# 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

- Applied Data and Information
- User Experience Design

## Graduate Programs

- Health Informatics - M.S.
- Knowledge Management - M.S.
- Library and Information Science - M.L.I.S.
- School Library Media K-12 - M.L.I.S.
- School Library Media Licensure (Non-Degree)
- User Experience - M.S.

## Certificates

- Health Informatics - Graduate Certificate
- Knowledge Management - Graduate Certificate
- Medical Librarianship - Graduate Certificate

## School of Information Faculty

- Albright, Kendra S. (2016), Professor, Ph.D., University of Tennessee-Knoxville, 2002
- Boon, Belinda (2006), Professor, Ph.D., University of Texas, Austin, 2006
- Gracy, Karen (2007), Professor, Ph.D., University of California-Los Angeles, 2001
- Hajibayova, Lala (2014), Associate Professor, Ph.D., Indiana University, Bloomington, 2014
- Harper, Sarah M. (2001), Professor, Ph.D., Kent State University, 2003
- Martens, Marianne (2012), Professor, Ph.D., Rutgers University, 2012
- Matteson, Miriam L. (2012), 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
- Salaba, Athena (1993), Professor, Ph.D., University of Wisconsin-Madison, 2005
- Smith, Catherine L. (2010), Associate Professor, Ph.D., Rutgers University, 2010
- Soyka, Heather (2017), Associate Professor, Ph.D., University of Pittsburgh, 2015
- Stahr, MaryAnn A. (1998), Assistant Professor, Ph.D., Kent State University, 2008
- Yoo, Dong Whi (2023), Assistant Professor, M.S., Georgia Institute of Technology, 2018
- 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**
(Slashed with HI 80401) This introductory course is a survey course that acts as a foundation for all other courses in the Health Informatics program. Basic concepts of Health Informatics are emphasized throughout. The course targets students who at some point in their career will oversee or have direct input on one of the highest expenditure areas for health care organizations--the planning, selection, deployment and management of electronic medical records (EMR), management decision-support and tracking systems (DSS) and other health information technologies (health IT).
**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) This course provides students with an introduction to the fundamentals of law for Health Informatics and Information Management. Components of learning will include general legal principles and regulatory issues in the U.S. healthcare system. Primary topics will include ethical issues, consideration of state laws and the Federal Health Insurance Portability and Accountability Act (HIPAA), privacy and security rules. Through discussion board and writing assignments, students will demonstrate understanding of practical issues of health information access, its use and disclosure, and the legal and regulatory consequences associated with breaches of health information confidentiality and security. We will explore some of the special legal issues with electronic health records (EHR) and health information exchange; secondary uses of health information; compliance; and related ethics issues.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**HI 60403    HEALTH INFORMATION SYSTEMS    3 Credit Hours**
(Slashed with HI 80403) 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.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**HI 60410    HEALTH RECORDS MANAGEMENT    3 Credit Hours**
(Slashed with HI 80410) This course examines Health Information Management, the role of the HIM professional in the context of the health system and the role of the health record. The role of information management and documentation principles is essential to the successful application of technology and ensuring an effective health information infrastructure. The course discusses confidentiality, privacy, security, reliable standards, data integrity, quality, governance, and ethical principles that make health care information of use for organizations and individuals.
**Prerequisite:** Graduate standing.
**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 that are standard setters in the industry.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**HI 60412    CLINICAL DECISION SUPPORT    3 Credit Hours**
(Slashed with HI 80412) 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:** 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:** 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.
**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:** 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**
(Slashed with HI 80416) 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. Course's primary focus is on the United States, but international approaches are also be discussed. Legislation affecting health information technology area are 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 also are discussed, including structure of health administrative and delivery systems, assessment of population health, models of health care delivery, access and quality of care.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**HI 60417    PUBLIC HEALTH INFORMATICS    3 Credit Hours**
(Slashed with HI 80417) 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:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**HI 60418    CLINICAL ANALYTICS II    3 Credit Hours**
As the volume and complexity of health data continues to grow, analysis of that data requires more advanced tools to transform that data into meaningful information for clinical decisions. Not only is data from electronic medical records (EMRs) growing at a rapid pace but new types of data are available for analysis, such as, genomic data and patient generated data. These advanced analytic tools break down into three areas, each of which will be examined in this course: new data warehousing techniques to manage big data, new analytic tools including cognitive computing and predictive analytics and new ways to visualize the data. All of these techniques transform the raw data into use cases, such as, population health, precision medicine and clinical decision support using artificial intelligence and machine learning which will also be addressed in this course.
**Prerequisite:** HI 60411; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**HI 60419    CONSUMER HEALTH INFORMATICS    3 Credit Hours**
This course examines the history and current trends in consumer health informatics, examining how patients and healthcare stakeholders manage health in the digital age. The evolution of health information technology has expanded the role of the patient to include being a consumer of healthcare, bringing with it more capabilities and responsibilities. The course will discuss health information and communication technologies and their influence on health care for patients, affecting health information seeking behaviors and expectations among multiple stakeholder groups. The course will discuss US and global perspectives for health information professionals serving health information needs in the community and in medical, academic, and public libraries.
**Prerequisite:** 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) (Slashed with HI 80691) Advanced research by students who are qualified to examine problems of certain special areas 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 M.S. degree in health informatics is 4 semester hours.
**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**
(Repeatable for credit) 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).
**Prerequisite:** Graduate standing; and special approval.
**Schedule Type:** Practical Experience
**Contact Hours:** 6.66-10 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HI 61095    SPECIAL TOPICS IN HEALTH INFORMATICS    1-3 Credit Hours**
(Repeatable for credit) (Slashed with HI 81095) 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 master's degree.
**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.
**Prerequisite:** HI 60401, HI 60402, HI 60403, HI 60410, HI 60411, HI 60414 and HI 60636; and minimum 3.000 overall GPA; and graduate standing; and special approval.
**Schedule Type:** Practical Experience
**Contact Hours:** 10 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HI 66099    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.
**Prerequisite:** HI 60401, HI 60402, HI 60403, HI 60410, HI 60411, HI 60414 and HI 60636; and minimum overall 3.000 GPA; and graduate standing; and special approval.
**Schedule Type:** Project or Capstone
**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 Health Informatics master's degree.
**Prerequisite:** HI 60401, HI 60402, HI 60403, HI 60410, HI 60411, HI 60414 and HI 60636; and minimum 3.000 overall GPA; and graduate standing; and special approval.
**Schedule Type:** Research
**Contact Hours:** 9 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HI 66199    THESIS I    2-6 Credit Hours**
(Repeatable for credit) Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester distributed over several semesters if desired.
