

# SCHOOL OF INFORMATION

## College of Communication and Information

School of Information  
314 University Library  
Kent Campus  
330-672-2782  
iSchool@kent.edu  
www.kent.edu/iSchool

## Minor

- User Experience Design - Minor

## Graduate Programs

- Health Informatics - M.S.
- School Library Media Licensure (Non-Degree)
- Knowledge Management - M.S.
- Library and Information Science - M.L.I.S.
- User Experience Design - M.S.

## Certificates

- Health Informatics - Graduate Certificate
- Web-Enabled E-Learning Knowledge Management - Graduate Certificate

## School of Information Faculty

- Albright, Kendra S., Professor
- Boon, Belinda (2006), Assistant Professor, Ph.D., University of Texas-Austin, 2006
- Campana, Kathleen (2017), Assistant Professor, Ph.D., University of Washington, 2018
- Gracy, Karen (2007), Associate Professor, Ph.D., University of California-Los Angeles, 2001
- Hajibayova, Lala (2014), Assistant Professor, Ph.D., Indiana University-Bloomington, 2014
- Harper, Sarah M. (2001), Associate Professor, Ph.D., Kent State University, 2003
- Hegmann, Elda (2011), Assistant Professor, Ph.D., Laval University, 2003
- Hudak, Christine A. (2012), Professor, Ph.D., Cleveland State University, 1998
- Jakli, Antal I. (1989), Professor, Ph.D., University of Budapest, 1986
- Latham, Kiersten F. (2010), Assistant Professor, Ph.D., Emporia State University, 2009
- Martens, Marianne (2012), Associate Professor, Ph.D., Rutgers The State University of New Jersey, 2012
- Matteson, Miriam L. (2012), Associate Professor, Ph.D., University of Maryland, 2009
- Meehan, Rebecca A. (2012), Associate Professor, Ph.D., Case Western Reserve University, 1997
- Nichols, Mary A. (1996), Senior Lecturer, M.L.S., Kent State University, 1993

- Robins, David B. (2004), Associate Professor, Ph.D., University of North Texas, 1998
- Salaba, Athena (1993), Associate Professor, Ph.D., University of Wisconsin-Madison, 2005
- Sherman, Paul J. (2013), Assistant Professor, Ph.D., University of Texas-Austin, 1997
- Smith, Catherine L. (2010), Associate Professor, Ph.D., Rutgers, The State University of New Jersey, 2010
- Soyka, Heather (2017), Assistant Professor
- Woods, Daniel B. (2009), Lecturer, M.B.A., Case Western University, 2014
- Zeng, Marcia L. (1992), Professor, Ph.D., University of Pittsburgh, 1992
- Zhang, Yin (1999), Professor, Ph.D., University of Illinois-Chicago, 1999

## Health Informatics (HI)

### HI 41095 SPECIAL TOPICS IN HEALTH INFORMATICS 1-3 Credit Hours

(Repeatable for credit) Topics could include current or emerging issues in health informatics. Topics will be announced in schedule of classes. Offered irregularly as resources and opportunities permit.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

### HI 41096 INDIVIDUAL INVESTIGATION IN HEALTH INFORMATICS 1-3 Credit Hours

(Repeatable for credit) Research or individual investigation in areas not covered in the existing curriculum for baccalaureate level students at or above the junior level. In-progress (IP) mark permissible.

**Prerequisite:** Special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Standard Letter-IP

### HI 60401 HEALTH INFORMATICS MANAGEMENT 3 Credit Hours

Covers the areas encompassing health informatics management including the planning, selection, deployment, and management of electronic medical records (EMR), management decision-support and tracking systems (DSS), and other health information technologies (HIT).

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

### HI 60402 LEGAL ISSUES IN HEALTH INFORMATICS 3 Credit Hours

(Slashed with HI 80402) Introduction to the fundamentals of law for Health Informatics and Information Management. Elements of the course include general legal principles and healthcare; legal electronic medical records (EMR); Health Insurance Portability and Accountability Act (HIPAA) privacy rules and security rules; access, requests and disclosure of health information; required reporting and mandatory disclosure laws; risk management and quality improvement; compliance; workforce overview; related ethics and social issues.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** HI 60401.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 60403 HEALTH INFORMATION SYSTEMS 3 Credit Hours**

Introduction to information systems and their applications in healthcare used for managerial and clinical support. Study the fundamentals of information systems, including Electronic Medical Records (EMR), information security. Understand the role of standardized codes, vocabularies and terminologies used in health information systems. Analysis of management and enterprise systems, identify the key elements to manage information resources effectively and the trends affecting the development of health information systems and networks.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** HI 60401.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 60410 HEALTH RECORDS MANAGEMENT 3 Credit Hours**

Conceptual foundations and practicum for health records management, including the planning, implementation and operation of electronic medical records (EMR); the management of EMR in management and enterprise systems; identifying, selecting and evaluating EMR and health information systems, applications, and repositories; and issues of data quality, integrity, migration, and interoperability.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** HI 60401.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 60411 CLINICAL ANALYTICS 3 Credit Hours**

(Slashed with HI 80411) The use of well-defined and well-integrated clinical analytics throughout the healthcare value chain can be transformative. Through careful implementation of health analytics, hospitals can transform unwieldy amalgamations of data into information that can: improve patient outcomes, increase safety, enhance operational efficiency and support public health. Given the immense size of the data challenge, the distinctness and geographic spread of many healthcare-related activities, and the fact that so many healthcare activities are conducted by different entities which must interact with each other, there is really no other way to provide operations management tools necessary to deliver personalized medicine and to control spiraling costs. Since clinical analytics is an immature discipline, we carefully examine the practices of those institutions who are standard setters in the industry.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** HI 60401.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 60412 CLINICAL DECISION SUPPORT 3 Credit Hours**

Provides a practical survey of clinical decision support systems that collect clinical data and enable the transition to clinical knowledge in real world applications intended to improve quality and safety of patient care. Students become familiar with the basic requirements for clinical decision support systems and the challenges associated with the development and deployment of new applications within the healthcare setting.

**Prerequisite:** HI 60401 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 60413 CHANGE MANAGEMENT IN HEALTH INFORMATICS 3 Credit Hours**

(Slashed with HI 80413) Designed to cover the process of change management in large healthcare organizations in light of current trends. Topics related to technology requirements, technology implementations, risk assessment and buy-in are among those covered.

**Prerequisite:** HI 60401 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 60414 HUMAN FACTORS AND USABILITY IN HEALTH INFORMATICS 3 Credit Hours**

(Slashed with HI 80414) Provides students with the foundational principles of usability and human factors as applied to safety and quality in health informatics technology. Course readings and materials review the concepts of human factors, usability and the cognitive consequences of health information technology on clinical performance and decision making. Attention is given to the role of mobile computing in health care, as well as information visualization.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** HI 60401.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 60415 HEALTH INFORMATICS INQUIRY AND ASSESSMENT 3 Credit Hours**

(Slashed with HI 80415) Provides a foundation for understanding research in health informatics with a focus on user and experience design research. Through lectures, readings, discussions and assignments, students review user research methods, data collection techniques and communication strategies within the healthcare context. Students then apply this knowledge to creating a research plan for assessing health information technology and communicating results to key organizational stakeholders.

**Prerequisite:** HI 60401 with a minimum C (2.000) grade and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 60416 HEALTH INFORMATICS ISSUES: POLICY, POLITICS AND ETHICS 3 Credit Hours**

This course uses a policy analysis lens to critically examine issues related to the use of information technology in healthcare from an ethical, political and regulatory perspective. The primary focus will be on the United States, but international approaches will also be discussed. Legislation affecting Health Information Technology area will be examined including the American Reinvestment and Recovery Act, HITECH section; Affordable Care Act and Health Insurance Portability and Accountability Act (HIPAA) of 1996. Topics and issues related to Health Informatics including structure of health administrative and delivery systems, assessment of population health, models of health care delivery, access and quality of care will also be discussed.

**Prerequisite:** HI 60401 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 60417 PUBLIC HEALTH INFORMATICS 3 Credit Hours**

Public Health Informatics (PHI) is an emergent, interdisciplinary field that focuses on the systematic management and dynamic application of information resources to enhance public health practice, education and research. As an emerging subset of Health Informatics, PHI is practiced by individuals, governmental and nongovernmental organizations at the international, national, regional, state and local levels. PHI deals with the collection and analysis of vital statistics data through surveillance; information creation; information storage and retrieval; visualization and graphics; dissemination; use of information for policy, decision making and trend tracking. The purpose of this course is to provide students with an introductory overview of the vast and dynamic field of PHI, including definitions, approaches, competencies, applications and informatics principles applied in public health settings.

**Prerequisite:** HI 60401 or HI 8040 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 60636 STANDARDIZED TERMINOLOGIES IN HEALTHCARE 3 Credit Hours**

Introduce various types of standardized healthcare terminologies (controlled vocabularies) used in the Electronic Health Records (EHR) and Health Information Exchange (HIE). Present the benefits of using standardized terminologies, as well as the interoperability and Meaningful Use (MU) requirements and standards. Explain the purposes, structures, components, and application of the most widely implemented standardized terminologies such as ICD, CPT, SNOMED CT, LOINC, RxNorm, ICNP, and UMLS.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 60691 SEMINAR IN HEALTH INFORMATICS 1-3 Credit Hours**

(Repeatable for credit). Advanced research by students who are qualified to examine problems of certain special areas related to concentrations of study in health informatics.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**HI 60693 VARIABLE TITLE WORKSHOP IN HEALTH INFORMATICS 1-3 Credit Hours**

(Repeatable for credit). Intensive examination of special topics of interest to those involved in health informatics program. Maximum workshop credit for the health informatics program is 4 credit hours. Satisfactory/unsatisfactory (S/U) graded.

**Prerequisite:** Graduate standing.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

**HI 60792 ELECTIVE INTERNSHIP IN HEALTH INFORMATICS 2-3 Credit Hours**

Supervised work experience in health informatics of a professional nature of not less than 100 clock hours (for 2 credit hours) or 150 clock hours (for 3 credit hours) with directed preparation of a reflection paper. In-progress (IP) mark permissible. Satisfactory/unsatisfactory (S/U) graded.

**Prerequisite:** Graduate standing and special approval.

**Schedule Type:** Practicum or Internship

**Contact Hours:** 2-3 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HI 61095 SPECIAL TOPICS IN HEALTH INFORMATICS 1-3 Credit Hours**

(Repeatable for credit) Offered irregularly as resources and/or opportunities permit. Topics could include current or emerging issues in health informatics. Specific topics are announced in the Schedule of Classes.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**HI 61096 INDIVIDUAL INVESTIGATION IN HEALTH INFORMATICS 1-3 Credit Hours**

(Repeatable for credit) Research or individual investigation in areas not covered by the existing curriculum for master's level students. Maximum 6 credit hours towards the health informatics major within the Master of Science degree. In-progress (IP) mark permissible.

**Prerequisite:** Graduate standing and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Standard Letter-IP

**HI 66092 MASTER'S INTERNSHIP IN HEALTH INFORMATICS 3 Credit Hours**

Supervised work experience of an advanced professional nature that concentrates on developing skills in areas of health informatics and integrates their knowledge from all HI courses and experiences. Satisfactory/unsatisfactory (S/U) graded. In-progress (IP) mark permissible. Students must have completed a minimum of 30 credit hours towards the health informatics major within the master of science degree.

**Prerequisite:** HI 60401, HI 60402, HI 60403, HI 60410, HI 60411, KM 60301 and LIS 60636; and a minimum cumulative 3.000 GPA; and special approval.

**Schedule Type:** Practicum or Internship

**Contact Hours:** 10 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HI 66098 MASTER'S PROJECT IN HEALTH INFORMATICS 3 Credit Hours**

Provides a means for the application of the knowledge, research and competencies learned through study in health informatics to the development of an information system, product, setting or service. Students must have completed a minimum 30 credit hours towards the MS-HI program prior to registration. Satisfactory/unsatisfactory (S/U) graded.

**Prerequisite:** HI 60401, HI 60402, HI 60403, HI 60410, HI 60411, KM 60301 and LIS 60636; and a minimum cumulative 3.000 GPA; and special approval.

**Schedule Type:** Master's Project

**Contact Hours:** 3 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HI 66198 MASTER'S RESEARCH PAPER IN HEALTH INFORMATICS 3 Credit Hours**

Under the advisement of a faculty member, students will complete a research paper that serves as a culminating experience for the M.S.-HI degree. Cumulative GPA of 3.000 is required prior to enrolling in the course. Satisfactory/unsatisfactory (S/U) graded. Students must have completed a minimum of 30 credit hours the MS-HI program prior to registration.

**Prerequisite:** HI 60401, HI 60402, HI 60403, HI 60410, HI 60411, KM 60301 and LIS 60636; and a minimum cumulative 3.000 GPA; and Graduate standing and special approval.

**Schedule Type:** Master's Project

**Contact Hours:** 3 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HI 66199 THESIS I 2-6 Credit Hours**

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Satisfactory/unsatisfactory (S/U) graded. Students must have completed a minimum 30 credit hours towards the MS-HI program prior to registration.

**Prerequisite:** HI 60401, HI 60402, HI 60403, HI 60410, HI 60411, KM 60301 and LIS 60636; and a 3.000 cumulative GPA; and Graduate standing and special approval.

