LIBRARY AND INFORMATION SCIENCES (LIS)

LIS 10010 INFORMATION FLUENCY 3 Credit Hours
(Cross-listed with LIB 10010) Teaches information and technology skills critical to college success, enabling students to become information fluent–able to find and evaluate information in a variety of contexts and formats, using a variety of technologies, to achieve specific objectives in effective and socially responsible ways.
Prerequisite: none.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 30010 INFORMATION FLUENCY IN THE WORKPLACE AND BEYOND 3 Credit Hours
(Cross-listed with LIB 30010) Teaches information access, technology, and media literacy skills which enables student to become, not only information literate, but also information fluent - able to move seamlessly among multiple information sources and technologies resources to fill their informational needs, whether in the classroom or the workplace.
Prerequisite: none.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 40655 COPYRIGHT: UNDERSTANDING USER RIGHTS AND RESPONSIBILITIES 3 Credit Hours
Exploration of advanced copyright topics such as mass digitization, creative arts and other issues in fair use, library, archive and educational uses including the TEACH Act, digital first sale rights, Digital Millennium Copyright Act, and an introduction to copyright reform.
Prerequisite: None.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 40656 LICENSING OF INFORMATION PRODUCTS AND SERVICES 3 Credit Hours
Topics related to licensing of information products and services including online contract formation, software licenses (End User License Agreements), database and website terms of service, detailed understanding of common terms and conditions in license agreements and an introduction to music licensing and Creative Commons licensing.
Prerequisite: None.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 40693 VARIABLE TITLE WORKSHOP-LIBRARY AND INFORMATION SCIENCE 1-3 Credit Hours
(Repeatable for credit)Intensive examination of special topics of interest.
Prerequisite: Junior or senior standing and special approval.
Schedule Type: Workshop
Contact Hours: 1-3 other
Grade Mode: Satisfactory/Unsatisfactory

LIS 41095 SELECTED TOPICS IN LIBRARY SCIENCE 1-3 Credit Hours
(Repeatable for credit)Topics will be announced in schedule of classes. Offered irregularly as resources and opportunities permit.
Prerequisite: Permission.
Schedule Type: Lecture
Contact Hours: 1-3 lecture
Grade Mode: Standard Letter

LIS 50693 VARIABLE TITLE WORKSHOP-LIBRARY AND INFORMATION SCIENCE 1-3 Credit Hours
(Repeatable for credit)Maximum workshop credit accepted for MLIS degree is 4 semester hours. Intensive examination of special topics of interest to practicing librarians.
Prerequisite: Graduate standing.
Schedule Type: Workshop
Contact Hours: 1-3 other
Grade Mode: Satisfactory/Unsatisfactory

LIS 60000 TOOLS FOR MASTER OF LIBRARY AND INFORMATION SCIENCE SUCCESS 1 Credit Hour
Provides an overview of the MLIS program and LIS professions. Teaches basic social, communication, and technology skills to succeed in the MLIS program and beyond.
Prerequisite: graduate standing.
Schedule Type: Lecture
Contact Hours: 1 lecture
Grade Mode: Satisfactory/Unsatisfactory

LIS 60001 ACCESS TO INFORMATION 3 Credit Hours
(Slashed with LIS 80001) Examination of information access issues. Topics include discussion of information needs, use of information sources and information access services. This course is not open to students in non-degree programs.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60002 ORGANIZATION OF INFORMATION 3 Credit Hours
(Slashed with LIS 80002) Introduction to the theory and practice of organizing information in various information environments. Familiarity with principles, standards, tools and current systems relating to organization of information. This course is not open to students in non-degree programs.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60003 INFORMATION TECHNOLOGY FOR LIBRARY AND INFORMATION PROFESSIONALS 3 Credit Hours
(Slashed with LIS 80003) Provides basic information technology concepts and skills necessary for library and information professionals. Topics include computer hardware and software basics; operating systems; file management; software installation and configuration; basic PC applications; information systems concepts, development and evaluation; search skills; Internet and the Web concepts, tools and applications; emerging technologies and skills. This course is not open to students in non-degree programs.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
LIS 60010 THE INFORMATION LANDSCAPE  2 Credit Hours
Exploration of the nature of information and technology in information-intensive environments. Topics to be addressed include information lifecycle processes such as production, storage, sharing, and consumption; social, cultural, economic, legal, and technological contexts for understanding information processes; the roles of information professionals and agencies, and their place in the larger information marketplace; current and emerging information technologies that shape the information economy.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 2 lecture
Grade Mode: Standard Letter