**Prerequisite:** HI 60401, HI 60402, HI 60403, HI 60410, HI 60411, HI 60414 and HI 60636; and minimum 3.000 overall GPA; and graduate standing; and special approval.
**Schedule Type:** Masters Thesis
**Contact Hours:** 6-18 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HI 66299    THESIS II    2 Credit Hours**
(Repeatable for credit) Thesis students must continue registration each semester until all degree requirements are met.
**Prerequisite:** HI 66199; and graduate standing; and special approval.
**Schedule Type:** Masters Thesis
**Contact Hours:** 6 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HI 80401    HEALTH INFORMATICS MANAGEMENT    3 Credit Hours**
(Slashed with HI 60401) This introductory course is a survey course that acts as a foundation for all other courses in the Health Informatics program. Basic concepts of Health Informatics are emphasized throughout. The course targets students who at some point in their career will oversee or have direct input on one of the highest expenditure areas for health care organizations--the planning, selection, deployment, and management of electronic medical records (EMR), management decision-support and tracking systems (DSS), and other health information technologies (health IT).
**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) This course provides students with an introduction to the fundamentals of law for Health Informatics and Information Management. Components of the learning will include general legal principles and regulatory issues in the U.S. healthcare system. Primary topics will include ethical issues, consideration of state laws and the Federal Health Insurance Portability and Accountability Act (HIPAA), privacy and security rules. Through discussion board and writing assignments, students will demonstrate understanding of practical issues of health information access, its use and disclosure, and the legal and regulatory consequences associated with breaches of health information confidentiality and security. We will explore some of the special legal issues with electronic health records (EHR) and health information exchange; secondary uses of health information; compliance; and related ethics issues.
**Prerequisite:** Doctoral standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**HI 80403    HEALTH INFORMATION SYSTEMS    3 Credit Hours**
(Slashed with HI 60403) 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:** Doctoral standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**HI 80410   HEALTH RECORDS MANAGEMENT    3 Credit Hours**
(Slashed with HI 60410) This course examines Health Information Management, the role of the HIM professional in the context of the health system and the role of the health record. The role of information management and documentation principles is essential to the successful application of technology and ensuring an effective health information infrastructure. The course discusses confidentiality, privacy, security, reliable standards, data integrity, quality, governance, and ethical principles that make health care information of use for organizations and individuals.
**Prerequisite:** 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 that are standard setters in the industry.
**Prerequisite:** 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:** 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:** 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:** 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:** Doctoral standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**HI 80416   HEALTH INFORMATICS ISSUES: POLICY, POLITICS AND ETHICS    3 Credit Hours**
(Slashed with HI 60416) 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. Course's primary focus is on the United States, but international approaches are also be discussed. Legislation affecting health information technology area are 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 also are discussed, including structure of health administrative and delivery systems, assessment of population health, models of health care delivery, access and quality of care.
**Prerequisite:** Doctoral standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**HI 80417    PUBLIC HEALTH INFORMATICS    3 Credit Hours**
(Slashed with HI 60417) 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:** Doctoral standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**HI 80691    SEMINAR IN HEALH INFORMATICS    1-3 Credit Hours**
(Repeatable for credit) (Slashed with HI 60691) Advanced research by students who are qualified to examine problems of certain special areas 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) (Slashed with HI 61095) 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**
(Repeatable for credit). Research or individual investigation in areas not covered by the existing curriculum for doctoral level students. Deliverables determined with instructor of record.
**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) An introduction to the field of Knowledge Management (KM) with particular attention given to KM practices in various environments such as business, government, the military, non-profits, education, communities and societies. This course will provide students with an understanding of the nature of knowledge, core KM principles, KM processes, the KM life cycle, KM social and technological tools, KM's effects and effectiveness, KM ethics, KM strategy and significant KM issues such as culture, and innovation. Covers principles of collection versus connection as to knowledge.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**KM 60302    DESIGNING AND IMPLEMENTING KNOWLEDGE MANAGEMENT IN THE WORKPLACE    3 Credit Hours**
(Slashed with KM 80302). This course will explore how to effectively create a Knowledge Management (KM) program, including learning about factors that can lead to either success or failure. Two broad areas of focus will include purposeful collaboration and effective networking. This course will cover a complete KM program methodology starting from the initial steps to form a KM program and how to create an implementation plan to give any organization the greatest chance to go from strategy to action to sustainability.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**KM 60303    KNOWLEDGE METRICS AND ASSESSMENT    3 Credit Hours**
(Slashed with KM 80303) Learn how to design, build, and operate a measurement strategy that evaluates the effectiveness of a Knowledge Management (KM) program and its components in achieving business objectives. The course provides an overview of overall organization measurement approaches (e.g., focus groups, interviews, surveys) and applies them in a KM context (e.g., KM Maturity Model, Communities of Practice, Search, Expert Finding). Students will also learn how to tailor their presentation of resulting metrics for specific audiences (KM practitioner, business leader, etc.). Students will apply what they have learned to develop a measurement strategy using case studies.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**KM 60305   COMMUNITIES OF PRACTICE   3 Credit Hours**
(Slashed with KM 80305) This course will explore communities and community management from a practical perspective. It will enable students to learn how knowledge management leaders launch and lead communities of practice programs as part of their initiatives. Students will learn how community managers do their jobs successfully through applying proven practices for creating and cultivating communities. The course exposes students to the fundamental concepts and principles of communities of practice and includes real life case studies. Students will complete a course project pertaining to community of practice evaluation.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**KM 60306   THOUGHT LEADERSHIP AND CAREER DEVELOPMENT IN KNOWLEDGE MANAGEMENT   1 Credit Hour**
(Slashed with KM 80306) Students will develop thought leadership strategies and innovative ideas to build their professional agenda and guide career planning. Students will review their knowledge of business from a knowledge management perspective and identify related career path options. Students will share their career options to help determine their M.S. program plan.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 1 lecture
**Grade Mode:** Standard Letter

