between libraries and museums with education in the current funding environment, the provision of online educational materials, and the diversity of educational communities and their needs. Special attention will be paid to the ways that these programs can assist schools in meeting national, state, and local learning standards. As part of their coursework students will design educational materials, compare programs in area museums and libraries, and design a complete educational experience to accompany an exhibition or library collection currently available in New York City.

INFO-676 Programming Services, and Resources for Early Childhood - (3 Credits)
The course explores the specialized skills and knowledge needed to design and develop library programs, services, and resources for infants and young children (0-8 years) The course will follow the literacy continuum, from language development through to independent reading writing, with a special focus on the first three years of life, early literacy, and the role of family and community. This course will interest students who want to work with young people in different contexts and need specialized knowledge of early childhood, the social dynamic of families, and the early education environment.

INFO-677 Literature & Literacy for Teens - (3 Credits)
This course explores the social and psychological needs and attitudes of adolescents, aged 12-18, and the literature and literacy based tools created especially for this demographic. The primary focus of this class is the literacy practices of teenagers and the evaluation and selection of materials in a variety of formats available for them with an emphasis on media literacy. Special attention is paid to the developmental assets of this age group with an eye toward literary recommendation. Discussion topics will include popular literature for teen readers, literacy and technology, the media and popular culture as it applies to this age group, and the use of specialized selection materials to develop collections in school and public libraries.

INFO-678 Growing Up Digital - (3 Credits)
This course explores, from a user centered perspective, digital technologies for young people and the ways that children and teens navigate contemporary socio-technical systems in their everyday lives. Students who successfully complete this course will be able to apply, in critical manner and with an open mindset, key concepts and guiding principles to the design of digital experiences for young people. The driving goal of the course is to invite students into a culture of dignity that will help guide the design of positive socio-technical worlds for young people. It is designed for any student with an interest in young people and a desire to create positive technology experiences for children and teens.

INFO-679 Museums and Digital Culture:Theory and Practice - (3 Credits)
This required course introduces students to the theory and practice of museums and digital culture and to current research in the field. Students learn how digital culture is transforming museums across the full range of museum functions and activities and become familiar with the digital tools and technologies that engage and inform museum visitors. The course gives a broad overview of field's development, which importantly is grounded in information science and the related fields of museum informatics and digital cultural heritage, fields that find commonalties of practice with libraries and archives. The course examines the issues and challenges museums face today and moving into the future. It surveys digital culture across the museum from the perspectives of digital technology and social contexts including digital information behavior, user experience, digital exhibitions and museums on the Web. Students experience and engage with museum digital culture through lectures, engaging with museum professionals, field observation, and by doing a final digital project drawn from coursework and class presentation.

INFO-680 Extended Reality:user Experience for AR/VR - (3 Credits)
Extended Reality (XR) is the collective term for Augmented Reality (AR), Virtual Reality (VR), and Mixed Reality (MR). This course covers how to design for XR technologies through the lens of the human-centered User Experience (UX) process. Covering relevant UX research and design methods in addition to XR platforms and tools, students will gain the fundamental knowledge and skills to create, prototype, and evaluate XR experiences and applications.

INFO-681 Community Building & Engagement - (3 Credits)
This course examines the notion of community within cultural heritage institutions such as the public library and the museum. Particular emphasis is placed on community building, social advocacy, and activism through the use of community informatics. Topics include outreach to diverse populations, including families, children and youth, and the hard-to-reach; data sources, user studies, and participatory methods; community partnerships; digital identity and information ecologies, social media adoption and use as a tool for communication; technology in service to culture, community, and democracy; and evaluation of community engagement.

INFO-682 Projects in Information Experience Design - (3 Credits)
With a theoretical foundation that combines aspects of information science and user experience (UX) design, this course covers practical, hands-on approaches for working with information organizations to conceptualize and implement user centered tools, services, and/ or information spaces. Throughout the course, students will explore and apply theories and principles of the emerging field of Information Experience Design (IXD) through applied, collaborative projects with partner institutions (e.g., libraries, archives, museums, or similar organizations). Topics will include design thinking, research and discovery, and project planning and implementation, with an emphasis on designing an information experience that meets the needs of both internal and external stakeholders.