**Schedule Type:** Masters Thesis

**Contact Hours:** 2-6 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HI 66299 THESIS II 2 Credit Hours**

Thesis students must continue registration each semester until all degree requirements are met. Satisfactory/unsatisfactory (S/U) graded.

**Prerequisite:** HI 66199 and Graduate standing and special approval.

**Schedule Type:** Masters Thesis

**Contact Hours:** 2 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HI 80401 HEALTH INFORMATICS MANAGEMENT 3 Credit Hours**

Covers the areas encompassing Health informatics management including the planning, selection, deployment, and management of electronic medical records (EMR), management decision-support and tracking systems (DSS), and other health information technologies (HIT).

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 80402 LEGAL ISSUES IN HEALTH INFORMATICS 3 Credit Hours**

(Slashed with HI 60402) Introduction to the fundamentals of law for Health Informatics and Information Management. Elements of the course include general legal principles and healthcare; legal electronic medical records (EMR); Health Insurance Portability and Accountability Act (HIPAA) privacy rules and security rules; access, requests and disclosure of health information; required reporting and mandatory disclosure laws; risk management and quality improvement; compliance; workforce overview; related ethics and social issues.

**Prerequisite:** HI 80401 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 80403 HEALTH INFORMATION SYSTEMS 3 Credit Hours**

Introduction to information systems and their applications in healthcare used for managerial and clinical support. Study the fundamentals of information systems, including Electronic Medical Records (EMR), information security. Understand the role of standardized codes, vocabularies and terminologies used in health information systems. Analysis of management and enterprise systems, identify the key elements to manage information resources effectively and the trends affecting the development of health information systems and networks.

**Prerequisite:** HI 80401 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 80410 HEALTH RECORDS MANAGEMENT 3 Credit Hours**

Conceptual foundations and practicum for health records management, including the planning, implementation and operation of electronic medical records (EMR); the management of EMR in management and enterprise systems; identifying, selecting and evaluating EMR and health information systems, applications, and repositories; and issues of data quality, integrity, migration, and interoperability.

**Prerequisite:** HI 80401 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 80411 CLINICAL ANALYTICS 3 Credit Hours**

(Slashed with HI 60411) The use of well-defined and well integrated clinical analytics throughout the healthcare value chain can be transformative. Through careful implementation of health analytics, hospitals can transform unwieldy amalgamations of data into information that can: Improve patient outcomes, increase safety, enhance operational efficiency and support public health. Given the immense size of the data challenge, the distinctness and geographic spread of many healthcare-related activities, and the fact that so many healthcare activities are conducted by different entities which must interact with each other, there is really no other way to provide operations management tools necessary to deliver personalized medicine and to control spiraling costs. Since clinical analytics is an immature discipline, we carefully examine the practices of those institutions who are standard setters in the industry.

**Prerequisite:** HI 80401 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 80412 CLINICAL DECISION SUPPORT 3 Credit Hours**

(Slashed with HI 60412) Provides a practical survey of clinical decision support systems that collect clinical data and enable the transition to clinical knowledge in real world applications intended to improve quality and safety of patient care. Students become familiar with the basic requirements for clinical decision support systems and the challenges associated with the development and deployment of new applications within the healthcare setting.

**Prerequisite:** HI 80401 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 80413 CHANGE MANAGEMENT IN HEALTH INFORMATICS 3 Credit Hours**

(Slashed with HI 60413) Designed to cover the process of change management in large healthcare organizations in light of current trends. Topics related to technology requirements, technology implementations, risk assessment, end user computing and buy-in are among those covered.

**Prerequisite:** HI 80401 with a minimum C grade and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 80414 HUMAN FACTORS AND USABILITY IN HEALTH INFORMATICS 3 Credit Hours**

(Slashed with HI 60414) Provides students with the foundational principles of usability and human factors as applied to safety and quality in health informatics technology. Course readings and materials review the concepts of human factors, usability, and the cognitive consequences of health information technology on clinical performance and decision making. Attention is given to the role of mobile computing in health care, as well as information visualization.

**Prerequisite:** HI 80401 with a minimum grade of C (2.000) and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 80415 HEALTH INFORMATICS INQUIRY AND ASSESSMENT 3 Credit Hours**

(Slashed with HI 60415) This course will provide a foundation for understanding research in health informatics with a focus on user and experience design research. Through course lectures, readings, discussions and assignments, students will review user research methods, data collection techniques and communication strategies within the healthcare context. Students will then apply this knowledge to creating a research plan for assessing health information technology and communicating results to key organizational stakeholders.

**Prerequisite:** HI 80401 with a minimum C grade and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 80417 PUBLIC HEALTH INFORMATICS 3 Credit Hours**

Public Health Informatics (PHI) is an emergent, interdisciplinary field that focuses on the systematic management and dynamic application of information resources to enhance public health practice, education and research. As an emerging subset of Health Informatics, PHI is practiced by individuals, governmental and nongovernmental organizations at the international, national, regional, state and local levels. PHI deals with the collection and analysis of vital statistics data through surveillance; information creation; information storage and retrieval; visualization and graphics; dissemination; use of information for policy, decision making and trend tracking. The purpose of this course is to provide students with an introductory overview of the vast and dynamic field of PHI, including definitions, approaches, competencies, applications and informatics principles applied in public health settings.

**Prerequisite:** HI 60401 or HI 80401 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HI 80691 SEMINAR IN HEALTH INFORMATICS 1-3 Credit Hours**

(Repeatable for credit) Advanced research by students who are qualified to examine problems of certain special areas related to concentrations of study in health informatics.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**HI 81095 SPECIAL TOPICS IN HEALTH INFORMATICS 1-3 Credit Hours**

(Repeatable for credit) Offered irregularly as resources and or opportunities permit. Topics could include current or emerging issues in health informatics. Specific topics are announced in the Schedule of Classes.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**HI 81096 INDIVIDUAL INVESTIGATION IN HEALTH INFORMATICS 1-3 Credit Hours**

Research or individual investigation for doctoral level students.

**Prerequisite:** Doctoral standing and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Standard Letter-IP

## Knowledge Management (KM)

**KM 41095 SPECIAL TOPICS IN KNOWLEDGE MANAGEMENT 1-3 Credit Hours**

(Repeatable for credit) Topics could include current or emerging issues in knowledge management. Topics will be announced in schedule of classes. Offered irregularly as resources and opportunities permit.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**KM 41096 INDIVIDUAL INVESTIGATION IN KNOWLEDGE MANAGEMENT 1-3 Credit Hours**

(Repeatable for credit) Research or individual investigation in areas not covered in the existing curriculum for baccalaureate level students at or above the junior level.

**Prerequisite:** Special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Standard Letter-IP

**KM 60301 FOUNDATIONAL PRINCIPLES OF KNOWLEDGE MANAGEMENT 3 Credit Hours**

(Slashed with KM 80301) This course covers an introduction to: historical roots for knowledge and knowledge management; theories/definitions of knowledge; theories, applications tools and practices of KM; Knowledge Management Life-Cycle Framework and Models; significant issues in KM-- best practices, culture, economics, strategy, intellectual capital, sustainable innovation.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 60303 KNOWLEDGE ASSESSMENT AND EVALUATION 3 Credit Hours**

(Slashed with KM 80303) Explores all aspects of effective knowledge management within all types of organizations. Lays out the context for knowledge management – at each multiple levels (strategic, technical, business-aligned, and individual) and across all competencies. Covers theory, practice and methods of assessment and evaluation for all levels and all competencies. Provides an introduction to knowledge strategy formulation and planning, knowledge management maturity modeling, knowledge typologies and audits, knowledge mapping, organizational network analysis, knowledge competency mapping and human capital analytics, strategic workforce planning concepts, internal knowledge markets and incentives, community of practice metrics, organizational culture metrics.

**Prerequisite:** KM 60301 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 60304 THE INFORMATION AND KNOWLEDGE ECONOMY 3 Credit Hours**

Covers theories of information and knowledge economy. The focus of the course is on information and the new information and digital economy, consumer behavior and production theory; the demand for information; information as a factor of production; information costs and pricing. Case studies in the information industry are explored.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** KM 60301.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 60305 COMMUNITIES OF PRACTICE 3 Credit Hours**

(Slashed with KM 80305) Explores collaboration and communities from both a theoretical and a practical perspective. The theory includes structural elements (defining a community identity, scoping the domain, defining practice), and natural lifecycles, and best practices for cultivating communities. On the practical side, students explore strategic placement of communities, the community development process, community design and implementation, and measuring the impacts of communities on intellectual capital creation. Communities of practice are also discussed in the context of digital ecosystems (Web 2.0 and Web 3.0). Utilizes readings and reviews of real life case studies of communities of practice in education, health care and nursing, disaster management, military sciences, and hobbies and craft circles. Students also complete a course project pertaining to community of practice evaluation.

**Prerequisite:** KM 60301 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 60307 ORGANIZATIONAL LEARNING 3 Credit Hours**

Addresses organizational learning in fast-paced, complex and changing organizational environments. For knowledge organizations in the 21st century, learning is a continuous activity. To survive and grow, a knowledge organization must learn through its people, its groups and the organization as a whole. The capacity to learn is a competitive advantage for a knowledge organization. Covers the fundamental theory of organizational learning, organizational learning types, and the five disciplines of learning organizations, and factors that facilitate or impede organizational learning.

**Prerequisite:** KM 60301 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 60310 INTELLECTUAL CAPITAL MANAGEMENT 3 Credit Hours**

This course encompasses the new knowledge-intensive economic units: human capital and social capital intellectual assets, intellectual property, brands and trademarks. A "lifecycle" approach for intellectual assets is described– creation, codification, valuation, protection and leveraging of intellectual assets for competitive advantage. Prerequisite: KM 60301 with a minimum grade of C (2.000) and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 60311 BUSINESS PROCESS MANAGEMENT 3 Credit Hours**

(Slashed with KM 80311) Introduction to business process management and workflow management. BPM will describe how organizational business processes (internal, external, manual and automated) can be transformed and managed to increase efficiency, effectiveness and positively affect performance. Topics include the discovery, analysis, modeling and automation of workflow processes.

**Prerequisite:** KM 60301 with a minimum grade of C (2.000) and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 60312 BUSINESS INTELLIGENCE-COMPETITIVE INTELLIGENCE 3 Credit Hours**

An introduction to strategic intelligence consisting of competitive and business intelligence. Strategic intelligence is an art, science and craft. Businesses and governments require effective intelligence programs, processes and tools to track businesses competitors, markets and trends by acquiring, creating, managing and disseminating intelligence knowledge.

**Prerequisite:** KM 60301 with a minimum grade of C (2.000) and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 60315 FOUNDATIONS OF DOCUMENT MANAGEMENT 3 Credit Hours**

Covers three main themes: Principles, which covers the document and records management conceptual framework, relationships with information policy, definitions and industry standards; Practices, which covers the management and procedural framework for effective planning and implementation of document and records management solutions; Technologies, which provides a business-oriented analysis of the nature of the enabling information systems available to support effective document and records management solutions.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** KM 60301.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 60316 ORGANIZATIONAL CULTURE ASSESSMENT 3 Credit Hours**

Examines different types of cultures and how each type influences a knowledge organization - how culture influences the way knowledge workers work, how they make decisions and how they behave, the internal cultures of groups and communities, the cultural attributes of knowledge workers which may impact their knowledge behaviors. Organizational cultures of multicultural, global and virtual organizations are covered. Students conduct an organizational culture assessment.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** KM 60301.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 60340 BUSINESS NARRATIVE AND STORYTELLING 3 Credit Hours**

(Slashed with KM 80340) Focuses on the business use of storytelling and narrative intelligence. Narrative intelligence is the ability to make sense of the world through narrative and storytelling. Business narrative helps a knowledge organization to strengthen its organizational visions, to enhance communications, to capture and transfer knowledge, externalize and internalize tacit knowledge, encourage innovation, build communities, and develop effective training, mentoring and learning strategies. Business narrative is the primary way that procedural knowledge is understood and shared. Covers oral and written stories, documentaries, oral histories, organizational myths and legends, case scenarios, training scenarios, encoded and embedded business rules, gossip and business conversations. Students learn how to develop business stories, craft and deliver a springboard story, evaluate narrative architectures, and design systems that support access to business narratives and stories.

**Prerequisite:** KM 60301 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 60370 SEMANTIC ANALYSIS METHODS AND TECHNOLOGIES 3 Credit Hours**

(Slashed with KM 80370) Introduces students to the practical contexts, methods and tools associated with semantic analysis. Focuses on early life cycle aspects of semantics, including identification and modeling of semantic problems, design of semantic solutions, and the identification and implementation of appropriate semantic technologies. Covers natural language processing, rule-based and grammar based concept extraction, rule-based and dynamic classification and automated summarization. Students work with a variety of semantic technologies.

**Prerequisite:** KM 60301 or DSCI 64210 or MIS 64036 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 60691 SEMINAR IN KNOWLEDGE MANAGEMENT 1-3 Credit Hours**

(Repeatable for credit) Advanced research by students who are qualified to examine problems of certain special areas related to concentrations of study in knowledge management.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**KM 60693 VARIABLE TITLE WORKSHOP IN KNOWLEDGE MANAGEMENT 1-3 Credit Hours**

(Repeatable for credit) Intensive examination of special topics of interest to those involved in knowledge management. Maximum number of workshop credits for the MS-KM degree is 4 semester hours.