**KM 60308   EMERGING TECHNOLOGIES IN KNOWLEDGE MANAGEMENT   3 Credit Hours**
(Slashed with KM 80308) Explores the various emerging digital technologies and their application to the digital workplace that complement the human aspects of knowledge management. Work process digitalization is accelerating and artificial intelligence and mixed reality devices are critical technologies that will allow knowledge management professionals to deliver instant, relevant knowledge in the context of the work for both field and knowledge workers. Includes real life case studies of pioneers of emerging digital technologies.
**Prerequisite:** 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 C grade; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**KM 60312   STRATEGIC INTELLIGENCE   3 Credit Hours**
(Slashed with KM 80312) This course is an introduction to strategic intelligence, consisting of competitive and business intelligence. Strategic intelligence is both art and science, used for critical decision-making, planning and response. Businesses and governments require effective intelligence programs, processes and tools, to track competitors, markets and trends by acquiring, organizing, analyzing and disseminating intelligence. Students will learn about the intelligence cycle, needs analysis and intelligence analysis resources, techniques and technologies.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**KM 60316   ORGANIZATIONAL CULTURE ASSESSMENT   3 Credit Hours**
(Slashed with KM 80316) In this course, students will examine 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 in this course. Students conduct an organizational culture assessment.
**Prerequisite:** 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:** BA 64036 or EMAT 64210 or KM 60301; 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) (Slashed with KM 80691) Advanced research by students who are qualified to examine problems of certain special areas 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.
**Prerequisite:** Graduate standing.
**Schedule Type:** Workshop
**Contact Hours:** 1-3 other
**Grade Mode:** Satisfactory/Unsatisfactory

**KM 61095    SPECIAL TOPICS IN KNOWLEDGE MANAGEMENT    1-3 Credit Hours**
(Repeatable for credit) (Slashed with KM 81095) 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.
**Prerequisite:** KM 60301, KM 60302, KM 60306, LIS 60636 and MGMT 64158; and a minimum 3.000 overall GPA; and graduate standing; and special approval.
**Schedule Type:** Practical Experience
**Contact Hours:** 9 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**KM 66099    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.
**Prerequisite:** KM 60301, KM 60302, KM 60306, LIS 60636 and MGMT 64158; and minimum 3.000 overall GPA; and graduate standing; and special approval.
**Schedule Type:** Project or Capstone
**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 Knowledge Management master's degree.
**Prerequisite:** KM 60301, KM 60303, KM 60306, LIS 60636 and MGMT 64158; and minimum 3.000 overall GPA; and graduate standing; and special approval.
**Schedule Type:** Master's Project
**Contact Hours:** 9 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.
**Prerequisite:** KM 60301, KM 60302, KM 60306, LIS 60636; MGMT 64158; and minimum 3.000 overall GPA; and graduate standing; and special approval.
**Schedule Type:** Masters Thesis
**Contact Hours:** 6-18 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:** 6 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**KM 80301    FOUNDATIONAL PRINCIPLES OF KNOWLEDGE MANAGEMENT    3 Credit Hours**
(Slashed with KM 60301) An introduction to the field of Knowledge Management (KM) with particular attention given to KM practices in various environments such as business, government, the military, non-profits, education, communities, and societies. This course will provide students with an understanding of the nature of knowledge, core KM principles, KM processes, the KM life cycle, KM social and technological tools, KM's effects and effectiveness, KM ethics, KM strategy, and significant KM issues such as culture, and innovation. Covers principles of collection versus connection as to knowledge.
**Prerequisite:** Doctoral standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**KM 80302    DESIGNING AND IMPLEMENTING KNOWLEDGE MANAGEMENT IN THE WORKPLACE    3 Credit Hours**
(Slashed with KM 60302). This course will explore how to effectively create a Knowledge Management (KM) program, including learning about factors that can lead to either success or failure. Two broad areas of focus will include purposeful collaboration and effective networking. This course will cover a complete KM program methodology starting from the initial steps to form a KM program and how to create an implementation plan to give any organization the greatest chance to go from strategy to action to sustainability.
**Prerequisite:** Doctoral standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**KM 80303    KNOWLEDGE METRICS AND ASSESSMENT    3 Credit Hours**
(Slashed with KM 60303) Learn how to design, build, and operate a measurement strategy that evaluates the effectiveness of a Knowledge Management (KM) program and its components in achieving business objectives. The course provides an overview of overall organization measurement approaches (e.g., focus groups, interviews, surveys) and applies them in a KM context (e.g., KM Maturity Model, Communities of Practice, Search, Expert Finding). Students will also learn how to tailor their presentation of resulting metrics for specific audiences (KM practitioner, business leader, etc.). Students will apply what they have learned to develop a measurement strategy using case studies.
**Prerequisite:** 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) This course will explore communities and community management from a practical perspective. It will enable students to learn how knowledge management leaders launch and lead communities of practice programs as part of their initiatives. Students will learn how community managers do their jobs successfully through applying proven practices for creating and cultivating communities. The course exposes students to the fundamental concepts and principles of communities of practice, and includes real life case studies. Students will complete a course project pertaining to community of practice evaluation.
**Prerequisite:** Doctoral standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**KM 80306    THOUGHT LEADERSHIP AND CAREER DEVELOPMENT IN KNOWLEDGE MANAGEMENT    1 Credit Hour**
(Slashed with KM 60306). Students will develop thought leadership strategies and innovative ideas to build their professional agenda and guide career planning. Students will review their knowledge of business from a knowledge management perspective and identify related career path options.
**Prerequisite:** Doctoral standing.
**Schedule Type:** Lecture
**Contact Hours:** 1 lecture
**Grade Mode:** Standard Letter