INFO-683 Museum Digital Strategy: Planning and Management - (3 Credits)
Museums are developing and implementing digital strategies to embed the use of technology across their different functions with the end goal of engaging with their audiences in the digital arena. This course aims to provide an understanding of the management and planning concepts, frameworks and tools needed in the implementation of a digital strategy. Students engage in hands-on exercises to learn how to define, execute and evaluate a digital strategy. This course examines how to integrate digital platforms such as website, mobile technologies and social media into the strategic plan and tactics of the museum with the aim of reaching audiences, increasing engagement with the online communities and improving the visitor experience. It includes a review of some of the digital strategy documents published by various museums and an online analysis of their digital outcomes. From an internal organizational perspective, the course explores how specific museums have incorporated digital plans to transform their culture, processes and increase their digital literacy. Discussions during the course will deepen into the opportunities and challenges of implementing digital practices in a museum.

INFO-684 Museum Information Management: Collection Cataloging & Digital Technology - (3 Credits)
In this course, students will learn to manage a museum's most important information source: its collection information. Students will learn the functions of collection management systems, how to catalog cultural objects by applying descriptive metadata standards and best practices, and explore the potential for creating new access points to museum collections through digital tools.

INFO-685 Digital Analytics: Web, Mobile and Social Media - (3 Credits)
Cultural institutions embrace digital media and use it as a means to communicate and promote their activities, and also to interact and engage with their audiences. Digital Analytics can help to understand the users and their behaviors on the organization's website, social media and mobile apps. This course is intended to provide an insight on the digital analytics process and present the steps to define and select metrics that support organizational strategic goals and measure digital success. This course teaches how to use some of the most significant digital analytics tools such as Google Analytics, Facebook Insight or Twitter Analytics. Students will develop skills in the use of these tools, including advances settings, user segmentation, content testing, report automation and dashboard creation. The course covers the entire process, from how to collect data from different platforms to analyze and visualize the date. There is an important practical component where students conduct exercises on how to extract and interpret data to make changes to a website, app or social media activity. Examples are presented to illustrate how to use the different analytics reports in order to provide insights, inform strategy and provide evidence to help the decision making process.

INFO-686 Animals and Experience Design - (3 Credits)
Animal-Computer Interaction (ACI) is a growing field of study that examines the relationship between animals and digital technology. This includes designing and building technology specifically for animals, as well as creating tracking and monitoring tools for humans to better understand animals and how they interact within their environment, particularly in the context of wildlife biology and conservation. There are numerous contexts in which animals are already affected by technology, such as agriculture, zoos, and domestic pets, who often encounter technology in their everyday lives. Additionally, the natural world is increasingly mediated with digital technologies that have consequences for wildlife and animals who live in close contact with urban areas. This course explores different dimensions of ACI, including the theoretical foundations of the field and emerging methodologies that help us design for and with animals. Additionally, we will explore the history of animals in relation to technology more broadly, as well as the ethical, social, cultural, and ecological dimensions that inform our approach to creating and utilizing technology around animals and their habitats, with a focus on sustainability and multispecies futures.

INFO-689 Rare Books & Special Collections - (3 Credits)
The course serves as an integral part of the special collections concentration with a particular focus on bibliography and the printed book. It is an overview to gain an understanding of issues related to reference, cataloging, exhibitions, acquisitions and conservation in rare books and special collections libraries. Of particular interest will be the special collections at New York Public Library, with emphasis on the Rare Book Division. Planned visits include The Grolier Club and NYU Fales Collection, as well as enriching guests speakers. Students will engage actual special collections materials to gain a first-hand understanding of proper handling, basic care, and preservation techniques in rare book collections as well as practical knowledge of reference sources and rare book reading room policies.