**Prerequisite:** Graduate standing.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

**KM 60792 ELECTIVE INTERNSHIP IN KNOWLEDGE MANAGEMENT 2-3 Credit Hours**

Supervised work experience in knowledge management of a professional nature of not less than 100 clock hours (for 2 credit hours) or 150 clock hours (for 3 credit hours) with directed preparation of a reflection paper.

**Prerequisite:** Graduate standing and special approval.

**Schedule Type:** Practicum or Internship

**Contact Hours:** 6-10 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**KM 61095 SPECIAL TOPICS IN KNOWLEDGE MANAGEMENT 1-3 Credit Hours**

(Repeatable for credit) Offered irregularly as resources and or opportunities permit. Topics could include current or emerging issues in knowledge management. Specific topics are announced in the Schedule of Classes.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**KM 61096 INDIVIDUAL INVESTIGATION IN KNOWLEDGE MANAGEMENT 1-3 Credit Hours**

Repeatable for credit) Research or individual investigation in areas not covered in the existing curriculum for master's level students. Maximum credit towards master's degree: 6 hours.

**Prerequisite:** Graduate standing and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Standard Letter-IP

**KM 66092 MASTER'S INTERNSHIP IN KNOWLEDGE MANAGEMENT 3 Credit Hours**

Supervised work experience of an advanced professional nature that concentrates on developing skills in areas of knowledge management and integrates their knowledge from all KM courses and experiences. Students must have completed 30 credit hours towards the MS-KM program prior to registration.

**Prerequisite:** KM 60301, KM 60303, KM 60304, KM 60305, KM 60307 and LIS 60636; and a minimum cumulative 3.000 GPA; and Graduate standing and special approval.

**Schedule Type:** Practicum or Internship

**Contact Hours:** 9 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**KM 66098 MASTER'S PROJECT IN KNOWLEDGE MANAGEMENT 3 Credit Hours**

Provides a means for the application of the knowledge, research and competencies learned through study in knowledge management to the development of an information system, product, setting or service. Students must have completed a minimum of 30 credit hours prior to enrolling in the course.

**Prerequisite:** KM 60301, KM 60303, KM 60304, KM 60305, KM 60307 and LIS 60636; and a minimum cumulative 3.000 GPA; and Graduate standing and special approval.

**Schedule Type:** Master's Project

**Contact Hours:** 3 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**KM 66198 MASTER'S RESEARCH PAPER IN KNOWLEDGE MANAGEMENT 3 Credit Hours**

Under the advisement of a faculty member, students will complete a research paper that serves as a culminating experience for the M.S.-KM program. Students must have completed a minimum of 30 credit hours towards the MS-KM program prior to registration.

**Prerequisite:** KM 60301, KM 60303, KM 60304, KM 60305, KM 60307 and LIS 60636; and a cumulative 3.000 GPA; and Graduate standing and special approval.

**Schedule Type:** Master's Project

**Contact Hours:** 3 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**KM 66199 THESIS I 2-6 Credit Hours**

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Students must have completed a minimum of 30 credit hours towards the MS-KM program prior to registration.

**Prerequisite:** KM 60301, KM 60303, KM 60304, KM 60305, KM 60307 and LIS 60636; and a cumulative 3.000 GPA; and Graduate standing and special approval.

**Schedule Type:** Masters Thesis

**Contact Hours:** 2-6 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**KM 66299 THESIS II 2 Credit Hours**

Thesis students must continue registration each semester until all degree requirements are met.

**Prerequisite:** KM 66199; and Graduate standing and special approval.

**Schedule Type:** Masters Thesis

**Contact Hours:** 2 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**KM 80301 FOUNDATIONAL PRINCIPLES OF KNOWLEDGE MANAGEMENT 3 Credit Hours**

(Slashed with KM 60301) This course covers an introduction to: historical roots for knowledge and knowledge management; theories/definitions of knowledge; theories, applications, tools, and practices of KM; Knowledge Management Life-Cycle Framework and Models; significant issues in KM - best practices, culture, economics, strategy, intellectual capital, sustainable innovation.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 80303 KNOWLEDGE ASSESSMENT AND EVALUATION 3 Credit Hours**

(Slashed with KM 60303) Explores all aspects of effective knowledge management within all types of organizations. Lays out the context for knowledge management – at each multiple levels (strategic, technical, business-aligned, and individual) and across all competencies. Covers theory, practice and methods of assessment and evaluation for all levels and all competencies. Provides an introduction to knowledge strategy formulation and planning, knowledge management maturity modeling, knowledge typologies and audits, knowledge mapping, organizational network analysis, knowledge competency mapping and human capital analytics, strategic workforce planning concepts, internal knowledge markets and incentives, community of practice metrics, organizational culture metrics.

**Prerequisite:** KM 80301 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 80305 COMMUNITIES OF PRACTICE 3 Credit Hours**

(Slashed with KM 60305) Explores collaboration and communities from both a theoretical and a practical perspective. The theory includes structural elements (defining a community identity, scoping the domain, defining practice), and natural lifecycles, and best practices for cultivating communities. On the practical side, students explore strategic placement of communities, the community development process, community design and implementation, and measuring the impacts of communities on intellectual capital creation. Communities of practice are also discussed in the context of digital ecosystems (Web 2.0 and Web 3.0). Utilizes readings and reviews of real life case studies of communities of practice in education, health care and nursing, disaster management, military sciences, and hobbies and craft circles. Students also complete a course project pertaining to community of practice evaluation.

**Prerequisite:** KM 80301 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 80307 ORGANIZATIONAL LEARNING 3 Credit Hours**

(Slashed with KM 60307) Addresses organizational learning in fast-paced, complex and changing organizational environments. For knowledge organizations in the 21st century, learning is a continuous activity. To survive and grow, a knowledge organization must learn through its people, its groups and the organization as a whole. The capacity to learn is a competitive advantage for a knowledge organization. Covers the fundamental theory of organizational learning, organizational learning types, and the five disciplines of learning organizations, and factors that facilitate or impede organizational learning.

**Prerequisite:** KM 80301 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 80310 INTELLECTUAL CAPITAL MANAGEMENT 3 Credit Hours**

(Slashed with KM 60310) This course encompasses the new knowledge-intensive economic units: human capital and social capital intellectual assets, intellectual property, brands, and trademarks. A "lifecycle" approach for intellectual assets is described - creation, codification, valuation, protection and leveraging of intellectual assets for competitive advantage.

**Prerequisite:** KM 80301 with a minimum C grade and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 80311 BUSINESS PROCESS MANAGEMENT 3 Credit Hours**

(Slashed with KM 60311) Introduction to business process management and workflow management. BPM will describe how organizational business processes, (internal, external, manual and automated), can be transformed and managed to increase efficiency, effectiveness and positively affect performance. Topics include the discovery, analysis, modeling and automation of workflow processes.

**Prerequisite:** KM 80301 with a minimum C grade and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 80312 BUSINESS INTELLIGENCE-COMPETITIVE INTELLIGENCE 3 Credit Hours**

(Slashed with KM 60312) An introduction to strategic intelligence consisting of competitive and business intelligence. Strategic intelligence is an art, science, and craft. Businesses and governments require effective intelligence programs, processes, and tools to track businesses, competitors, markets and trends by acquiring, creating, managing, packaging, and disseminating intelligence knowledge.

**Prerequisite:** KM 80301 with a minimum C grade and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 80315 FOUNDATIONS OF DOCUMENT MANAGEMENT 3 Credit Hours**

(Slashed with KM 60315) Covers three main themes: Principles, which covers the document and records management conceptual framework, relationships with information policy, definitions and industry standards; Practices, which covers the management and procedural framework for effective planning and implementation of document and records management solutions; Technologies, which provides a business-oriented analysis of the nature of the enabling information systems available to support effective document and records management solutions.

**Prerequisite:** KM 80301 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 80316 ORGANIZATIONAL CULTURE ASSESSMENT 3 Credit Hours**

(Slashed with KM 60316) Examines different types of cultures and how each type influences a knowledge organization - how culture influences the way knowledge workers work, how they make decisions and how they behave, the internal cultures of groups and communities, the cultural attributes of knowledge workers which may impact their knowledge behaviors. Organizational cultures of multicultural, global and virtual organizations are covered. Students conduct an organizational culture assessment.

**Prerequisite:** KM 80301 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 80340 BUSINESS NARRATIVE AND STORYTELLING 3 Credit Hours**

(Slashed with KM 60340) Focuses on the business use of storytelling and narrative intelligence. Narrative intelligence is the ability to make sense of the world through narrative and storytelling. Business narrative helps a knowledge organization to strengthen its organizational visions, to enhance communications, to capture and transfer knowledge, externalize and internalize tacit knowledge, encourage innovation, build communities, and develop effective training, mentoring and learning strategies. Business narrative is the primary way that procedural knowledge is understood and shared. Covers oral and written stories, documentaries, oral histories, organizational myths and legends, case scenarios, training scenarios, encoded and embedded business rules, gossip and business conversations. Students learn how to develop business stories, craft and deliver a springboard story, evaluate narrative architectures, and design systems that support access to business narratives and stories.

**Prerequisite:** KM 80301 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 80370 SEMANTIC ANALYSIS METHODS AND TECHNOLOGIES 3 Credit Hours**

(Slashed with KM 60370) Introduces students to the practical contexts, methods and tools associated with semantic analysis. Focuses on early life cycle aspects of semantics, including identification and modeling of semantic problems, design of semantic solutions, and the identification and implementation of appropriate semantic technologies. Covers natural language processing, rule-based and grammar based concept extraction, rule-based and dynamic classification and automated summarization. Students work with a variety of semantic technologies.

**Prerequisite:** KM 80301 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**KM 80691 SEMINAR IN KNOWLEDGE MANGEMENT 1-3 Credit Hours**

(Repeatable for credit) Advanced research by students who are qualified to examine problems of certain special areas related to concentrations of study in knowledge management.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**KM 81095 SPECIAL TOPICS IN KNOWLEDGE MANAGEMENT 1-3 Credit Hours**

(Repeatable for credit) Offered irregularly as resources and or opportunities permit. Topics could include current or emerging issues in knowledge management. Specific topics are announced in the Schedule of Classes.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**KM 81096 INDIVIDUAL INVESTIGATION IN KNOWLEDGE MANAGEMENT 1-3 Credit Hours**

Research or individual investigation for doctoral level students.

**Prerequisite:** Doctoral standing and Graduate standing.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Standard Letter-IP

## Library and Information Science (LIS)

**LIS 10010 INFORMATION FLUENCY 3 Credit Hours**

(Cross-listed with LIB 10010) Teaches information and technology skills critical to college success, enabling students to become information fluent—able to find and evaluate information in a variety of contexts and formats, using a variety of technologies, to achieve specific objectives in effective and socially responsible ways.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 30010 INFORMATION FLUENCY IN THE WORKPLACE AND BEYOND 3 Credit Hours**

(Cross-listed with LIB 30010) Teaches information access, technology, and media literacy skills which enables student to become, not only information literate, but also information fluent - able to move seamlessly among multiple information sources and technologies resources to fill their informational needs, whether in the classroom or the workplace.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 40655 COPYRIGHT: UNDERSTANDING USER RIGHTS AND RESPONSIBILITIES 3 Credit Hours**

Exploration of advanced copyright topics such as mass digitization, creative arts and other issues in fair use, library, archive and educational uses including the TEACH Act, digital first sale rights, Digital Millennium Copyright Act, and an introduction to copyright reform.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 40656 LICENSING OF INFORMATION PRODUCTS AND SERVICES 3 Credit Hours**

Topics related to licensing of information products and services including online contract formation, software licenses (End User License Agreements), database and website terms of service, detailed understanding of common terms and conditions in license agreements and an introduction to music licensing and Creative Commons licensing.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 40693 VARIABLE TITLE WORKSHOP IN LIBRARY AND INFORMATION SCIENCE 1-3 Credit Hours**

(Repeatable for credit) Intensive examination of special topics of interest.

**Prerequisite:** Junior or Senior standing and special approval.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

**LIS 41095 SELECTED TOPICS IN LIBRARY SCIENCE 1-3 Credit Hours**

(Repeatable for credit) Topics will be announced in schedule of classes. Offered irregularly as resources and opportunities permit.

**Prerequisite:** Permission.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**LIS 50693 VARIABLE TITLE WORKSHOP-LIBRARY AND INFORMATION SCIENCE 1-3 Credit Hours**

(Repeatable for credit) Maximum workshop credit accepted for MLIS degree is 4 semester hours. Intensive examination of special topics of interest to practicing librarians.