**KM 80308    EMERGING TECHNOLOGIES IN KNOWLEDGE MANAGEMENT    3 Credit Hours**
(Slashed with KM 60308) Explores the various emerging digital technologies and their application to the digital workplace that complement the human aspects of knowledge management. Work process digitalization is accelerating and artificial intelligence and mixed reality devices are critical technologies that will allow knowledge management professionals to deliver instant, relevant knowledge in the context of the work for both field and knowledge workers. Includes real life case studies of pioneers of emerging digital technologies.
**Prerequisite:** 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    STRATEGIC INTELLIGENCE    3 Credit Hours**
(Slashed with KM 60312) This course is an introduction to strategic intelligence, consisting of competitive and business intelligence. Strategic intelligence is both art and science, used for critical decision-making, planning and response. Businesses and governments require effective intelligence programs, processes and tools, to track competitors, markets and trends by acquiring, organizing, analyzing and disseminating intelligence. Students will learn about the intelligence cycle, needs analysis and intelligence analysis resources, techniques and technologies.
**Prerequisite:** KM 80301 with a minimum C grade; 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) In this course, students will examine 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 in this course. Students conduct an organizational culture assessment.
**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 MANAGEMENT    1-3 Credit Hours**
(Repeatable for credit) (Slashed with KM 60691) Advanced research by students who are qualified to examine problems of certain special areas 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) (Slashed with KM 61095) 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**
(Repeatable for credit). Research or individual investigation in areas not covered by the existing curriculum for doctoral level students. Deliverables determined with instructor of record.
**Prerequisite:** Doctoral standing; and special approval.
**Schedule Type:** Individual Investigation
**Contact Hours:** 3-9 other
**Grade Mode:** Standard Letter-IP

# Library and Information Science (LIS)

**LIS 10010    INFORMATION FLUENCY FOR COLLEGE SUCCESS    3 Credit Hours**
Course teaches information-seeking skills critical to college success, enabling students to become information fluent—able to formulate a research question; locate, evaluate and synthesize information from a variety of contexts, including scholarly and other resources; use information effectively and ethically in academic research; and become active contributors to scholarship.
**Prerequisite:** None.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 20600    APPLIED DATA AND INFORMATION FUNDAMENTALS    3 Credit Hours**
This course provides an introduction to data science from an information science perspective. Key elements include the role and impact of data on people and society; the disciplinary and interdisciplinary nature of data science; the information science approach to data in an applied area; the stages of data in the data lifecycle; basic knowledge and skills associated with various stages of the data lifecycle; data-related standards, principles, and best practices to make data more accessible, discoverable, retrievable, and usable; and human-centered, ethical, and contextual considerations of data.
**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**
This course is designed to help students understand, navigate and become full participants in information society. It goes beyond basic library and internet skills to highlight issues specific to professional information environments. Emphasis is placed on acknowledging the contextual, dynamic and fluid nature of information to further understand it as a process, commodity and entity. Students will examine and critically reflect on the value of using multiple information resources and emerging technologies to fill gaps in academic, professional and personal information contexts.
**Prerequisite:** None.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 40645    DATABASE FUNDAMENTALS FOR INFORMATION PROFESSIONALS    3 Credit Hours**
(Slashed with LIS 50645) Characteristics and concepts of database; different types of database models; conceptual database design and implementation; the relational database model and its application in practice for information professionals: key issues, principles, and techniques; data storage, processing, retrieval, analysis, and reporting.
**Prerequisite:** None.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 40646    RESEARCH DATA MANAGEMENT    3 Credit Hours**
(Slashed with LIS 50646) This course introduces students to current and historical issues and practice in the creation, management, curation, access and reuse of research data. Other related topics to be addressed include systems and standards for collecting, curating and preserving research data across different disciplines and contexts. Students will develop the skills to create actionable data management plans, to support sustainable projects and to work with researchers to build, access and maintain data infrastructures. Students will have the opportunity to apply some basic principles in their respective disciplinary interests.
**Prerequisite:** None.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 40647    INTRODUCTION TO DIGITAL HUMANITIES    3 Credit Hours**
(Slashed with LIS 50647) Provides students with a greater understanding of how new forms of knowledge production and representation, computational thinking and applications of various information and digital technologies have impacted research and pedagogy in humanities disciplines. Special attention is given to how information professionals can support and promote digital humanities work. Students have the opportunity to explore, apply and critique the technologies, tools, methods and values of the digital humanities field.
**Pre/corequisite:** LIS 40645.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 40693    VARIABLE TITLE WORKSHOP IN INFORMATION STUDIES    1-3 Credit Hours**
(Repeatable for credit) Intensive examination of special topics of interest in information studies.
**Prerequisite:** Junior or senior standing.
**Schedule Type:** Workshop
**Contact Hours:** 1-3 other
**Grade Mode:** Satisfactory/Unsatisfactory

**LIS 41095    SELECTED TOPICS IN INFORMATION STUDIES    1-3 Credit Hours**
(Repeatable for credit) 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

**LIS 50645    DATABASE FUNDAMENTALS FOR INFORMATION PROFESSIONALS    3 Credit Hours**
(Slashed with LIS 40645) Characteristics and concepts of database; different types of database models; conceptual database design and implementation; the relational database model and its application in practice for information professionals: key issues, principles, and techniques; data storage, processing, retrieval, analysis, and reporting.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 50646    RESEARCH DATA MANAGEMENT    3 Credit Hours**
(Slashed with LIS 40646) This course introduces students to current and historical issues and practice in the creation, management, curation, access and reuse of research data. Other related topics to be addressed include systems and standards for collecting, curating and preserving research data across different disciplines and contexts. Students will develop the skills to create actionable data management plans, to support sustainable projects and to work with researchers to build, access and maintain data infrastructures. Students will have the opportunity to apply some basic principles in their respective disciplinary interests.
**Prerequisite:** LIS 60510; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 50647    INTRODUCTION TO DIGITAL HUMANITIES    3 Credit Hours**
(Slashed with LIS 40647) Provides students with a greater understanding of how new forms of knowledge production and representation, computational thinking and applications of various information and digital technologies have impacted research and pedagogy in humanities disciplines. Special attention is given to how information professionals can support and promote digital humanities work. Students have the opportunity to explore, apply and critique the technologies, tools, methods and values of the digital humanities field.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 50693    VARIABLE TITLE WORKSHOP IN INFORMATION STUDIES    1-3 Credit Hours**
(Repeatable for credit) Maximum workshop credit accepted for M.L.I.S. degree is 4 credit hours. Intensive examination of special topics of interest to current M.L.I.S. students and practicing librarians, archivists and museum studies professionals.
**Prerequisite:** Graduate standing.
**Schedule Type:** Workshop
**Contact Hours:** 1-3 other
**Grade Mode:** Satisfactory/Unsatisfactory