INFO-693 Audience Research & Evaluation - (3 Credits)
Through hands-on experience, this course introduces students to the theory and practice of audience evaluation in a museum setting. Students will gain first-hand knowledge by executing an evaluation for a New York City institution. After two introductory sessions spent learning basic theory and practice, students will meet with museum staff to determine the research question and will then plan and execute the evaluation. Students learn how to build a research question, what to run the evaluation, how to mine the data for insights, how to write a compelling and useful report, and how to present findings to stakeholders. The final project is the evaluation report and presentation given to museum stakeholders. Through this course, students are able to immediately put theory to practice and will execute a portfolio-worthy final project. Although we are experiencing an era of \"big data,\" it remains challenging for museums to understand their visitors. Despite the mountains of data available about people, museums often rely on seemingly dated audience evaluation techniques; and for good reason: \"big data\" doesn't provide a complete picture of visitor behavior. This course examines the limitation of different research methodologies, data points, and evaluation approaches, and provides a critical understanding of the usefulness of audience evaluation as it relates to the museum field.

INFO-696 Advanced Projects in Visualization - (3 Credits)
This course covers the development of advanced visualization interfaces, including related techniques of data storage, manipulation, and analysis. Through practical, hands-on activities, students will learn best practices for working with large and complex datasets and communication then through user-centered interfaces. Over the course of the semester, students will become familiar with relevant programming languages and apply them to produce an interactive, web-based visualization project.

INFO-697 Special Topics - (3 Credits)
Covers current issues and topics. New or experimental courses are taught several times to assess the need for them in the regular curriculum.

INFO-698 Practicum/Seminar Information Science - (3 Credits)
This 3-credit course fractures experiential hands-on learning and experience in cultural settings such as libraries, archives, museums, non-profits, publishing and information design firms. Students engage in professional-level work, while relating theory and research to practice. Importantly, the course is designed to provide opportunities to apply and develop the knowledge and skills acquired through coursework in a real work setting. Completion of the following course elements are required: 1)120 hours of fieldwork and research in a workplace setting selected by the student and related to his/her career goals, 2) maintain a journal of on-site hours, activities and reflections, 3) attend four 2 1/2 -hour seminar sessions (10 hours) and 4) produce a practicum project drawn from on-site work and a project presentation at the final course session (20 hours). The course grade is based on the site supervisor's evaluation and the instructor's assessment of the journal, practicum project and class participation. The Practicum/Seminar is required for Advanced Certificate programs within the MSLIS in archives and in museum libraries.

INFO-699 Independent Study - (3 Credits)
Research or special studies dealing with a problem of particular interest to the student is completed under direction of a member of the faculty. Guidelines and application forms for this course are available in the School of Information office. Applications must be approved prior to registration for the term in which the course is to be taken.

INFO-9600 Internship 0-Credit - (0 Credits)
The internship is a learning experience at a discipline-related professional site. It provides students with an opportunity to apply academic knowledge and skills in a practical setting, while obtaining new knowledge and skills in preparation for professional work. Students experience the application of coursework lessons into a real-life context, thus enriching their education. They deepen their knowledge about important applied aspects of their discipline, enhance their professional skills in a real-world context, build their professional network, and inform their career choices. Additional faculty-supervised activities provide the opportunity for an in-depth reflection on the internship experience.

INFO-9601 Internship 1-CREDIT - (1 Credit)
The internship is a learning experience at a discipline-related professional site. It provides students with an opportunity to apply academic knowledge and skills in a practical setting, while obtaining new knowledge and skills in preparation for professional work. Students experience the application of coursework lessons into a real-life context, thus enriching their education. They deepen their knowledge about important applied aspects of their discipline, enhance their professional skills in a real-world context, build their professional network, and inform their career choices. Additional faculty-supervised activities provide the opportunity for an in-depth reflection on the internship experience.