**Prerequisite:** Graduate standing.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

**LIS 60010 THE INFORMATION LANDSCAPE 3 Credit Hours**

Exploration of the nature of information and technology in information-intensive environments. Topics to be addressed include information lifecycle processes such as production, storage, sharing, and consumption; social, cultural, economic, legal, and technological contexts for understanding information processes; the roles of information professionals and agencies, and their place in the larger information marketplace; current and emerging information technologies that shape the information economy.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60020 INFORMATION ORGANIZATION 3 Credit Hours**

Introduction to the theory and practice of information organization and retrieval in various information environments. Familiarity with principles, standards, tools and current systems relating to organization of information and retrieval. Exploration of supported information system functions such as searching, browsing, and navigation. Assessment and evaluation of information organization and retrieval systems.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010 or LIS 60607.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60030 PEOPLE IN THE INFORMATION ECOLOGY 3 Credit Hours**

Takes a user-centered approach in exploring the information needs and behaviors of people (as individuals and in groups, communities, and institutions) in relation to the larger information ecology that surrounds them. Topics covered include an overview of information ecology; the user-centered paradigm; major information needs and information behavior theories, models, and findings; the landscape of information sources and services for users; factors that influence people's information needs and behaviors; and user empowerment, information ethics, information fluency, and related issues.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010 or LIS 60607.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60040 INFORMATION INSTITUTIONS AND PROFESSIONS 3 Credit Hours**

Examines the political, social, economic, and technical forces that influence the larger environments in which information institutions are situated. This course explores characteristics of the environments in which information professionals may work, including but not limited to academic, school, public, and special libraries, museums, archives, cultural heritage institutions, government organizations, corporations across all industries, and information creators and publishers. The course explores characteristics of the information profession including core values and principles, emerging professions, and understanding possible futures in profession, and explores ideas of organizational behavior in information institutions that operate across the institution as a whole, within groups, and within individuals in the organization.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60050 RESEARCH AND ASSESSMENT IN LIBRARY AND INFORMATION SCIENCE 3 Credit Hours**

Focuses on quantitative and qualitative research methods applicable to information settings and environments. Explores research design, data analysis, proposal development, and ethical issues.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60092 MASTER'S INTERNSHIP IN LIBRARY AND INFORMATION SCIENCE 3 Credit Hours**

Under the advisement of a faculty member, students complete a professional-level internship that serves as a culminating experience for the M.L.I.S. degree. A minimum GPA of 3.000 is required for registration in this course.

**Prerequisite:** LIS 60000 and 60001 and 60002 and 60003 and 60600 and 60610; or LIS 60010 and LIS 60020 and LIS 60030 and LIS 60040 and LIS 60050; and 24 credit hours completed in the MLIS program; special approval and Graduate standing.

**Schedule Type:** Practicum or Internship

**Contact Hours:** 10 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**LIS 60098 MASTER'S PROJECT IN LIBRARY AND INFORMATION SCIENCE 3 Credit Hours**

Under the advisement of a faculty member, students will complete a master's research project that serves as a culminating experience for the M.L.I.S. degree. A minimum GPA of 3.000 is required for registration in this course.

**Prerequisite:** LIS 60050; and LIS 60000 and 60001 and 60002 and 60003 and 60600 and 60610 or LIS 60010 and LIS 60020 and LIS 60030 and LIS 60040; and 24 credit hours completed in the MLIS program; special approval and Graduate standing.

**Schedule Type:** Master's Project

**Contact Hours:** 3 lecture

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**LIS 60198 MASTER'S PAPER IN LIBRARY AND INFORMATION SCIENCE 3 Credit Hours**

Under the advisement of a faculty member, students will complete a research paper that serves as a culminating experience for the M.L.I.S. degree. A minimum GPA of 3.000 is required for registration in this course.

**Prerequisite:** LIS 60000 and 60001 and 60002 and 60003 and 60600 and 60610; or LIS 60010 and LIS 60020 and LIS 60030 and LIS 60040 and LIS 60050; and 24 credit hours completed in the MLIS program; and special approval and Graduate standing.

**Schedule Type:** Research

**Contact Hours:** 10 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**LIS 60199 THESIS I 2-6 Credit Hours**

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. Students must have a minimum cumulative GPA of 3.000 to be eligible for this course. In order to qualify for graduation, graduate students must have a 3.000 cumulative GPA in all graduate courses attempted.

**Prerequisite:** LIS 60050; or LIS 60010 and LIS 60020 and LIS 60030 and LIS 60040 and LIS 60050; and 24 hours of LIS coursework; special approval and Graduate standing.

**Schedule Type:** Masters Thesis

**Contact Hours:** 2-6 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**LIS 60280 MASTER'S PORTFOLIO IN LIBRARY AND INFORMATION SCIENCE 1 Credit Hour**

Completed in a student's last semester. It will include the creation of an electronic portfolio to represent and self-evaluate the student's experience throughout the MLIS program, considering program learning outcomes and preparation for a career in the field of library and information science.

**Prerequisite:** LIS 60010, LIS 60030 and LIS 60050; and LIS 60020 or LIS 60624; and LIS 60040 or LIS 60607; and 24 credit hours completed in the MLIS program; and Graduate standing and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**LIS 60299 THESIS II 2 Credit Hours**

Thesis students must continue registration each semester until all degree requirements are met.

**Prerequisite:** LIS 60199 and Graduate standing.

**Schedule Type:** Masters Thesis

**Contact Hours:** 2 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**LIS 60510 DIGITAL TECHNOLOGIES I: DATA FUNDAMENTALS 1 Credit Hour**

The first of three one-credit courses in digital technologies, this course presents foundational knowledge on the principles that underlie digital resources and services in modern information society, with specific emphasis on data representation, encoding, formatting, and data modeling.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010; or UXD 60001; or KM 60301; or HI 60401.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**LIS 60511 DIGITAL TECHNOLOGIES II: INTERNET FUNDAMENTALS 1 Credit Hour**

The second of three one-credit courses in digital technologies, this course presents foundational knowledge on the principles that underlie digital resources and services in modern information society, with specific emphasis on online information systems, the Internet, and data security.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60510.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**LIS 60512 DIGITAL TECHNOLOGIES III: INFORMATION SYSTEMS FUNDAMENTALS 1 Credit Hour**

The third of three one-credit courses in digital technologies, this course presents foundational knowledge on the principles that underlie digital resources and services in modern information society, with specific emphasis on Web-based information applications, programming logic, Linked Data, and the interpretation of data.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60511.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**LIS 60601 INFORMATION SOURCES AND REFERENCE SERVICES 3 Credit Hours**

(Slashed with LIS 80601) Introduction to use and evaluation of basic sources of reference information, computerized and noncomputerized; reference interview and question-negotiation techniques; administration of reference and information services.

**Prerequisite:** LIS 60030; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60602 CATALOGING AND CLASSIFICATION I 3 Credit Hours**

(Slashed with LIS 80602) Principles of cataloging with emphasis on Dewey Decimal and Library of Congress Classification systems, Library of Congress subject headings, online cataloging and administration.

**Prerequisite:** LIS 60020; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60603 CATALOGING AND CLASSIFICATION II 3 Credit Hours**

(Slashed with LIS 80603) Theory and practice of providing description and access to library materials. Examples and assignments will be taken from all types of library materials print and nonprint.

**Prerequisite:** LIS 60020; and LIS 60602 or LIS 80602; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60607 SCHOOL LIBRARY MANAGEMENT 3 Credit Hours**

(Slashed with LIS 80607) Management of school libraries.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60608 THE PUBLIC LIBRARY 3 Credit Hours**

(Slashed with LIS 80608) Analysis of the historical, sociopolitical, technological, fiscal and organizational factors affecting American public librarianship. Includes evaluation, planning, networking, funding, automation, buildings and censorship.

**Prerequisite:** LIS 60040; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60609 MARKETING THE LIBRARY 3 Credit Hours**

(Slashed with LIS 80609) Introduction to the theory and practice of marketing the library. Topics include the evaluation of customer needs, the marketing mix, merchandising, public relations, relationship marketing, and the design and development of a marketing plan for libraries.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60611 GOVERNMENT INFORMATION SOURCES AND SERVICES 3 Credit Hours**

(Slashed with LIS 80611) Library treatment of U.S. government publications with brief attention to municipal and state publications, and major documents of Great Britain, Canada and the United Nations.

**Prerequisite:** LIS 60030; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60612 LIBRARY MATERIALS AND SERVICES FOR ADULTS 3 Credit Hours**

(Slashed with LIS 80612) Recent investigations of group and individual reading habits; advisory services in various types of libraries; library programs for adult education; projection of library materials toward community.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60613 INFORMATION NEEDS, SEEKING AND USE 3 Credit Hours**

(Slashed with LIS 80613) Surveys theories related to people's interactions with information. The theories covered include information context and situation, information needs, information seeking, exploration of information sources, communication and collaboration in the information search process, information use, and other interactions among people, information, and information systems.

**Prerequisite:** LIS 60030; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60614 SELECTION AND ACQUISITION OF LIBRARY MATERIALS 3 Credit Hours**

(Slashed with LIS 80614) Factors affecting selection in public, academic, school and special libraries (reading habits, censorship, publishing trends) community analysis, selection policies and process; selection sources; acquisitions.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60615 THE ACADEMIC LIBRARY 3 Credit Hours**

(Slashed with LIS 80615) Governance, administration and services of libraries in institutions of postsecondary education.

**Prerequisite:** LIS 60040; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60616 THE SPECIAL LIBRARY 3 Credit Hours**

(Slashed with LIS 80616) The formation of special libraries. Libraries in special subject fields and in organizations: corporations, government agencies, hospitals, etc. Internal organization and administration collection development and services.

**Prerequisite:** LIS 60040; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60618 INFORMATION LITERACY INITIATIVES AND INSTRUCTION 3 Credit Hours**

(Slashed with LIS 80618) Invites information professionals from any library point-of-view (school, public, academic, archives, special, etc.).

Topics include definitions and history of information literacy standards and objectives, developing an information literacy agenda, library pedagogy and learning styles, information literacy needs assessment, program development and delivery, and experiential learning in library communities.

**Prerequisite:** LIS 60030; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60619 LEGAL INFORMATION SOURCES AND SERVICES 3 Credit Hours**

(Cross-listed with AS 43001 and AS 53001 and AS 73001) (Slashed with LIS 80619) Fundamentals of legal research methods and major sources of American legal literature in print and electronic formats as used in other disciplines. Students learn how to formulate a research plan based on legal analysis of issues using relevant, authoritative legal resources.

**Prerequisite:** LIS 60030; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60620 HEALTH INFORMATION RESOURCES 3 Credit Hours**

(Slashed with LIS 80620) Identifies print and electronic sources of health information with emphasis on electronic sources. Medical patient and consumer health information is presented. This course is designed for the health educator, librarian, nurse or other health care professional.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60621 SOCIAL SCIENCES INFORMATION SOURCES AND SERVICES 3 Credit Hours**

(Slashed with LIS 80621) Content, bibliographic structure and communication patterns in the social sciences with emphasis on information sources and services in sociology, history, education, political science, anthropology, related disciplines.

**Prerequisite:** LIS 60030 and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60622 SCIENCE/TECHNOLOGY INFORMATION SOURCES AND SERVICES 3 Credit Hours**

(Slashed with LIS 80622) Content, bibliographic structure and communication patterns in the sciences with emphasis on pure and applied fields, e.g., mathematics, biology, physics.

**Prerequisite:** LIS 60030; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60623 BUSINESS/FINANCE INFORMATION SOURCES AND SERVICES 3 Credit Hours**

(Slashed with LIS 80623) Historical development; applications to current business, labor, governmental, educational and sociological information needs; interpretation to executives and others; printed sources and databases.

**Prerequisite:** LIS 60030; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60624 CATALOGING FOR SCHOOL LIBRARIES 3 Credit Hours**

(Slashed with LIS 80624) Organization and administration of print and non-print materials in school libraries. Application of appropriate descriptive cataloging rules, subject headings and classification policies for children's, teen and educational materials K-12.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60625 LIBRARY MATERIALS AND SERVICES FOR YOUNG CHILDREN 3 Credit Hours**

(Slashed with LIS 80625) Selection and utilization of materials in relation to needs, abilities and interests of the young child.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60626 LIBRARY MATERIALS AND SERVICES TO TEENS 3 Credit Hours**

(Slashed with LIS 80626) Selection and utilization of books and materials in relation to needs, abilities and interests of teens.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60627 ART AND STORY: THE STUDY OF CHILDREN'S PICTUREBOOKS 3 Credit Hours**

(Slashed with LIS 80627) Engages students in the study and application of art and story in children's picturebooks through the lenses of book history, publishing studies, children's book illustration and storytelling, visual literacy and visual storytelling. Readers of picturebooks are studied as well, from professional readers, like librarians and book reviewers, to picturebook consumers.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60628 HUMANITIES INFORMATION SOURCES AND SERVICES 3 Credit Hours**

(Slashed with LIS 80628) Philosophy, literature, fine and performing arts.

**Prerequisite:** LIS 60030; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60629 LIBRARY MATERIALS AND SERVICES FOR SCHOOL-AGE CHILDREN 3 Credit Hours**

(Slashed with LIS 80629) Selection and utilization of materials in relation to needs, abilities and interests of school age children.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60630 REFERENCE SOURCES AND SERVICES FOR YOUTH 3 Credit Hours**

(Slashed with LIS 80630) Organization and administration of information sources and information services for children and young adults (K-12). Evaluation selection and utilization of print and electronic sources.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60631 INTRODUCTION TO DIGITAL PRESERVATION 3 Credit Hours**

Approaches and standards for preserving and maintaining access to digitized and born-digital text, images, data, audiovisual information, and web resources. Topics include longevity of digital media, selection for preservation; formats and strategies for preservation; preservation metadata; integrity and authenticity of digital materials; establishment and certification of trustworthy digital repositories; risk management; and policy development.

**Prerequisite:** LIS 60020; and LIS 60511; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60633 DIGITAL CURATION 3 Credit Hours**

(Slashed with LIS 80633) Management and preservation of digital objects and records throughout their lifecycle. Essential technologies and standards for building and maintaining robust, trusted digital repositories. Emphasizes the use and reuse of scholarly data, business and government records, cultural heritage materials, and other digital objects to create resources supporting communities of practice in their work.