LIS 60020 INFORMATION ORGANIZATION  2 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. Pre or co-requisite: LIS 60010.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 2 lecture
Grade Mode: Standard Letter

LIS 60030 PEOPLE IN THE INFORMATION ECOLOGY  2 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. Pre or co-requisite: LIS 60010.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 2 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. Pre or co-requisite: LIS 60010.
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. Pre or co-requisite: LIS 60010.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60092 MASTER'S INTERNSHIP IN LIBRARY AND INFORMATION SCIENCE  3 Credit Hours
Under the advisement of a faculty member, students complete a professional-level internship that serves as a culminating experience for the M.L.I.S. degree. A minimum GPA of 3.000 is required for registration in this course.
Prerequisite: LIS 60000 and 60001 and 60002 and 60003 and 60600 and 60610; or LIS 60010 and LIS 60020 and LIS 60030 and LIS 60040 and LIS 60050; and 24 credit hours completed in the MLIS program; special approval; and graduate standing.
Schedule Type: Practicum or Internship
Contact Hours: 10 other
Grade Mode: Satisfactory/Unsatisfactory-IP

LIS 60098 MASTER'S PROJECT IN LIBRARY AND INFORMATION SCIENCE  3 Credit Hours
Under the advisement of a faculty member, students will complete a master's research project that serves as a culminating experience for the M.L.I.S. degree. A minimum GPA of 3.000 is required for registration in this course.
Prerequisite: LIS 60050; and LIS 60000 and 60001 and 60002 and 60003 and 60600 and 60610 or LIS 60010 and LIS 60020 and LIS 60030 and LIS 60040 and LIS 60050; and 24 credit hours completed in the MLIS program; special approval; and graduate standing.
Schedule Type: Master's Project
Contact Hours: 3 lecture
Grade Mode: Satisfactory/Unsatisfactory-IP

LIS 60198 MASTER'S INTERNSHIP IN LIBRARY AND INFORMATION SCIENCE  3 Credit Hours
Under the advisement of a faculty member, students will complete a master's research paper that serves as a culminating experience for the M.L.I.S. degree. A minimum GPA of 3.000 is required for registration in this course.
Prerequisite: LIS 60050; and LIS 60000 and 60001 and 60002 and 60003 and 60600 and 60610 or LIS 60010 and LIS 60020 and LIS 60030 and LIS 60040 and LIS 60050; and 24 credit hours completed in the MLIS program; special approval; and graduate standing.
Schedule Type: Research
Contact Hours: 10 other
Grade Mode: Satisfactory/Unsatisfactory-IP

LIS 60198 MASTER'S PAPER IN LIBRARY AND INFORMATION SCIENCE  3 Credit Hours
Under the advisement of a faculty member, students will complete a research paper that serves as a culminating experience for the M.L.I.S. degree. A minimum GPA of 3.000 is required for registration in this course.
Prerequisite: LIS 60000 and 60001 and 60002 and 60003 and 60600 and 60610 or LIS 60010 and LIS 60020 and LIS 60030 and LIS 60040 and LIS 60050; and 24 credit hours completed in the MLIS program; special approval; and graduate standing.
Schedule Type: Research
Contact Hours: 10 other
Grade Mode: Satisfactory/Unsatisfactory-IP
LIS 60199  THESIS I  2-6 Credit Hours
Thesis students must register for a total of 6 hours, 2 to 6 hours in a single semester, distributed over several semesters if desired. Students must have a minimum cumulative GPA of 3.000 to be eligible for this course. In order to qualify for graduation, graduate students must have a 3.000 cumulative GPA in all graduate courses attempted.
Prerequisite: LIS 60001; LIS 60002, LIS 60003, LIS 60010, LIS 60012; or LIS 60020 and LIS 60030 and LIS 60040 and LIS 60050; and 24 hours of LIS coursework; special approval; and graduate standing.
Schedule Type: Masters Thesis
Contact Hours: 2-6 other
Grade Mode: Satisfactory/Unsatisfactory-IP