**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.
**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.
**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.
**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.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60099    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 60030; and LIS 60020 or LIS 60624; and LIS 60040 or LIS 60607; and 27 credit hours of graduate coursework; and graduate standing.
**Pre/corequisite:** LIS 60050.
**Schedule Type:** Lecture, Project or Capstone
**Contact Hours:** 1 lecture
**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.
**Prerequisite:** LIS 60020 and LIS 60030 and LIS 60040 and LIS 60050; and minimum 3.000 overall GPA; and 24 hours of LIS coursework; and graduate standing; and special approval.
**Schedule Type:** Masters Thesis
**Contact Hours:** 6-18 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**LIS 60299    THESIS II    2 Credit Hours**
(Repeatable for credit) Thesis students must continue registration each semester until all degree requirements are met.
**Prerequisite:** LIS 60199; and graduate standing; and special approval.
**Schedule Type:** Masters Thesis
**Contact Hours:** 6 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**LIS 60401    LEADERSHIP IN LIBRARIES AND INFORMATION CENTERS    3 Credit Hours**
This course will review the concept of leadership while delving into its relationship to and differences from management, and its application in the personal and professional lives of information professionals. Beginning with an examination of personal leadership styles, the course will review the major philosophies of leadership thought that affect the library and information fields, the role of mentors, team building, project management, the moral and ethical responsibilities of leading others and leading through change in the information world.
**Prerequisite:** LIS 60040; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**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.
**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**
Introduction to use and evaluation of basic sources of reference information, in-house and online; 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    RESOURCE DESCRIPTION AND ACCESS    3 Credit Hours**
Theoretical foundation, principles, core concepts, and practical application of current standards and conceptual models for the description (descriptive cataloging) of a variety of resources in information institutions. Topics include history and principles of descriptive cataloging standards, best practices documentation, resource discovery, authority work, encoding standards and structures, linked data, ethical issues, as well as current topics in resource description and access, such as emerging technologies and future directions.
**Prerequisite:** LIS 60020; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60603    SUBJECT ANALYSIS, REPRESENTATION AND ACCESS    3 Credit Hours**
(Slashed with LIS 80603) The course focuses on the theories, principles, and practices of subject analysis of the intellectual content of information resources and its representation through controlled vocabularies and classification. It covers fundamental concepts of aboutness, vocabulary control, classification theory, ethical considerations, and the theoretical foundations, structure, and the application of major subject vocabularies (LCSH), classification schemes (DDC and LCC), and other knowledge organization systems, including genre/form and named entity management. The course also includes examinations of authority control for subject headings.
**Prerequisite:** LIS 60020; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60607    SCHOOL LIBRARY MANAGEMENT    3 Credit Hours**
School Library Management focuses on theoretical and practical aspects of school library management. This course provides a foundation for the completion of a successful culminating experience practicum and licensure exam for School Library Media licensure K-12. The course content delivery, exploration activities and completion of assignments have been aligned with state of Ohio and the American Association of School Librarians national school library media standards and guidelines. This course includes 10 hours of practical experience.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60608    THE PUBLIC LIBRARY    3 Credit Hours**
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**
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.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60612    LIBRARY MATERIALS AND SERVICES FOR ADULTS    3 Credit Hours**
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.
**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 and research 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    COLLECTION MANAGEMENT IN LIBRARIES    3 Credit Hours**
Principles of collection development and management for public, academic, school and special libraries, including maintenance (weeding and analysis), needs assessment, acquisitions, e-resources, licensing, and preservation.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60615    THE ACADEMIC LIBRARY    3 Credit Hours**
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**
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 60617    INFORMATION LITERACY FOR YOUTH    3 Credit Hours**
This course is intended to guide graduate students in creating and providing information literacy instruction for youth in school and public libraries. This course includes 10 hours of practical experience.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60618    INFORMATION LITERACY INITIATIVES AND INSTRUCTION    3 Credit Hours**
Information literacy is an essential competency needed to navigate an information society. This course explores how to create and deliver effective information literacy instruction to post-secondary students and adult populations. Topics include a comparison of information literacy standards and frameworks; learning theories focused on adult learning; planning, creating, delivering, and assessing IL instruction activities; and developing and managing IL instruction in collaboration with key stakeholders.
**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**
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.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60624    CATALOGING FOR SCHOOL LIBRARIES    3 Credit Hours**
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.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60625    ENGAGING YOUNG CHILDREN AND FAMILIES    3 Credit Hours**
Selection and utilization of materials in relation to needs, abilities and interests of the young child.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60626    ENGAGING TEENS    3 Credit Hours**
Selection and utilization of books and materials in relation to needs, abilities and interests of teens.
**Prerequisite:** Graduate standing.
**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) This course 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. Picture book readers are also studied, from professional readers, like librarians and book reviewers, to picturebook consumers.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60629    ENGAGING SCHOOL-AGE CHILDREN    3 Credit Hours**
Selection and utilization of materials in relation to needs, abilities and interests of school age children.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60630    REFERENCE SOURCES AND SERVICES FOR YOUTH    3 Credit Hours**
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.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60631    INTRODUCTION TO DIGITAL PRESERVATION    3 Credit Hours**
(Slashed with 80631) 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 60511; 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 structures, services, and systems (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 taxonomy, thesaurus and ontology construction. Analysis and evaluation of KOS. Issues related to online display, visualization, interoperability and internationalization.
**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 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**
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**
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**
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.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60654     PRESERVATION AND CONSERVATION OF HERITAGE MATERIALS     3 Credit Hours**
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.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60655     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:** Graduate standing.
**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 60658    THEORY AND PRACTICE OF ARCHIVAL DESCRIPTION    3 Credit Hours**
This course will introduce students to the theory and practice of archival description, including 1) principles of provenance and original order, 2) hierarchical arrangement and description; 3) standards central to archival description including Describing Archives: A Content Standard (DACS), Machine Readable Cataloging (MARC), and Encoded Archival Description (EAD); 4) archival authority work, including Encoded Archival Context (EAC); and 5) subject access for archival materials. Other related topics to be addressed include approaches to description of born-digital archival records, management of description programs, design of information systems for archival description, project management and cost analyses, and community-driven archival description such as tagging and reparative description.
**Prerequisite:** LIS 60020; and graduate standing.
**Pre/corequisite:** LIS 60652.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60659    INTRODUCTION TO AUDIOVISUAL ARCHIVING    1 Credit Hour**
Introduction to the issues and challenges of preserving and providing access to archival moving image and sound material. Topics include basics of media care and handling; methods and approaches to preservation and digitization; and appraisal, description and access methods.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 1 lecture
**Grade Mode:** Standard Letter