**Prerequisite:** LIS 60631 or LIS 60638; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60635 CULTURAL HERITAGE INFORMATICS 3 Credit Hours**  
(Slashed with LIS 80635) Cultural heritage informatics brings a comprehensive, cross-disciplinary approach to supporting the entire lifecycle of cultural heritage information and documentation procedures for the benefit of the preservation, study, and promotion of cultural heritage. The course covers methods of creating descriptions for cultural objects, as well as organizing, delivering, and presenting the cultural heritage (tangible, intangible, and digital) resources in the digital age. The course aims to prepare students for careers focusing on or transcending libraries, archives, museums (LAMs), historical societies, and other cultural institutions by introducing them the methodologies and technologies commonly used in cultural heritage informatics and can be broadly implemented in LAMs.

**Prerequisite:** LIS 60020 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60636 KNOWLEDGE ORGANIZATION STRUCTURES, SYSTEMS AND SERVICES 3 Credit Hours**

(Slashed with LIS 80636) Introduction to various types of knowledge organization systems, services, and structures (KOS) used in the networked environment. Understanding of the functional philosophical, logical, and linguistic fundamentals of KOS. Explanation of design options, features of KOS, and procedures to be used in the thesaurus, taxonomy and ontology construction.

**Prerequisite:** LIS 60020; and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60637 METADATA ARCHITECTURE AND IMPLEMENTATION 3 Credit Hours**

(Slashed with LIS 80637) Principles and theories of metadata development in the digital environment. Main focus is given to the design and applications of metadata schemas for distinct domains and information communities, issues in metadata interoperability, vocabulary control, quality control and evaluation. Examination of international standards, activities and projects with the use of case study approach.

**Prerequisite:** LIS 60020; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60638 DIGITAL LIBRARIES 3 Credit Hours**

(Slashed with LIS 80638) Issues related to the development and maintenance of digital libraries, including technology, collection development and management, project management, digital preservation, user-centered design, public services, rights management and funding.

**Prerequisite:** LIS 60512; and Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60639 IMPLEMENTATION OF DIGITAL LIBRARIES 3 Credit Hours**  
(Slashed with LIS 80639) Explores issues related to implementation of digital libraries and provides hands-on experience for student to build digital library prototypes (small-scale) with open source software. Emphasis is on design and implementation of key digital library functions, including building digital collections, defining and creating metadata, indexing, browsing and retrieval, customizing interface, implementing services, encoding and transforming for data exchange, and testing the usability and effectiveness.

**Prerequisite:** LIS 60512; and Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60640 LIBRARY AUTOMATION 3 Credit Hours**

(Slashed with LIS 80640) Analysis, design and selection of automated library systems. Considers system analysis and requirements, networking technologies, database management systems, multimedia and hypermedia, and client-server computing. Also, proposals to vendors, contract negotiation, implementation, staffing, training, system maintenance and evaluation.

**Prerequisite:** LIS 60020 and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60641 INFORMATION STORAGE AND RETRIEVAL SYSTEMS 3 Credit Hours**

(Slashed with LIS 80641) Fundamentals of information retrieval models and methods, including information storage structures, full-text indexing, structured indexes, search engines and web retrieval, human-computer interaction, and the user's experience, system performance and evaluation.

**Prerequisite:** LIS 60512; and Graduate standing and special approval.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60643 ONLINE INFORMATION SYSTEMS 3 Credit Hours**

(Slashed with LIS 80643) Use of information technologies to search for and retrieve electronic information, primarily through the Internet. Analysis of database structures and electronic records; search principles and heuristics; database system producers; system interfaces; and evaluation of results.

**Prerequisite:** LIS 60030; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60644 INFORMATION SCIENCE 3 Credit Hours**

(Slashed with LIS 80644) Focal areas of information science: information retrieval systems, bibliometrics, citation analysis, systems analysis and evaluation, information technologies, information theory, information architecture, knowledge management and user experience.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60645 DATABASE SYSTEMS 3 Credit Hours**

(Slashed with LIS 80645) Characteristics and concepts of database systems; different types of database models; conceptual database design and implementation; the relational database model and its application in practice: key issues, principles, and techniques; current database technologies.

**Prerequisite:** LIS 60512; and Graduate standing and special approval.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60647 NETWORK AND SOFTWARE RESOURCES FOR INFORMATION SYSTEMS 3 Credit Hours**

(Slashed with LIS 80647) Study, use and evaluation of current and emerging information technologies; network and software resources for libraries and information centers, including network analysis and management, standards and protocols, and client-server technologies; and techniques for accessing and evaluating such technologies and resources.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60648 WEB SITE DEVELOPMENT, DESIGN AND MANAGEMENT 3 Credit Hours**

(Slashed with LIS 80648) Students significantly advance both their theoretical knowledge and practical skills by developing and implementing a comprehensive web content strategy. Focus is on developing and maintaining website content, organizing and presenting content, and acquiring skill in the use of web technologies needed by content managers to publish, manage, and disseminate content on the web and in the mobile environment.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60649 INDEXING AND ABSTRACTING 3 Credit Hours**

(Slashed with LIS 80649) Principles and methods of manual and computerized indexing and abstracting applied to I & A databases, back of book indexes, website indexes and sitemaps. Techniques of constructing indexing languages using international standards. Theory and practice of index design for specific formats and subjects. Automation and I & A services in networked environments.

**Prerequisite:** LIS 60020; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60650 INFORMATION POLICY 3 Credit Hours**

(Slashed with LIS 80650) Political, economic, cultural and legal issues regarding the production, distribution and use of information (print, electronic and Web). Policy-making process, standards and protocols, intellectual property, information economy, impact of computers on access and policy, privacy rights, transnational flow of information and the Internet and the World Wide Web.

**Prerequisite:** LIS 60040; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60651 DIGITAL IMAGE PROCESSING AND COLLECTION MANAGEMENT 3 Credit Hours**

(Slashed with LIS 80651) This course is designed to introduce students to the fundamental concepts, terminology, techniques and applications of digital imaging as they relate to the development of digital image collections depicting works found in museum collections, archives and special collections in libraries. The students will acquire knowledge and skills necessary to design, create, and manage digital images of text, graphics, slides and reproductions of 3-D objects. They will also be introduced to the principles and issues that pertain to the creation and distribution of digital image archives via image databases and the Web environment.

**Prerequisite:** LIS 60020; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60652 FOUNDATIONS OF RECORDKEEPING IN SOCIETY 3 Credit Hours**

(Slashed with LIS 80652) An introduction to the core principles and practices of recordkeeping and the multiple and complex roles records and archives play in identity, evidence, transparency, memory, accountability, equity, representation and trust in society. This course covers historical and contemporary recordkeeping contexts related to individuals, family, community, organization, corporate, academia and government, as well as traditional, nontextual and digital formats of records and archives.

**Prerequisite:** graduate standing.

**Pre/corequisite:** LIS 60010 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60653 INFORMATION SOURCES AND SERVICES IN LOCAL HISTORY AND GENEALOGY 3 Credit Hours**

Introduces primary and secondary resources and materials to promote and perform reference services in genealogy and local history through lectures, readings, discussion, and practical exercises. The course will use primary and secondary materials available to librarians and archivists in libraries, archives, historical societies and on the Internet.

**Prerequisite:** LIS 60030; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60654 PRESERVATION AND CONSERVATION OF HERITAGE MATERIALS 3 Credit Hours**

(Slashed with LIS 80654) Types and causes of deterioration of various kinds of library, archival, and museum collections; storage and preventive care, preservation through photographic reproduction and digital conversion, and conservation of rare materials.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60655 COPYRIGHT: UNDERSTANDING USER RIGHTS AND RESPONSIBILITIES 3 Credit Hours**

(Slashed with LIS 80655) Exploration of advanced copyright topics such as mass digitization, creative arts and other issues in fair use, library, archive and educational uses including the TEACH Act, digital first sale rights, Digital Millennium Copyright Act, and an introduction to copyright reform.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60656 LICENSING OF INFORMATION PRODUCTS AND SERVICES 3 Credit Hours**

(Slashed with LIS 80656) Topics related to licensing of information products and services including online contract formation, software licenses (End User License Agreements), database and website terms of service, detailed understanding of common terms and conditions in license agreements and an introduction to music licensing and Creative Commons licensing.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60657 THEORY AND METHODS OF ARCHIVAL ACQUISITION, SELECTION AND APPRAISAL 3 Credit Hours**

(Slashed with LIS 80657) This course provides a comprehensive introduction to the theory, methods and traditions employed by records professionals to form and shape archives as societal memory. This course focusses primarily on acquisition, selection, documentation and appraisal theory and methods. Students will also examine contemporary records frameworks and approaches and issues faced by archivists, special collections librarians and manuscript curators employed to identify, evaluate, acquire and dispose of records.

**Prerequisite:** LIS 60652 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60661 TECHNICAL SERVICES 3 Credit Hours**

(Slashed with LIS 80661) Principles, problems and current issues of acquiring, processing and preserving/conserving materials in libraries and information centers.

**Prerequisite:** LIS 60020 and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60665 RARE BOOK LIBRARIANSHIP 3 Credit Hours**

(Slashed with LIS 80665) Study of the theory and practice of rare book librarianship through lectures, readings, discussion and practical exercises.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60666 ETHICAL CONCERNS OF LIBRARY AND INFORMATION PROFESSIONALS 3 Credit Hours**

(Slashed with LIS 80666) Analysis of ethical concerns of information professionals: codes of ethics, intellectual freedom, free access, privacy, confidentiality, computer issues and relations with management, clients and colleagues.

**Prerequisite:** LIS 60040; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60668 INTERNATIONAL AND COMPARATIVE LIBRARIANSHIP 3 Credit Hours**

(Slashed with LIS 80668) Provides an introduction to international and comparative librarianship.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60675 YOUTH LITERATURE IN THE DIGITAL REALM 3 Credit Hours**

From apps, to eBooks, to multi-platform books, to books with augmented reality, new digital formats extend books across media platforms, and provide readers with new, interactive ways of engaging with texts. However, the proliferation of new media formats means there are just as many questions related to their selection, evaluation, and use. This course aims to answer those questions and to critically examine digital formats and related implications for stakeholders in the field of literary production for young people, including librarians, publishers, authors, illustrators, and readers.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** LIS 60010.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60691 SEMINAR IN LIBRARY SCIENCE 1-3 Credit Hours**

(Repeatable for credit) (Slashed with LIS 80691) Advanced research by small groups of students who are qualified to examine problems of certain special areas.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**LIS 60692 PRACTICUM-LIBRARIES AND INFORMATION CENTERS 2,3 Credit Hours**

(Repeatable for credit) Supervised library or information center work experience of a professional nature of not less than 100 clock hours, directed readings and preparation of a paper.

**Prerequisite:** Graduate standing and special approval.

**Schedule Type:** Practicum or Internship

**Contact Hours:** 2-3 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**LIS 60693 VARIABLE TITLE WORKSHOP-LIBRARY AND INFORMATION SCIENCE 1-3 Credit Hours**

(Repeatable for credit) Intensive examination of special topics of interest to practicing librarians. May be repeated. Maximum workshop credit accepted for MLIS degree is 4 semester hours.

**Prerequisite:** Graduate standing.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

**LIS 60695 SPECIAL PROBLEMS IN LIBRARY SCIENCE 1-10 Credit Hours**

(Repeatable for credit) (Slashed with 80695) Individual research at high levels of specialization. Intended for persons in sixth year program.

**Prerequisite:** Graduate standing and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 1-10 lecture

**Grade Mode:** Standard Letter-IP

**LIS 60700 FOUNDATIONS OF MUSEUM STUDIES 3 Credit Hours**

(Slashed with LIS 80700) Intended for those interested in learning more about museums or specializing in museum studies. The goal is to introduce students to various aspects of all types of museums as dynamic networked systems positioned around objects, people and ideas. Covers history and types of museums, the roles of objects and ideas, structure, function, museum workers and users, and the purpose and future of museums.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60701 MUSEUM COLLECTIONS 3 Credit Hours**

(Slashed with LIS 80701) This course introduces students to the organization, care and meaning of objects held in museum collections. Through both theoretical and practical concepts, basic collection management and registration skills are introduced. In conjunction, students explore the meanings made of museum objects.

**Prerequisite:** LIS 60700; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60702 MUSEUM COMMUNICATION 3 Credit Hours**

(Slashed with LIS 80702) Museums communicate to the public in a multitude of ways: interpretation, exhibition, publication, educational programming and using a web presence. This course introduces important concepts, theories, applications, processes and technology used in museum interpretation and communication. Students are provided with a balance of practical techniques with thoughtful conceptual exploration.

**Prerequisite:** LIS 60700 and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60703 MUSEUM USERS 3 Credit Hours**

(Slashed with LIS 80703) Families, individuals and students visit museums and community institutions for a variety of purposes including leisure, education and curiosity. Introduction to the research and theory on museum user experience. Inquiry involves examining notions of learning, engagement, and transformative experiences of users, characteristics of users and the social dynamics of the museum experience. In addition, reviews several programmatic techniques and methods used in museums to increase engagement and learning for patrons.

**Prerequisite:** LIS 60700 and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60704 THE MUSEUM SYSTEM 3 Credit Hours**

(Slashed with LIS 80704) Museums are by their very nature complex and dynamic systems composed of people, objects and activities. Comprised of an "outer" subsystem and an "inner" subsystem, the museum as a whole functions as an organic body, with all of its parts working together to function successfully. This system exists within a larger landscape, one filled increasingly with new types of interactions, unlimited access and constant feedback. This course explores this holistic system from both practical and conceptual viewpoints, examining the role of administration throughout the system as well as considering current issues such as sustainability, advocacy and relationships with community and users add to an overall understanding of the museum system.