LIS 60280  MASTER'S PORTFOLIO IN LIBRARY AND INFORMATION SCIENCE  1 Credit Hour
Completed in a student’s last semester. It will include the creation of an electronic portfolio to represent and self-evaluate the student’s experience throughout the MLIS program, considering program learning outcomes and preparation for a career in the field of library and information science.
Prerequisite: LIS 60000 and LIS 60001 and LIS 60002 and LIS 60003 and LIS 60004 and LIS 60010; or LIS 60012 and LIS 60020 and LIS 60030 and LIS 60040 and LIS 60050; and 24 credit hours completed in the MLIS program; and graduate standing; and special approval.
Schedule Type: Lecture
Contact Hours: 1 lecture
Grade Mode: Satisfactory/Unsatisfactory-IP

LIS 60299  THESIS II  2 Credit Hours
Thesis students must continue registration each semester until all degree requirements are met.
Prerequisite: LIS 60199 and graduate standing.
Schedule Type: Masters Thesis
Contact Hours: 2 other
Grade Mode: Satisfactory/Unsatisfactory-IP

LIS 60510  DIGITAL TECHNOLOGIES I: DATA FUNDAMENTALS  1 Credit Hour
The first of three one-credit courses in digital technologies, this course presents foundational knowledge on the principles that underlie digital resources and services in modern information society, with specific emphasis on data representation, encoding, formatting, and data modeling.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010; or UXD 60001; or KM 60301; or HI 60401.
Schedule Type: Lecture
Contact Hours: 1 lecture
Grade Mode: Standard Letter

LIS 60511  DIGITAL TECHNOLOGIES II: INTERNET FUNDAMENTALS  1 Credit Hour
The second of three one-credit courses in digital technologies, this course presents foundational knowledge on the principles that underlie digital resources and services in modern information society, with specific emphasis on online information systems, the Internet, and data security.
Prerequisite: graduate standing.
Pre/corequisite: LIS 60510.
Schedule Type: Lecture
Contact Hours: 1 lecture
Grade Mode: Standard Letter

LIS 60512  DIGITAL TECHNOLOGIES III: INFORMATION SYSTEMS FUNDAMENTALS  1 Credit Hour
The third of three one-credit courses in digital technologies, this course presents foundational knowledge on the principles that underlie digital resources and services in modern information society, with specific emphasis on Web-based information applications, programming logic, Linked Data, and the interpretation of data.
Prerequisite: graduate standing.
Pre/corequisite: LIS 60511.
Schedule Type: Lecture
Contact Hours: 1 lecture
Grade Mode: Standard Letter