**LIS 60665    RARE BOOKS AND SPECIAL COLLECTIONS    3 Credit Hours**
Study of the theory and practice of rare books and special collections librarianship. Topics to be addressed include identification and description of collections, history of the book, valuation, collection development, preservation, security, access and discovery, promotion and outreach, and administration of collections and resources.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60666    ETHICAL CONCERNS OF LIBRARY AND INFORMATION PROFESSIONALS    3 Credit Hours**
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 LIBRARIANSHIP AND INFORMATION SERVICES    3 Credit Hours**
Main theoretical traditions, concepts, and in-depth understanding of international librarianship (library communication on international issues) and comparative librarianship (comparative study of information services in specific contexts) through the study of international cooperation, influences, development aid, international organizations and associations, differences, major issues facing library and information services within their socio-economic, political, and cultural contexts, and innovations to solve these issues across the world.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60669    INFORMATION SERVICES FOR DIVERSE POPULATIONS    3 Credit Hours**
Explores services for diverse populations to ensure equity of access to information in a range of LIS institutional settings. Special interests or needs include sensory or mobility-impairment; learning disabilities; illiteracy; incarceration and institutionalization; demographic factors (age, race, ethnicity, socio-economic status, sexual orientation, gender identity); non-native English speakers; and homeless persons. Covers Federal regulations, materials, spaces, programs and services, professional attitudes, techniques, and technology issues.
**Prerequisite:** LIS 60030; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60671    INTRODUCTION TO CATALOGING PRINCIPLES AND PRACTICES IN MEDICAL LIBRARIES    1 Credit Hour**
This course is designed to provide students with cataloging knowledge in the area of medical librarianship. Students will learn how to apply subject analysis principles to evaluate medical resources and assign medical subject headings. This course is one course in a three, one-credit hour sequence of medical librarianship courses.
**Prerequisite:** LIS 60020; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 1 lecture
**Grade Mode:** Standard Letter

**LIS 60672    REFERENCE SOURCES AND SERVICES IN MEDICAL LIBRARIES    1 Credit Hour**
This course is intended to introduce specialized reference services and sources found in medical library settings.
**Prerequisite:** LIS 60030; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 1 lecture
**Grade Mode:** Standard Letter

**LIS 60673     MEDICAL LIBRARY MANAGEMENT AND CULTURE     1 Credit Hour**

This course introduces the environment and context of a medical library to students. The course starts with the context of the medical environment and moves to medical libraries, medical librarianship and related management issues specific to medical library environments. The course reviews typical work scenarios and requests for medical librarians.

**Prerequisite:** LIS 60040; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 1 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.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60676     TEACHING STRATEGIES AND METHODS IN SCHOOL LIBRARIES     3 Credit Hours**

Principles of teaching students including curriculum, planning instruction, assessment, fundamentals of evaluation, and reflective practice. All course content focuses on preparing teachers to instruct in the school library media center and obtain a multiage licensure in K-12 School Library Media. This course will include 65 hours of supervised experiential learning that are integrated with academic instruction and related to the student's occupational goal as a school librarian. Students are required to complete Bureau of Criminal Investigation and Identification (BCII) and Federal Bureau of Investigation (FBI) background checks and submit the results to authorized personnel at their assigned school-agency before the first day of the semester in which student teaching internship will take place.

**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60677     SEXUAL AND GENDER IDENTITY IN CHILDREN'S AND TEEN LITERATURE     1 Credit Hour**

This course focuses on both theoretical and practical aspects of providing and managing LGBTQAI+ literature and services to youth in the context of public and school libraries.

**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 1 lecture
**Grade Mode:** Standard Letter

**LIS 60678     ENGAGING CHILDREN AND TEENS WITH LATINE LITERATURE     1 Credit Hour**

This course is intended to introduce literature written by Latine authors and for Latine youth to be selected for use by informational professionals in information institutions.

**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 1 lecture
**Grade Mode:** Standard Letter

**LIS 60691     SEMINAR IN INFORMATION STUDIES     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 in information studies.

**Prerequisite:** Graduate standing.
**Schedule Type:** Seminar
**Contact Hours:** 1-3 other
**Grade Mode:** Standard Letter

**LIS 60692     INTERNSHIP IN INFORMATION AND CULTURAL HERITAGE INSTITUTIONS     2-3 Credit Hours**

(Repeatable for credit) Supervised experience of a professional nature of not less than 100 clock hours for 2 credit hours or not less than 150 clock hours for 3 credit hours in an information or cultural heritage institution. Deliverables determined with instructor of record. Maximum registration of 2-3 credit hours per semester. No more than a total of 6 credit hours of Internship or Individual Investigation or any combination of the two may count toward MLIS degree requirements.