**Prerequisite:** LIS 60700 and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60705 MUSEUM ORIGINS 3 Credit Hours**

(Slashed with LIS 80705) While the collecting of objects can be found as far back as ancient times in various parts of the world, the birth of the modern museum finds its roots in Europe. In the context of today's world, students will "go back in time" to understand the origins of western museums and the creation, use, and meaning of publicly shared collections over time. Students will explore the history of the modern museum and spend time visiting actual sites and collections that played a role in this history. Exploring the past in this way is geared specifically to help today's museum workers gain a better understanding of their own role and purpose in their community, society, and nation.

**Prerequisite:** Graduate standing and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 60792 CULMINATING EXPERIENCE PRACTICUM IN K-12 LIBRARIES 3 Credit Hours**

Under the advisement of a faculty member, students complete a professional-level practicum that serves as a culminating experience for the M.L.I.S. degree.

**Prerequisite:** LIS 60607 or LIS 60040; and LIS 60624 or LIS 60020; and LIS 60618, LIS 60626, LIS 60629, LIS 60630 and LIS 60050; and overall minimum GPA of 3.000; 24 hours completed in the MLIS degree program; or School Library Media program; and Graduate standing and special approval.

**Schedule Type:** Practicum or Internship

**Contact Hours:** 9 other

**Grade Mode:** Standard Letter-IP

**LIS 60870 CULMINATING EXPERIENCE FOR DUAL DEGREE 6 Credit Hours**

Culminating experience for students pursuing dual degree in M.Ed. and MLIS and K-12 School Library Media licensure. Must be in a supervised educational library or information center.

**Prerequisite:** ADED 62146, CI 67310, CI 67330, EPSY 65524, LIS 60030, LIS 60050, LIS 60618, LIS 60630 and SPED 63200; and LIS 60607 or LIS 60040; and LIS 60020 or LIS 60624; and Graduate standing and special approval.

**Schedule Type:** Research

**Contact Hours:** 18 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**LIS 61095 SELECTED TOPICS IN LIBRARY SCIENCE 1-3 Credit Hours**

(Repeatable for credit) (Slashed with LIS 61095) Offered irregularly as resources and/or opportunities permit. Topics will be announced in the schedule of classes.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**LIS 61096 INDIVIDUAL INVESTIGATION 1-3 Credit Hours**

(Repeatable for credit) Research or individual investigation for master's level graduate students. Maximum 3 credits per registrations. Maximum 4 credits toward master's degree.

**Prerequisite:** Graduate standing and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter-IP

**LIS 80601 INFORMATION SOURCES AND REFERENCE SERVICES 3 Credit Hours**

(Slashed with LIS 60601) Introduction to use and evaluation of basic sources of reference information, computerized and noncomputerized; reference interview and question-negotiation techniques; administration of reference and information services.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80602 CATALOGING AND CLASSIFICATION I 3 Credit Hours**

(Slashed with LIS 60602) Principles of cataloging with emphasis on Dewey Decimal and Library of Congress Classification systems, Library of Congress subject headings, online cataloging and administration.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80603 CATALOGING AND CLASSIFICATION II 3 Credit Hours**

(Slashed with LIS 60603) Theory and practice of providing description and access to library materials. Examples and assignments will be taken from all types of library materials, print and nonprint.

**Prerequisite:** LIS 60602 or LIS 80602; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80607 SCHOOL LIBRARY MANAGEMENT 3 Credit Hours**

(Slashed with LIS 60607) Management of school libraries.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80608 THE PUBLIC LIBRARY 3 Credit Hours**

(Slashed with 60608) Analysis of the historical, sociopolitical, technological, fiscal and organizational factors affecting American public librarianship. Includes evaluation, planning, networking, funding, automation, buildings and censorship.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80609 MARKETING THE LIBRARY 3 Credit Hours**

(Slashed with LIS 60609) Introduction to the theory and practice of marketing the library. Topics include the evaluation of customer needs, the marketing mix, merchandising, public relations, relationship marketing, and the design and development of a marketing plan for libraries.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80611 GOVERNMENT INFORMATION SOURCES AND SERVICES 3 Credit Hours**

(Slashed with LIS 60611) Library treatment of U.S. government publications, with brief attention to municipal and state publications, and major documents of Great Britain, Canada and the United Nations. Will not include materials covered in LIS 60601/LIS 80601.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80612 LIBRARY MATERIALS AND SERVICES FOR ADULTS 3 Credit Hours**

(Slashed with LIS 60612) Recent investigations of group and individual reading habits; advisory services in various types of libraries; library programs for adult education; projection of library materials toward community.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80613 INFORMATION NEEDS, SEEKING AND USE 3 Credit Hours**

(Slashed with LIS 60613) Surveys theories related to people's interactions with information. The theories covered include information context and situation, information needs, information seeking, exploration of information sources, communication and collaboration in the information search process, information use, and other interactions among people, information, and information systems.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80614 SELECTION AND ACQUISITION OF LIBRARY MATERIALS****3 Credit Hours**

(Slashed with LIS 60614) Factors affecting selection in public, academic, school and special libraries (reading habits, censorship, publishing trends); community analysis, selection policies and process; selection sources; acquisitions.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80615 THE ACADEMIC LIBRARY 3 Credit Hours**

(Slashed with LIS 60615) Governance, administration and services of libraries in institutions of postsecondary education.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80616 THE SPECIAL LIBRARY 3 Credit Hours**

(Slashed with LIS 60616) The formation of special libraries. Libraries in special subject fields and in organizations: corporations, government agencies, hospitals, etc. Internal organization and administration, collection development and services.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80618 INFORMATION LITERACY INITIATIVES AND INSTRUCTION****3 Credit Hours**

(Slashed with LIS 60618) Invites information professionals from any library point-of-view (school, public, academic, archives, special, etc.). Topics include definitions and history of information literacy standards and objectives, developing an information literacy agenda, library pedagogy and learning styles, information literacy needs assessment, program development and delivery, and experiential learning for students in library communities.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80619 LEGAL INFORMATION SOURCES AND SERVICES 3 Credit Hours**

(Slashed with LIS 60619) (Cross-listed with AS 43001 and AS 53001 and AS 73001) Fundamentals of legal research methods and major sources of American legal literature in print and electronic formats as used in other disciplines. Students learn how to formulate a research plan based on legal analysis of issues using relevant, authoritative legal resources.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80620 HEALTH INFORMATION RESOURCES 3 Credit Hours**

(Cross-listed with LIS 60620) Identifies print and electronic sources of health information with emphasis on electronic sources. Medical patient and consumer health information is presented. This course is designed for the health educator, librarian, nurse or other healthcare professional.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80621 SOCIAL SCIENCES INFORMATION SOURCES AND SERVICES****3 Credit Hours**

(Slashed with LIS 60621) Content, bibliographic structure and communication patterns in the social sciences with emphasis on information sources and services in sociology, history, education, political science, anthropology, related disciplines.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80622 SCIENCE AND TECHNOLOGY INFORMATION SOURCES AND SERVICES 3 Credit Hours**

(Slashed with LIS 60622) Content, bibliographic structure and communication patterns in the sciences with emphasis on pure and applied fields, e.g., mathematics, biology, physics.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80623 BUSINESS AND FINANCE INFORMATION SOURCES AND SERVICES 3 Credit Hours**

(Slashed with LIS 60623) Historical development; applications to current business, labor, governmental, educational and sociological information needs; interpretation to executives and others; printed sources and databases.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80624 CATALOGING FOR SCHOOL LIBRARIES 3 Credit Hours**

(Cross-listed with LIS 60624) Organization and administration of print and non-print materials in school libraries. Application of appropriate descriptive cataloging rules, subject headings and classification policies for children's, teen and educational materials K-12.

**Prerequisite:** Doctoral standing and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80625 LIBRARY MATERIALS AND SERVICES FOR YOUNG CHILDREN 3 Credit Hours**

(Cross-listed with LIS 60625) Selection and utilization of materials in relation to needs, abilities and interests of the young child.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80626 LIBRARY MATERIALS AND SERVICES TO TEENS 3 Credit Hours**

(Cross-listed with LIS 80626) Selection and utilization of books and materials in relation to needs, abilities and interests of teens.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80627 ART AND STORY: THE STUDY OF CHILDREN'S PICTUREBOOKS 3 Credit Hours**

(Cross-listed with LIS 60627) Engages students in the study and application of art and story in children's picturebooks through the lenses of book history, publishing studies, children's book illustration and storytelling, visual literacy and visual storytelling. Readers of picturebooks are studied as well, from professional readers, like librarians and book reviewers, to picturebook consumers.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80628 HUMANITIES INFORMATION SOURCES AND SERVICES 3 Credit Hours**

(Slashed with LIS 60628) Philosophy, literature, fine and performing arts.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80629 LIBRARY MATERIALS AND SERVICES FOR SCHOOL AGE CHILDREN 3 Credit Hours**

(Slashed with LIS 60629) Selection and utilization of materials in relation to needs, abilities and interests of school-age children.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80630 REFERENCE SOURCES AND SERVICES FOR YOUTH 3 Credit Hours**

(Slashed with LIS 60630) Organization and administration of information sources and information services for children and young adults (K-12). Evaluation, selection and utilization of print and electronic sources.

**Prerequisite:** Doctoral standing; and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80631 INTRODUCTION TO DIGITAL PRESERVATION 3 Credit Hours**

(Slashed with LIS 60631) Approaches and standards for preserving and maintaining access to digitized and born-digital text, images, data, audiovisual information, and web resources. Topics include longevity of digital media, selection for preservation; formats and strategies for preservation; preservation metadata; integrity and authenticity of digital materials; establishment and certification of trustworthy digital repositories; risk management; and policy development.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80633 DIGITAL CURATION 3 Credit Hours**

(Slashed with LIS 60633) Management and preservation of digital objects and records throughout their lifecycle. Essential technologies and standards for building and maintaining robust, trusted digital repositories. Emphasizes the use and reuse of scholarly data, business and government records, cultural heritage materials, and other digital objects to create resources supporting communities of practice in their work.

**Prerequisite:** LIS 60631 or LIS 60638 or LIS 80631 or LIS 80638; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80635 CULTURAL HERITAGE INFOMATICS 3 Credit Hours**

(Slashed with LIS 60635) Cultural heritage informatics brings a comprehensive, cross-disciplinary approach to supporting the entire lifecycle of cultural heritage information and documentation procedures for the benefit of the preservation, study, and promotion of cultural heritage. The course covers methods of creating descriptions for cultural objects, as well as organizing, delivering, and presenting the cultural heritage (tangible, intangible, and digital) resources in the digital age. The course aims to prepare students for careers focusing on or transcending libraries, archives, museums (LAMs), historical societies, and other cultural institutions by introducing them to the methodologies and technologies commonly used in cultural heritage informatics and can be broadly implemented in LAMs.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80636 KNOWLEDGE ORGANIZATION STRUCTURES, SYSTEMS AND SERVICES 3 Credit Hours**

(Slashed with LIS 60636) Introduction to various types of knowledge organization systems, services, and structures (KOS) used in the networked environment. Understanding of the functional philosophical, logical, and linguistic fundamentals of KOS. Explanation of design options, features of KOS, and procedures to be used in the thesaurus, taxonomy and ontology construction.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80637 METADATA ARCHITECTURE AND IMPLEMENTATION 3 Credit Hours**

(Slashed with LIS 60637) Principles and theories of metadata development in the digital environment. Main focus is given to the design and applications of metadata schemas for distinct domains and information communities, issues in metadata interoperability, vocabulary control, quality control and evaluation. Examination of international standards, activities and projects with the use of case study approach.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80638 DIGITAL LIBRARIES 3 Credit Hours**

(Slashed with LIS 60638) Issues related to the development and maintenance of digital libraries, including technology, collection development and management, project management, digital preservation, user-centered design, public services, rights management and funding.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80639 IMPLEMENTATION OF DIGITAL LIBRARIES 3 Credit Hours**

(Slashed with LIS 60639) Explores issues related to implementation of digital libraries and provides hands-on experience for students to build digital library prototypes (small-scale) with open source software. The major emphasis is on design and implementation of key digital library functions, including building digital collections, defining and creating metadata, indexing, browsing and retrieval, customizing interface, implementing services, encoding and transforming for data exchange, and testing the usability and effectiveness.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80640 LIBRARY AUTOMATION 3 Credit Hours**

(Slashed with LIS 60640) Analysis, design and selection of automated library systems. Considers system analysis and requirements, networking technologies, database management systems, multimedia and hypermedia, and client-serving computing. Also, proposals to vendors, contract negotiation, implementation, staffing, training, system maintenance and evaluation.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80641 INFORMATION STORAGE AND RETRIEVAL SYSTEMS 3 Credit Hours**

(Slashed with LIS 60641) Fundamentals of information retrieval models and methods, including information storage structures, full-text indexing, structured indexes, search engines and web retrieval, human-computer interaction, and the user's experience, system performance and evaluation.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80643 ONLINE REFERENCE SYSTEMS 3 Credit Hours**

(Slashed with LIS 60643) Use of information technologies to search for and retrieve electronic information, primarily through the Internet. Analysis of database structures and electronic records; search principles and heuristics; database system producers; system interfaces; and evaluation of results.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80644 INFORMATION SCIENCE 3 Credit Hours**