LIS 60515  FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE  3 Credit Hours
Explores the social, philosophical and historical foundations of libraries, librarianship and other information institutions and LIS-related professions. Topics include the impact of technology on society, policy-making and the economy; an overview of types of libraries and services, locally and globally; the nature of information infrastructures; and access to and organization of information. This course is not open to students in non-degree programs.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 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, computerized and noncomputerized; reference interview and question-negotiation techniques; administration of reference and information services.
Prerequisite: LIS 60001 or LIS 60030 or LIS 80001; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60602  CATALOGING AND CLASSIFICATION I  3 Credit Hours
Principles of cataloging with emphasis on Dewey Decimal and Library of Congress Classification systems, Library of Congress subject headings, online cataloging and administration.
Prerequisite: LIS 60002 or LIS 60020; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60603  CATALOGING AND CLASSIFICATION II  3 Credit Hours
Theory and practice of providing description and access to library materials. Examples and assignments will be taken from all types of library materials print and nonprint.
Prerequisite: LIS 60002 or LIS 60020 or LIS 80002; and LIS 60602 and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60607  SCHOOL LIBRARY MANAGEMENT  3 Credit Hours
(Cross-listed with LIS 80607) Management of school libraries.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
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 or LIS 60600; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60609 MARKETING THE LIBRARY 3 Credit Hours
(Slashed with LIS 80809) Introduction to the theory and practice of marketing the library. Topics include the evaluation of customer needs, the marketing mix, merchandising, public relations, relationship marketing, and the design and development of a marketing plan for libraries.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60610 MANAGEMENT OF LIBRARIES AND INFORMATION CENTERS 3 Credit Hours
(Slashed with LIS 80610) Identifies and discusses management functions of libraries and related organizations; includes planning and decision-making, human resource management, measurement and evaluation, fiscal and project management. This course is not open to students in non-degree programs.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60611 GOVERNMENT INFORMATION SOURCES AND SERVICES 3 Credit Hours
(Slashed with LIS 80611) Library treatment of U.S. government publications with brief attention to municipal and state publications, and major documents of Great Britain, Canada and the United Nations.
Prerequisite: LIS 60001 or LIS 60030; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60612 LIBRARY MATERIALS AND SERVICES FOR ADULTS 3 Credit Hours
Recent investigations of group and individual reading habits; advisory services in various types of libraries; library programs for adult education; projection of library materials toward community.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60613 INFORMATION NEEDS, SEEKING AND USE 3 Credit Hours
Surveys theories related to people’s interactions with information. The theories covered include information context and situation, information needs, information seeking, exploration of information sources, communication and collaboration in the information search process, information use, and other interactions among people, information, and information systems.
Prerequisite: LIS 60030 and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60614 SELECTION AND ACQUISITION OF LIBRARY MATERIALS 3 Credit Hours
(Slashed with LIS 80614) Factors affecting selection in public, academic, school and special libraries (reading habits, censorship, publishing trends) community analysis, selection policies and process; selection sources; acquisitions.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
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 60600 or 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 60600 or LIS 60040; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60618 INFORMATION LITERACY INITIATIVES AND INSTRUCTION 3 Credit Hours
(Slashed with LIS 80618) Invites information professionals from any library point-of-view (school, public, academic, archives, special, etc.). Topics include definitions and history of information literacy standards and objectives, developing an information literacy agenda, library pedagogy and learning styles, information literacy needs assessment, program development and delivery, and experiential learning in library communities.
Prerequisite: LIS 60001 and LIS 60600; or LIS 60030; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
LIS 60619 LEGAL INFORMATION SOURCES AND SERVICES 3 Credit Hours
(Cross-listed with AS 43001 and AS 53001 and AS 73001 and LIS 80619)
Fundamentals of legal research methods and major sources of American legal literature in print and electronic formats as used in other disciplines. Students learn how to formulate a research plan based on legal analysis of issues using relevant, authoritative legal resources.
Prerequisite: LIS 60030 or pre- or co-requisite: LIS 60000; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60620 HEALTH INFORMATION RESOURCES 3 Credit Hours
(Cross-listed with LIS 80620) Identifies print and electronic sources of health information with emphasis on electronic sources. Medical patient and consumer health information is presented. This course is designed for the health educator, librarian, nurse or other health care professional.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60621 SOCIAL SCIENCES INFORMATION SOURCES AND SERVICES 3 Credit Hours
Content, bibliographic structure and communication patterns in the social sciences with emphasis on information sources and services in sociology, history, education, political science, anthropology, related disciplines.
Prerequisite: LIS 60001 or LIS 60030; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60622 SCIENCE/TECHNOLOGY INFORMATION SOURCES AND SERVICES 3 Credit Hours
Content, bibliographic structure and communication patterns in the sciences with emphasis on pure and applied fields, e.g., mathematics, biology, physics.
Prerequisite: LIS 60001 or LIS 60030; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60623 BUSINESS/FINANCE INFORMATION SOURCES AND SERVICES 3 Credit Hours
Historical development; applications to current business, labor, governmental, educational and sociological information needs; interpretation to executives and others; printed sources and databases.
Prerequisite: LIS 60001 or LIS 60030; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60624 CATALOGING FOR SCHOOL LIBRARIES 3 Credit Hours