**Prerequisite:** LIS 60040; and graduate standing; and special approval.
**Schedule Type:** Practical Experience
**Contact Hours:** 6-9 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

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

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**

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**
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:** Graduate standing.
**Pre/corequisite:** LIS 60700.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 60703     MUSEUM USERS     3 Credit Hours**
Families, individuals and students visit museums and community institutions for a variety of purposes including leisure, education and curiosity. This course introduces students to the research and theory on museum user experience using a contextual approach to understanding museum users via the personal, socio-cultural and physical. This inquiry will involve examining notions of learning, engagement, and transformative experiences of users, characteristics of users, and the social dynamics of the museum experience. In addition, this course will review several programmatic techniques and methods used in museums to increase engagement and learning for visitors and take the student through all aspects of a museum visit, from beginning to end.
**Prerequisite:** Graduate standing.
**Pre/corequisite:** LIS 60700.
**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 60617 and LIS 60626 and LIS 60629 and LIS 60630; and graduate standing; and special approval.
**Schedule Type:** Practical Experience
**Contact Hours:** 9 other
**Grade Mode:** Standard Letter-IP

**LIS 60892     CULMINATING EXPERIENCE FOR DUAL DEGREE     6 Credit Hours**
Culminating experience for students pursuing dual degree in M.Ed. and M.L.I.S. and K-12 School Library Media licensure. Must be in a supervised educational library or information center.
**Prerequisite:** ADED 62145 and CI 67310 and CI 67330 and EPSY 65524 and LIS 60030 and LIS 60050 and LIS 60617 and LIS 60630 and SPED 53050; and LIS 60607 or LIS 60040; and LIS 60020 or LIS 60624; and graduate standing; and special approval.
**Schedule Type:** Practical Experience
**Contact Hours:** 18 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**LIS 61095     SPECIAL TOPICS IN INFORMATION STUDIES     1-3 Credit Hours**
(Repeatable for credit) (Slashed with LIS 81095) Offered irregularly as resources and/or opportunities permit. Topics could include current or emerging issues in information studies. Specific topics are 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 in areas not covered by the existing curriculum for master's level graduate students. Deliverables determined with instructor of record. Maximum registration of 1-3 credit hours per semester. Students may count a maximum of 6 credit hours of individual investigation toward their MLIS degree requirements. No more than a total of 6 credit hours of Internship or Individual Investigation or any combination of the two may count toward MLIS degree requirements.
**Prerequisite:** Graduate standing; and special approval.
**Schedule Type:** Individual Investigation
**Contact Hours:** 1-3 other
**Grade Mode:** Standard Letter-IP

**LIS 80603     SUBJECT ANALYSIS, REPRESENTATION AND ACCESS     3 Credit Hours**
(Slashed with LIS 60603) The course focuses on the theories, principles, and practices of subject analysis of the intellectual content of information resources and its representation through controlled vocabularies and classification. It covers fundamental concepts of aboutness, vocabulary control, classification theory, ethical considerations, and the theoretical foundations, structure, and the application of major subject vocabularies (such as LCSH), classification schemes (such as Dewey), and other knowledge organization systems, including genre/form and named entity management. The course also includes examinations of authority control for subject headings.
**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 and research 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 80627    ART AND STORY: THE STUDY OF CHILDREN'S PICTUREBOOKS    3 Credit Hours**
(Slashed with LIS 60627) This course 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. Picture book readers are also studied, 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 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:** Doctoral standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 80635    CULTURAL HERITAGE INFORMATICS    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 structures, services and systems (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 taxonomy, thesaurus and ontology construction. Analysis and evaluation of KOS. Issues related to online display, visualization, interoperability and internationalization.
**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 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 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 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 80668    INTERNATIONAL LIBRARIANSHIP AND INFORMATION SERVICES    3 Credit Hours**
(Slashed with LIS 60668) Main theoretical traditions, concepts, and in-depth understanding of international librarianship (library communication on international issues) and comparative librarianship (comparative study of information services in specific contexts) through the study of international cooperation, influences, development aid, international organizations and associations, differences, major issues facing library and information services within their socio-economic, political, and cultural contexts, and innovations to solve these issues across the world.
**Prerequisite:** Doctoral standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**LIS 80691    SEMINAR IN INFORMATION STUDIES    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 in information studies.
**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 81095    SPECIAL TOPICS IN INFORMATION STUDIES    1-3 Credit Hours**
(Repeatable for credit) (Slashed with LIS 61095) Offered irregularly as resources and or opportunities permit. Topics could include current or emerging issues in information studies. Specific topics are 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) Research or individual investigation in areas not covered by the existing curriculum for doctoral level students. Deliverables determined with instructor of record.
**Prerequisite:** Doctoral standing; and special approval.
**Schedule Type:** Individual Investigation
**Contact Hours:** 1-3 other
**Grade Mode:** Standard Letter-IP

# User Experience (UX)

**UX 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:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**UX 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:** Graduate standing.
**Pre/corequisite:** UX 60102.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**UX 60117    USER EXPERIENCE LEADERSHIP    3 Credit Hours**
The importance of user-centered design to organizational success is increasing, and user experience professionals are moving into higher level roles within their organizations. This course will teach UX professionals about leadership, followership, the ethics of design and how to become an effective leader within an organization.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**UX 60501    INTRODUCTION TO USER EXPERIENCE    3 Credit Hours**
This course provides a comprehensive overview of User Experience (UX) from various perspectives, including the origins of UX as a professional discipline, the goals and values of UX within organizations, and elements of UX practice. It further introduces roles and contributions of specialization areas within UX, as well as the principles of user experience design. Students will develop and document their professional development goals.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**UX 60502     USER EXPERIENCE PROCESSES AND PRACTICE     3 Credit Hours**
Students engage in a structured walkthrough of the major goals, responsibilities, and elements of User Experience (UX) in an agile environment. This course introduces important models of iterative design processes and the professional practices of research, design, prototyping, testing and team communication. Students will explore personal goals for specialization in UX.
**Prerequisite:** Graduate standing.
**Pre/corequisite:** UX 60501.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**UX 60503     FUNDAMENTALS OF INTERACTION DESIGN     3 Credit Hours**
This course offers students a comprehensive understanding of interaction design principles and their practical implementation. It covers the concept of prototyping, enabling students to create their own prototypes, and refine them based on peer feedback.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**UX 60504     ACCESSIBILITY AND UNIVERSAL DESIGN     3 Credit Hours**
This course will provide user experience researchers and designers with the skills to evaluate technology accessibility, as well as an understanding of the principles of universal design and how they guide and influence the design of digital experiences
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**UX 60511     INFORMATION ARCHITECTURE FUNDAMENTALS     3 Credit Hours**
Introduction to the fundamental concepts of information architecture (IA) and underlying cognitive processes of concept structure and information categorization. Students develop practical skills for content analysis and the design and evaluation of information architectures. Major topics include organization, navigation, labeling and design for finding.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**UX 60521     DATA-DRIVEN INTERACTION FUNDAMENTALS     3 Credit Hours**
Recent technological advances, particularly in machine learning (ML) and artificial intelligence (AI), have ushered in a new era of data-driven interactions between users and technology. This course is designed to prepare students for UX careers in these data-driven environments by providing a fundamental understanding of data, databases, ML, and AI. Students will explore the future of user experience shaped by ML and AI and discuss the ethical dimensions of this evolution, including issues of fairness, accountability and transparency.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**UX 60531     DISCOVERY RESEARCH FUNDAMENTALS     3 Credit Hours**
In order to design a successful user experience, UX professionals seek to discover users' needs, goals and tasks. This course covers discovery research methods such as interviews, surveys, diary studies and other methods applicable to the formative stages of the design process.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**UX 60541     USER EXPERIENCE EVALUATION FUNDAMENTALS     3 Credit Hours**
Evaluating prototypes and products is a critical component of user experience design. This course covers qualitative and quantitative evaluation methods, such as heuristic evaluation, cognitive walkthrough, usability testing, A/B testing and experimental design. Students will learn how to choose evaluation methods, how to conduct them and how to communicate the results of evaluations.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