(Slashed with LIS 60644) Focal areas of information science: information retrieval systems, bibliometrics, citation analysis, systems analysis and evaluation, information technologies, information theory, information architecture, knowledge management and user experience.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80645 DATABASE SYSTEMS 3 Credit Hours**

(Slashed with LIS 60645) Characteristics and concepts of database systems; different types of database models; conceptual database design and implementation; the relational database model and its application in practice: key issues, principles, and techniques; current database technologies.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80647 NETWORK AND SOFTWARE RESOURCES FOR INFORMATION SYSTEMS 3 Credit Hours**

(Slashed with LIS 60647) Study, use and evaluation of current and emerging information technologies; network and software resources for libraries and information centers, including network analysis and management, standards, protocols and client-server technologies; and techniques for accessing and evaluating such technologies and resources.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80648 WEB SITE DEVELOPMENT, DESIGN AND MANAGEMENT 3 Credit Hours**

(Slashed with LIS 60648) Students significantly advance both their theoretical knowledge and practical skills by developing and implementing a comprehensive web content strategy. Focus is on developing and maintaining website content, organizing and presenting content, and acquiring skill in the use of web technologies needed by content managers to publish, manage, and disseminate content on the web and in the mobile environment.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80649 INDEXING AND ABSTRACTING 3 Credit Hours**

(Slashed with LIS 60649) Principles and methods of manual and computerized indexing and abstracting applied to I&A databases, back-of-book indexes, Web site indexes and sitemaps. Techniques of constructing indexing languages using international standards. Theory and practice of index design for specific formats and subjects. Automation and I&A services in networked environments.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80650 INFORMATION POLICY 3 Credit Hours**

(Slashed with LIS 60650) Political, economic, cultural and legal issues regarding the production, distribution, and use of information (print, electronic and Web). Policy-making process, standards and protocols, intellectual property, information economy, impact of computers on access and policy, privacy rights, transnational flow of information and the Internet and the World Wide Web.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80651 DIGITAL IMAGE PROCESSING AND COLLECTION MANAGEMENT 3 Credit Hours**

(Slashed with LIS 60651) This course is designed to introduce students to the fundamental concepts, terminology, techniques and applications of digital imaging as they relate to the development of digital image collections depicting works found in museum collections, archives, and special collections in libraries. The students will acquire knowledge and skills necessary to design, create and manage digital images of text, graphics, slides, and reproductions of 3-D objects. They will also be introduced to the principles and issues that pertain to the creation and distribution of digital-image archives via image databases and the Web environment.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80652 FOUNDATIONS OF RECORDKEEPING IN SOCIETY 3 Credit Hours**

(Slashed with LIS 60652) An introduction to the core principles and practices of recordkeeping and the multiple and complex roles records and archives play in identity, evidence, transparency, memory, accountability, equity, representation and trust in society. This course covers historical and contemporary recordkeeping contexts related to individuals, family, community, organization, corporate, academia and government, as well as traditional, nontextual and digital formats of records and archives.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80654 PRESERVATION AND CONSERVATION OF HERITAGE MATERIALS 3 Credit Hours**

(Slashed with LIS 60654) Types and causes of deterioration of various kinds of library, archival, and museum collections; storage and preventive care, preservation through photographic reproduction and digital conversion, and conservation of rare materials.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80655 COPYRIGHT: UNDERSTANDING USER RIGHTS AND RESPONSIBILITIES 3 Credit Hours**

(Slashed with LIS 60655) Exploration of advanced copyright topics such as mass digitization, creative arts and other issues in fair use, library, archive and educational uses including the TEACH Act, digital first sale rights, Digital Millennium Copyright Act, and an introduction to copyright reform.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80656 LICENSING OF INFORMATION PRODUCTS AND SERVICES 3 Credit Hours**

(Slashed with LIS 60656) Topics related to licensing of information products and services including online contract formation, software licenses (End User License Agreements), database and website terms of service, detailed understanding of common terms and conditions in license agreements and an introduction to music licensing and Creative Commons licensing.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80657 THEORY AND METHODS OF ARCHIVAL ACQUISITION, SELECTION AND APPRAISAL 3 Credit Hours**

(Slashed with LIS 60657) This course provides a comprehensive introduction to the theory, methods and traditions employed by records professionals to form and shape archives as societal memory. This course focuses primarily on acquisition, selection, documentation and appraisal theory and methods. Students will also examine contemporary records frameworks and approaches and issues faced by archivists, special collections librarians and manuscript curators employed to identify, evaluate, acquire and dispose of records.

**Prerequisite:** LIS 80652 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80661 TECHNICAL SERVICES 3 Credit Hours**

(Slashed with LIS 60661) Principles, problems and current issues of acquiring, processing and preserving conserving materials in libraries and information centers.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80665 RARE BOOK LIBRARIANSHIP 3 Credit Hours**

(Slashed with LIS 60665) Study of the theory and practice of rare book librarianship through lectures, readings, discussion and practical exercises.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80666 ETHICAL CONCERNS OF LIBRARY AND INFORMATION PROFESSIONALS 3 Credit Hours**

(Slashed with LIS 60666) Analysis of ethical concerns of information professionals: codes of ethics, intellectual freedom, free access, privacy, confidentiality, computer issues and relations with management, clients and colleagues.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80668 INTERNATIONAL AND COMPARATIVE LIBRARIANSHIP 3 Credit Hours**

(Slashed with LIS 60668) Provides an introduction to international and comparative librarianship.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80691 SEMINAR IN LIBRARY SCIENCE 1-3 Credit Hours**

(Slashed with LIS 60691) Advanced research by small groups of students who are qualified to examine problems of certain special areas.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**LIS 80694 COLLEGE TEACHING OF LIBRARY SCIENCE 2,3 Credit Hours**

(Repeatable for credit) Staff training and experience in college teaching.

**Prerequisite:** Doctoral standing and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 2-3 lecture

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**LIS 80695 SPECIAL PROBLEMS IN LIBRARY SCIENCE 1-10 Credit Hours**

(Repeatable for credit) (Slashed with LIS 60695) Individual research at high levels of specialization.

**Prerequisite:** Doctoral standing and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 1-10 lecture

**Grade Mode:** Standard Letter-IP

**LIS 80700 FOUNDATIONS OF MUSEUM STUDIES 3 Credit Hours**

(Slashed with LIS 60700) Intended for those interested in learning more about museums or specializing in museum studies. The goal is to introduce students to various aspects of all types of museums as dynamic networked systems positioned around objects, people and ideas. Covers history and types of museums, the roles of objects and ideas, structure, function, museum workers and users, and the purpose and future of museums.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80701 MUSEUM COLLECTIONS 3 Credit Hours**

(Slashed with LIS 60701) Introduction to the organization, care and meaning of objects held in museum collections. Through both theoretical and practical concepts, basic collection management and registration skills are introduced. In conjunction, students explore the meanings made of museum objects.

**Prerequisite:** LIS 60700 or LIS 80700; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80702 MUSEUM COMMUNICATION 3 Credit Hours**

(Slashed with LIS 60702) Museums communicate to the public in a multitude of ways: interpretation, exhibition, publication, educational programming and using a web presence. Introduces important concepts, theories, applications, processes and technology used in museum interpretation and communication. Students are provided with a balance of practical techniques with thoughtful conceptual exploration.

**Prerequisite:** LIS 60700 or LIS 80700 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80703 MUSEUM USERS 3 Credit Hours**

(Slashed with LIS 60703) Families, individuals, and students visit museums and community institutions for a variety of purposes including leisure, education, and curiosity. Introduction to the research and theory on museum user experience. Inquiry involves examining notions of learning, engagement, and transformative experiences of users, characteristics of users, and the social dynamics of the museum experience. In addition, reviews several programmatic techniques and methods used in museums to increase engagement and learning for patrons.

**Prerequisite:** LIS 60700 or LIS 80700; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80704 THE MUSEUM SYSTEM 3 Credit Hours**

(Slashed with LIS 60704) Museums are by their very nature complex and dynamic systems composed of people, objects and activities. Comprised of an "outer" subsystem and an "inner" subsystem, museum as a whole functions as an organic body, with all of its parts working together to function successfully. This system exists within a larger landscape, one filled increasingly with new types of interactions, unlimited access, and constant feedback. This course explores this holistic system from both practical and conceptual viewpoints, examining the role of administration throughout the system as well as considering current issues such as sustainability, advocacy and relationships with community and users add to an overall understanding of the museum system.

**Prerequisite:** LIS 60700 or LIS 80700; and doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 80705 MUSEUM ORIGINS 3 Credit Hours**

(Slashed with LIS 60705) While the collecting of objects can be found as far back as ancient times in various parts of the world, the birth of the modern museum finds its roots in Europe. In the context of today's world, students will "go back in time" to understand the origins of western museums and the creation, use, and meaning of publicly shared collections over time. Students will explore the history of the modern museum and spend time visiting actual sites and collections that played a role in this history. Exploring the past in this way is geared specifically to help today's museum workers gain a better understanding of their own role and purpose in their community, society and nation.

**Prerequisite:** Doctoral standing and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**LIS 81095 SELECTED TOPICS IN LIBRARY SCIENCE 1-3 Credit Hours**

(Repeatable for credit) (Slashed with LIS 61095) Offered irregularly as resources and or opportunities permit. Topics will be announced in the Schedule of Classes.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**LIS 81096 INDIVIDUAL INVESTIGATION 1-3 Credit Hours**

(Repeatable for credit) Individual investigation for doctoral level students.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Individual Investigation

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter-IP

## User Experience Design (UXD)

**UXD 20001 INTRODUCTION TO USER EXPERIENCE DESIGN 3 Credit Hours**

Students explore the context within which User Experience Design exists and the fundamental research that explains human behavior and how that research informs design decisions. Students are also introduced to the basic design processes and deliverables employed by UXD professionals.

**Prerequisite:** Major or minor in Advertising, Communication Studies, Digital Media Production, Digital Sciences, Journalism, Photography, Public Relations, User Experience Design or Visual Communication Design.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 40101 INFORMATION ARCHITECTURE 3 Credit Hours**

Introduction to the fundamental concepts and practices of information architecture (IA). Students develop practical skills for comparing, analyzing, critiquing and design of IA. Major topics include organization, navigation, labeling and search systems for web and mobile architectures.

**Prerequisite:** UXD 20001 and User Experience Design (UXDE) minor.

**Schedule Type:** Laboratory, Lecture, Combined Lecture and Lab

**Contact Hours:** 2 lecture, 2 lab

**Grade Mode:** Standard Letter

**UXD 40104 USABILITY 3 Credit Hours**

Provides a conceptual and practical overview of the processes and methods of usability testing such as development of test protocols, goals, facilitation, analysis and reporting of results. Actual usability tests are performed, using quantitative and qualitative methods and employing emerging software tools to facilitate data collection and analysis.

**Prerequisite:** UXD 20001 and User Experience Design (UXDE) minor.

**Schedule Type:** Laboratory, Lecture, Combined Lecture and Lab

**Contact Hours:** 2 lecture, 2 lab

**Grade Mode:** Standard Letter

**UXD 41095 SPECIAL TOPICS IN USER EXPERIENCE DESIGN 1-3 Credit Hours**

(Repeatable for credit) Topics could include current or emerging issues in user experience design. Topics will be announced in schedule of classes. Offered irregularly as resources and opportunities permit.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**UXD 41096 INDIVIDUAL INVESTIGATION IN USER EXPERIENCE DESIGN 1-3 Credit Hours**

(Repeatable for credit) Research or individual investigation in areas not covered in the existing curriculum for baccalaureate level students at or above the junior level.

**Prerequisite:** Special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Standard Letter-IP

**UXD 60001 USER EXPERIENCE DESIGN PRINCIPLES AND CONCEPTS 3 Credit Hours**

(Slashed with UXD 80001) Students explore the context in which User Experience Design exists and the various methods employed by designers in various fields related to design research, the generation of ideas and implementation of designs. Students are introduced to methods of design evaluation and to the conceptual framework of the related curricula.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 60002 USER EXPERIENCE DESIGN IN PRACTICE 3 Credit Hours**

Students learn and employ methods for engaging in creative problem solving. Introduce students to design research methods and current research on human behavior as it applies to user experience design. A core set of design deliverables are examined. Students begin to develop individual portfolio materials.

**Prerequisite:** Graduate standing.

**Pre/corequisite:** UXD 60001.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 60101 INFORMATION ARCHITECTURE I 3 Credit Hours**

(Slashed with UXD 80101) Introduction to the fundamental concepts and practices of information architecture (IA). Students develop practical skills for comparing, analyzing, critiquing and designing information architectures. Major topics include organization, navigation, labeling, search and other core IA concepts. Students learn to create blueprints, wireframes, process flows and other documents used to communicate an information architecture design.

**Prerequisite:** UXD 60001 and UXD 60002 with a minimum of C and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 60102 PRINCIPLES OF INTERACTION 3 Credit Hours**

This course provides students with an overview of interaction design principles and concepts. It is divided into five modules.

**Prerequisite:** UXD 60001 and UXD 60002 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 60103 RESEARCHING THE USER EXPERIENCE I 3 Credit Hours**

(Slashed with UXD 80103) Design research seeks to understand user needs, goals and tasks. Deals with research methods for human-centered design of information-rich artifacts and experiences. Covers interviews, surveys, diary studies and other methods applicable to the formative stages of the design process. Students learn to distill research findings into audience segments, user profiles, personas, scenarios and other documents that model user behavior.