(Cross-listed with LIS 80624) Organization and administration of print and non-print materials in school libraries. Application of appropriate descriptive cataloging rules, subject headings and classification policies for children’s, teen and educational materials K-12.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60625 LIBRARY MATERIALS AND SERVICES FOR YOUNG CHILDREN 3 Credit Hours
(Cross-listed with LIS 80625) Selection and utilization of materials in relation to needs, abilities and interests of the young child.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60626 LIBRARY MATERIALS AND SERVICES TO TEENS 3 Credit Hours
(Cross-listed with LIS 80626) Selection and utilization of books and materials in relation to needs, abilities and interests of teens.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60627 ART AND STORY: THE STUDY OF CHILDREN’S PICTUREBOOKS 3 Credit Hours
(Cross-listed with LIS 80627) Engages students in the study and application of art and story in children's picturebooks through the lenses of book history, publishing studies, children's book illustration and storytelling, visual literacy and visual storytelling. Readers of picturebooks are studied as well, from professional readers, like librarians and book reviewers, to picturebook consumers.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60628 HUMANITIES INFORMATION SOURCES AND SERVICES 3 Credit Hours
Philosophy, literature, fine and performing arts.
Prerequisite: LIS 60001 or LIS 60030; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60629 LIBRARY MATERIALS AND SERVICES FOR SCHOOL-AGE CHILDREN 3 Credit Hours
(Dismissed with LIS 80629) Selection and utilization of materials in relation to needs, abilities and interests of school age children.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60630 REFERENCE SOURCES AND SERVICES FOR YOUTH 3 Credit Hours
(Dismissed with LIS 80630) Organization and administration of information sources and information services for children and young adults (K-12).
Evaluation selection and utilization of print and electronic sources.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
LIS 60631  INTRODUCTION TO DIGITAL PRESERVATION  3 Credit Hours
Approaches and standards for preserving and maintaining access to
digitized and born-digital text, images, data, audiovisual information,
and web resources. Topics include longevity of digital media, selection
for preservation; formats and strategies for preservation; preservation
metadata; integrity and authenticity of digital materials; establishment
and certification of trustworthy digital repositories; risk management; and
policy development.
Prerequisite: LIS 60002 or 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
Management and preservation of digital objects and records throughout
their lifecycle. Essential technologies and standards for building and
maintaining robust, trusted digital repositories. Emphasizes the
use and reuse of scholarly data, business and government records,
cultural heritage materials, and other digital objects to create resources
supporting communities of practice in their work.
Prerequisite: LIS 60631 or 60638; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60636  KNOWLEDGE ORGANIZATION STRUCTURES, SYSTEMS AND
SERVICES  3 Credit Hours
(Slashed with LIS 80636) Introduction to various types of knowledge
organization systems, services, and structures (KOS) used in the
networked environment. Understanding of the functional philosophical,
logical, and linguistic fundamentals of KOS. Explanation of design
options, features of KOS, and procedures to be used in the thesaurus,
taxonomy and ontology construction.
Prerequisite: 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 60002 or LIS 60020; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60638  DIGITAL LIBRARIES  3 Credit Hours
Issues related to the development and maintenance of digital libraries,
including technology, collection development and management, project
management, digital preservation, user-centered design, public services,
rights management and funding.
Prerequisite: LIS 60003 or LIS 60512; and graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60639  IMPLEMENTATION OF DIGITAL LIBRARIES  3 Credit Hours
Explores issues related to implementation of digital libraries and provides
hands-on experience for student to build digital library prototypes
(small-scale) with open sourc software. Emphasis is on design and
implementation of key digital library functions, including building
digital collections, defining and creating metadata, indexing, browsing
and retrieval, customizing interface, implementing services, encoding
and transforming for data exchange, and testing the usability and
effectiveness.
Prerequisite: LIS 60003 or LIS 60512; and graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60640  LIBRARY AUTOMATION  3 Credit Hours
Analysis, design and selection of automated library systems. Considers
system analysis and requirements, networking technologies, database
management systems, multimedia and hypermedia, and client-
server computing. Also, proposals to vendors, contract negotiation,
implementation, staffing, training, system maintenance and evaluation.
Prerequisite: LIS 60002 or LIS 60020; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60641  INFORMATION STORAGE AND RETRIEVAL SYSTEMS  3 Credit Hours
Fundamentals of information retrieval models and methods, including
information storage structures, full-text indexing, structured indexes,
search engines and web retrieval, human-computer interaction, and the
user's experience, system performance and evaluation.
Prerequisite: LIS 60003 or LIS 60512; and graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60643  ONLINE INFORMATION SYSTEMS  3 Credit Hours
Use of information technologies to search for and retrieve electronic
information, primarily through the Internet. Analysis of database
structures and electronic records; search principles and heuristics;
database system producers; system interfaces; and evaluation of results.
Prerequisite: LIS 60001 or LIS 60030; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60644  INFORMATION SCIENCE  3 Credit Hours
(Slashed with LIS 80644) Focal areas of information science: information
retrieval systems, bibliometrics, citation analysis, systems analysis and
evaluation, information technologies, information theory, information
architecture, knowledge management and user experience.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
LIS 60645  DATABASE SYSTEMS  3 Credit Hours
Characteristics and concepts of database systems; different types of database models; conceptual database design and implementation; the relational database model and its application in practice: key issues, principles, and techniques; current database technologies.
**Prerequisite:** LIS 60003 or LIS 60512; and graduate standing.
**Pre/corequisite:** LIS 60000 or LIS 60010.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