**UX 60691     SEMINAR IN USER EXPERIENCE     1-3 Credit Hours**
(Repeatable for credit) (Slashed with UX 80691) Advanced research by students who are qualified to examine problems of certain special areas in user experience.
**Prerequisite:** Graduate standing.
**Schedule Type:** Seminar
**Contact Hours:** 1-3 other
**Grade Mode:** Standard Letter

**UX 60693     VARIABLE TITLE WORKSHOP IN USER EXPERIENCE     1-3 Credit Hours**
(Repeatable for credit) Intensive examination of special topics of interest to those involved in user experience.
**Prerequisite:** Graduate standing.
**Schedule Type:** Workshop
**Contact Hours:** 1-3 other
**Grade Mode:** Satisfactory/Unsatisfactory

**UX 60792     ELECTIVE INTERNSHIP IN USER EXPERIENCE     2-3 Credit Hours**
(Repeatable for credit) 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).
**Prerequisite:** Graduate standing; and special approval.
**Schedule Type:** Practical Experience
**Contact Hours:** 6.33-10 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UX 61095     SPECIAL TOPICS IN USER EXPERIENCE     1-3 Credit Hours**
(Repeatable for credit) (Slashed with UX 81095) Offered irregularly as resources and or opportunities permit. Topics could include current or emerging issues in user experience.
**Prerequisite:** Graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 1-3 lecture
**Grade Mode:** Standard Letter

**UX 61096    INDIVIDUAL INVESTIGATION IN USER EXPERIENCE    1-3 Credit Hours**
(Repeatable for credit). Individual investigation in areas not covered by the existing curriculum for master's level students.
**Prerequisite:** Graduate standing; and special approval.
**Schedule Type:** Individual Investigation
**Contact Hours:** 3-9 other
**Grade Mode:** Standard Letter-IP

**UX 66080    PROFESSIONAL PORTFOLIO DEVELOPMENT 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:** UX 60504; and a minimum 3.000 overall GPA; and graduate standing; and special approval.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UX 66092    MASTER'S INTERNSHIP IN USER EXPERIENCE    3 Credit Hours**
Supervised work experience of an advanced professional nature that concentrates on developing skills in areas of user experience and integrates their knowledge from all UX courses and experiences.
**Prerequisite:** UX 60501, UX 60502, UX 60503 and UX 60504; and minimum 3.000 overall GPA; and graduate standing; and special approval.
**Schedule Type:** Practical Experience
**Contact Hours:** 9 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UX 66099    MASTERS PROJECT IN USER EXPERIENCE    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.
**Prerequisite:** UX 60501 and UX 60502 and UX 60503 and UX 60504; and minimum 3.000 overall GPA; and graduate standing; and special approval.
**Schedule Type:** Project or Capstone
**Contact Hours:** 3 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UX 66198    MASTER'S RESEARCH PAPER IN USER EXPERIENCE    3 Credit Hours**
Under the advisement of a faculty member, students will complete a research paper that serves as a culminating experience for the User Experience master's degree.
**Prerequisite:** UX 60501 and UX 60502 and UX 60503 and UX 60504; and minimum 3.000 overall GPA; and graduate standing; and special approval.
**Schedule Type:** Research
**Contact Hours:** 9 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UX 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.
**Prerequisite:** UX 60501 and UX 60502 and UX 60503 and UX 60504; and a minimum 3.000 overall GPA; and graduate standing; and special approval.
**Schedule Type:** Masters Thesis
**Contact Hours:** 6-18 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UX 66299    THESIS II    2 Credit Hours**
Thesis students must continue registration each semester until all degree requirements are met.
**Prerequisite:** UX 66199; and graduate standing; and special approval.
**Schedule Type:** Masters Thesis
**Contact Hours:** 6 other
**Grade Mode:** Satisfactory/Unsatisfactory-IP

**UX 80691    SEMINAR IN USER EXPERIENCE    1-3 Credit Hours**
(Repeatable for credit) (Slashed with UX 60691) Advanced research by students who are qualified to examine problems of certain special areas in user experience.
**Prerequisite:** Doctoral standing.
**Schedule Type:** Seminar
**Contact Hours:** 1-3 other
**Grade Mode:** Standard Letter

**UX 81095    SPECIAL TOPICS IN USER EXPERIENCE    1-3 Credit Hours**
(Repeatable for credit) (Slashed with UX 61095) Offered irregularly as resources and or opportunities permit. Topics could include current or emerging issues in user experience.
**Prerequisite:** Doctoral standing.
**Schedule Type:** Lecture
**Contact Hours:** 1-3 lecture
**Grade Mode:** Standard Letter

**UX 81096    INDIVIDUAL INVESTIGATION IN USER EXPERIENCE    1-3 Credit Hours**
(Repeatable for credit). Research or individual investigation in areas not covered by the existing curriculum for doctoral level students. Deliverables determined with instructor of record.
**Prerequisite:** Doctoral standing; and special approval.
**Schedule Type:** Individual Investigation
**Contact Hours:** 3-9 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:** None.
**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 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.
**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