**Prerequisite:** UXD 60001 and UXD 60002 with a minimum grade of C (2.000); and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 60104 USABILITY I 3 Credit Hours**

(Slashed with UXD 80104) Provides a conceptual and practical overview of the processes and methods of usability testing, such as Think Aloud protocols, performance measurements and eye-tracking analysis. Actual usability testing is performed, using quantitative and qualitative methods and employing current and emerging software tools to facilitate data collection and analysis.

**Prerequisite:** UXD 60001 and UXD 60002 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 60106 CONTENT STRATEGY I 3 Credit Hours**

(Slashed with UXD 80106) Introduces the field of content strategy and its relationship to user experience design. Includes history and practices of content strategy, how to analyze user needs for content, the production of written materials related to content strategy and content audits and governance models. This course is the conceptual basis behind content strategy.

**Prerequisite:** UXD 60001 and UXD 60002 and Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 60111 INFORMATION ARCHITECTURE II 3 Credit Hours**

(Slashed with UXD 80111) This course will cover current topics in architecting for a changing web environment. Conceptual and technical aspects of Web 2.0 and Rich Internet Applications (RIA) have created the need for different types of design deliverables and usability considerations. In order to understand how to architect for Web 2.0, we must come to an understanding of what it is and how it works at least at a basic level. In addition, design tools to aid information architects are becoming more advanced and can aid IAs, making them more effective and efficient. These tools will be covered in depth.

**Prerequisite:** UXD 60001 and UXD 60002 and Graduate standing.

**Pre/corequisite:** UXD 60101.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 60112 INTERACTION IN PRACTICE 3 Credit Hours**

This course provides students with experience planning, designing and prototyping interactions. Students will learn common interaction design (IxD) methodologies, what is expected of interaction designers, and what deliverables a designer typically provides. Students will practice interaction design by specifying content organization, hierarchy and user journeys for a mobile application in wireframe form. Students will create a functional prototype, building in the basic functionality needed for navigation and process funnels. Finally, students will test their prototypes formally.

**Prerequisite:** UXD 60001 and UXD 60002; and graduate standing.

**Pre/corequisite:** UXD 60102.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 60113 RESEARCHING USER EXPERIENCE II 3 Credit Hours**

(Slashed with UXD 80113) In order to design and develop effective user interfaces, task analysis process and theory are explored and applied via principles drawn from anthropology, ethnography, cognitive psychology, document and instruction systems design and market research. Practical techniques and methodologies are presented to improve interface design through all phases of the design process.

**Prerequisite:** UXD 60001 and UXD 60002 and Graduate standing.

**Pre/corequisite:** UXD 60103.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 60114 USABILITY II 3 Credit Hours**

(Slashed with UXD 80114) Provides students with an understanding of qualitative and quantitative research methods appropriate for conducting advanced studies of human interaction with computers. In addition, students learn how to evaluate, purchase, implement and operate equipment for usability labs in a manner consistent with research methods.

**Prerequisite:** UXD 60001 and UXD 60002 and Graduate standing.

**Pre/corequisite:** UXD 60104.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 60117 USER EXPERIENCE DESIGN LEADERSHIP 3 Credit Hours**

As User Experience Design professionals are increasingly sought out not only to solve specific experience problems but also for business strategies, this course will teach students business terms and principles to become viable leaders within their organizations. Students will learn business concepts like market forces, business models innovation and design, basic accounting and finance, and how to interact with their colleagues as leaders.

**Prerequisite:** UXD 60001 and UXD 60002; and graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 60691 SEMINAR IN USER EXPERIENCE DESIGN 1-3 Credit Hours**

(Repeatable for credit) Advanced research by students who are qualified to examine problems of certain special areas related to concentrations of study in user experience design.

**Prerequisite:** Graduate standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**UXD 60693 VARIABLE TITLE WORKSHOP IN USER EXPERIENCE DESIGN 1-3 Credit Hours**

(Repeatable for credit) Intensive examination of special topics of interest to those involved in user experience design. Maximum number of workshop credits for the MS-UXD major is 4 semester hours.

**Prerequisite:** Graduate standing.

**Schedule Type:** Workshop

**Contact Hours:** 1-3 other

**Grade Mode:** Satisfactory/Unsatisfactory

**UXD 60792 ELECTIVE INTERNSHIP IN USER EXPERIENCE DESIGN 2-3 Credit Hours**

Supervised work experience in user experience design of a professional nature of not less than 100 clock hours (for 2 credit hours) or 150 clock hours (for 3 credit hours) with directed readings and preparation of a paper.

**Prerequisite:** Graduate standing and special approval.

**Schedule Type:** Practicum or Internship

**Contact Hours:** 6-9 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UXD 61095 SPECIAL TOPICS IN USER EXPERIENCE DESIGN 1-3 Credit Hours**

(Repeatable for credit) Offered irregularly as resources and or opportunities permit. Topics could include current or emerging issues in user experience design.

**Prerequisite:** Graduate standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**UXD 61096 INDIVIDUAL INVESTIGATION IN USER EXPERIENCE DESIGN 1-3 Credit Hours**

(Repeatable for credit) Research or individual investigation in areas not covered by the existing curriculum for master's level students. Maximum 6 credit towards the user experience design major within the master of science degree.

**Prerequisite:** Graduate standing and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Standard Letter-IP

**UXD 66080 PROFESSIONAL PORTFOLIO DESIGN AND ASSESSMENT 3 Credit Hours**

Students complete the assembly and evaluation of their work throughout the User Experience Design program in the form of a professional portfolio that will be used in efforts to gain employment or freelance work. Evaluation is done through critique by User Experience Design faculty and by peers.

**Prerequisite:** LIS 60636, UXD 60001, UXD 60002, UXD 60101, UXD 60104, UXD 60106; and a minimum cumulative 3.000 GPA; and Graduate standing and special approval.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UXD 66092 MASTER'S INTERNSHIP IN USER EXPERIENCE DESIGN 3 Credit Hours**

Supervised work experience of an advanced professional nature that concentrates on developing skills in areas of user experience design and integrates their knowledge from all UXD courses and experiences. Students must have completed a minimum of 30 credit hours towards the user experience design major prior to registration.

**Prerequisite:** LIS 60636, UXD 60001, UXD 60002, UXD 60101, UXD 60103, UXD 60104 and UXD 60106; and a minimum cumulative 3.000 gpa; and Graduate standing and special approval.

**Schedule Type:** Practicum or Internship

**Contact Hours:** 9 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UXD 66098 MASTERS PROJECT IN USER EXPERIENCE DESIGN 3 Credit Hours**

Provides a means for the application of the knowledge, research and competencies learned through study in user experience design to the development of an information system, product, setting or service. Cumulative GPA of 3.000 is required prior to enrolling in the course. Students must have completed 30 credit hours towards the MS-UXDE program prior to registration.

**Prerequisite:** LIS 60636, UXD 60001, UXD 60002, UXD 60101, UXD 60103, UXD 60104 and UXD 60106; and a minimum cumulative 3.000 GPA; and Graduate standing and special approval.

**Schedule Type:** Master's Project

**Contact Hours:** 3 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UXD 66198 MASTER'S RESEARCH PAPER IN USER EXPERIENCE DESIGN 3 Credit Hours**

Under the advisement of a faculty member, students will complete a research paper that serves as a culminating experience for the M.S.-UXD degree. Students must have completed 30 credit hours towards the MS-UXDE program prior to registration.

**Prerequisite:** LIS 60636, UXD 60001, UXD 60002, UXD 60101, UXD 60103, UXD 60106; and a minimum cumulative 3.000 GPA; and Graduate standing and special approval.

**Schedule Type:** Master's Project

**Contact Hours:** 3 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UXD 66199 THESIS I 2-6 Credit Hours**

Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired. Students must have completed 30 credit hours towards the MS-UXDE program prior to registration.

**Prerequisite:** LIS 60636, UXD 60001, UXD 60002, UXD 60101, UXD 60103, UXD 60104 and UXD 60106; a minimum cumulative 3.000 GPA; and Graduate standing.

**Schedule Type:** Masters Thesis

**Contact Hours:** 2-6 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UXD 66299 THESIS II 2 Credit Hours**

Thesis students must continue registration each semester until all degree requirements are met.

**Prerequisite:** UXD 66199 and Graduate standing and special approval.

**Schedule Type:** Masters Thesis

**Contact Hours:** 2 other

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UXD 80001 USER EXPERIENCE DESIGN PRINCIPLES AND CONCEPTS 3 Credit Hours**

(Slashed with UXD 60120) Students explore the context in which User Experience Design exists and the various methods employed by designers in various fields related to design research, the generation of ideas and implementation of designs. Students are introduced to methods of design evaluation and to the conceptual framework of the related curricula.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 80002 USER EXPERIENCE DESIGN IN PRACTICE 3 Credit Hours**

(Slashed with UXD 60002) Students learn and employ methods for engaging in creative problem solving. Introduce students to design research methods and current research on human behavior as it applies to user experience design. A core set of design deliverables are examined. Students begin to develop individual portfolio materials.

**Prerequisite:** UXD 80001 with a minimum grade of C (2.000); and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 80101 INFORMATION ARCHITECTURE I 3 Credit Hours**

(Slashed with UXD 60101) Introduction to the fundamental concepts and practices of information architecture (IA). Students develop practical skills for comparing, analyzing, critiquing and designing information architectures. Major topics include organization, navigation, labeling, search and other core IA concepts. Students learn to create blueprints, wireframes, process flows and other documents used to communicate an information architecture design.

**Prerequisite:** UXD 80001 with a minimum grade of C (2.000); and UXD 80002 with a minimum grade of C (2.000); and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 80103 RESEARCHING THE USER EXPERIENCE I 3 Credit Hours**

(Slashed with UXD 60103) Design research seeks to understand user needs, goals and tasks. Deals with research methods for human-centered design of information-rich artifacts and experiences. Covers interviews, surveys, diary studies and other methods applicable to the formative stages of the design process. Students learn to distill research findings into audience segments, user profiles, personas, scenarios and other documents that model user behavior.

**Prerequisite:** UXD 80001 with a minimum grade of C (2.000); UXD 80002 with a minimum grade of C (2.000); and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 80104 USABILITY I 3 Credit Hours**

(Slashed with UXD 60104) Provides a conceptual and practical overview of the processes and methods of usability testing, such as Think Aloud protocols, performance measurements and eye-tracking analysis. Actual usability testing is performed, using quantitative and qualitative methods and employing current and emerging software tools to facilitate data collection and analysis.

**Prerequisite:** UXD 80001 and UXD 80002 and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 80106 CONTENT STRATEGY I 3 Credit Hours**

(Slashed with UXD 60106) Introduces the field of content strategy and its relationship to user experience design. Includes history and practices of content strategy, how to analyze user needs for content, the production of written materials related to content strategy, and content audits and governance models. This course is the conceptual basis behind content strategy.

**Prerequisite:** UXD 80001; and UXD 80002; and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 80111 INFORMATION ARCHITECTURE II 3 Credit Hours**

(Slashed with UXD 60111) Web site design from emerging directions, such as the separation of content from presentation, with e.g., the use of Cascading Style Sheets (CSS) for formatting web-based documents. The course includes considerations of making web sites compliant with federal regulations or other standards and validation for various markup guidelines.

**Prerequisite:** UXD 80001 with a minimum grade of C (2.000); and UXD 80002 with a minimum grade of C (2.000); and UXD 80101 with a minimum grade of C (2.000); and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 80113 RESEARCHING THE USER EXPERIENCE II 3 Credit Hours**

(Slashed with UXD 60113) In order to design and develop effective user interfaces, task analysis process and theory are explored and applied via principles drawn from anthropology, ethnography, cognitive psychology, document and instruction systems design and market research. Practical techniques and methodologies are presented to improve interface design through all phases of the design process.

**Prerequisite:** UXD 80001 with a minimum grade of C (2.000); and UXD 80002 with a minimum grade of C (2.000); and UXD 80103 with a minimum grade of C (2.000); and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 80114 USABILITY II 3 Credit Hours**

(Slashed with UXD 60114) Provides students with an understanding of qualitative and quantitative research methods appropriate for conducting advanced studies of human interaction with computers. In addition, students learn how to evaluate, purchase, implement and operate equipment for usability labs in a manner consistent with research methods.

**Prerequisite:** UXD 80001, UXD 80002 and UXD 80104; and Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**UXD 80691 SEMINAR IN USER EXPERIENCE DESIGN 1-3 Credit Hours**

(Repeatable for credit) Advanced research by students who are qualified to examine problems of certain special areas related to concentrations of study in user experience design.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Seminar

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter

**UXD 81095 SPECIAL TOPICS IN USER EXPERIENCE DESIGN 1-3 Credit Hours**

(Repeatable for credit) Offered irregularly as resources and or opportunities permit. Topics could include current or emerging issues in user experience design.

**Prerequisite:** Doctoral standing.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**UXD 81096 INDIVIDUAL INVESTIGATION IN USER EXPERIENCE DESIGN 1-3 Credit Hours**

Research or individual investigation for doctoral level students.

**Prerequisite:** Doctoral standing and special approval.

**Schedule Type:** Individual Investigation

**Contact Hours:** 3-9 other

**Grade Mode:** Standard Letter-IP