LIS 60647  NETWORK AND SOFTWARE RESOURCES FOR INFORMATION SYSTEMS  3 Credit Hours
(Slashed with LIS 80647) Study, use and evaluation of current and emerging information technologies; network and software resources for libraries and information centers, including network analysis and management, standards and protocols, and client-server technologies; and techniques for accessing and evaluating such technologies and resources.
**Prerequisite:** Graduate standing.
**Pre/corequisite:** LIS 60000 or LIS 60010.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

LIS 60648  WEB SITE DEVELOPMENT, DESIGN AND MANAGEMENT  3 Credit Hours
Students significantly advance both their theoretical knowledge and practical skills by developing and implementing a comprehensive web content strategy. Focus is on developing and maintaining website content, organizing and presenting content, and acquiring skill in the use of web technologies needed by content managers to publish, manage, and disseminate content on the web and in the mobile environment.
**Prerequisite:** LIS 60003 and graduate standing.
**Pre/corequisite:** LIS 60000 or LIS 60010.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

LIS 60649  INDEXING AND ABSTRACTING  3 Credit Hours
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 60002 or 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 60600 or 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 60002 or LIS 60020; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

LIS 60652  FOUNDATIONS OF RECORDKEEPING IN SOCIETY  3 Credit Hours
(Slashed with LIS 80652) An introduction to the core principles and practices of recordkeeping and the multiple and complex roles records and archives play in identity, evidence, transparency, memory, accountability, equity, representation and trust in society. This course covers historical and contemporary recordkeeping contexts related to individuals, family, community, organization, corporate, academia and government, as well as traditional, nontextual and digital formats of records and archives.
**Prerequisite:** graduate standing.
**Pre/corequisite:** LIS 60010; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

LIS 60653  INFORMATION SOURCES AND SERVICES IN LOCAL HISTORY AND GENEALOGY  3 Credit Hours
Introduces primary and secondary resources and materials to promote and perform reference services in genealogy and local history through lectures, readings, discussion, and practical exercises. The course will use primary and secondary materials available to librarians and archivists in libraries, archives, historical societies and on the Internet.
**Prerequisite:** LIS 60001 or LIS 60030; and graduate standing.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter

LIS 60654  PRESERVATION AND CONSERVATION OF HERITAGE MATERIALS  3 Credit Hours
Types and causes of deterioration of various kinds of library, archival, and museum collections; storage and preventive care, preservation through photographic reproduction and digital conversion, and conservation of rare materials.
**Prerequisite:** Graduate standing.
**Pre/corequisite:** LIS 60000 or LIS 60010.
**Schedule Type:** Lecture
**Contact Hours:** 3 lecture
**Grade Mode:** Standard Letter
LIS 60655 COPYRIGHT: UNDERSTANDING USER RIGHTS AND RESPONSIBILITIES 3 Credit Hours
(Slashed with LIS 80655) Exploration of advanced copyright topics such as mass digitization, creative arts and other issues in fair use, library, archive and educational uses including the TEACH Act, digital first sale rights, Digital Millennium Copyright Act, and an introduction to copyright reform.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60656 LICENSING OF INFORMATION PRODUCTS AND SERVICES 3 Credit Hours
(Slashed with LIS 80656) Topics related to licensing of information products and services including online contract formation, software licenses (End User License Agreements), database and website terms of service, detailed understanding of common terms and conditions in license agreements and an introduction to music licensing and Creative Commons licensing.
Prerequisite: Graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60657 THEORY AND METHODS OF ARCHIVAL ACQUISITION, SELECTION AND APPRAISAL 3 Credit Hours
(Slashed with LIS 80657) This course provides a comprehensive introduction to the theory, methods and traditions employed by records professionals to form and shape archives as societal memory. This course focusses primarily on acquisition, selection, documentation and appraisal theory and methods. Students will also examine contemporary records frameworks and approaches and issues faced by archivists, special collections librarians and manuscript curators employed to identify, evaluate, acquire and dispose of records.
Prerequisite: LIS 60652; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 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 or LIS 60600; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60668 INTERNATIONAL AND COMPARATIVE LIBRARIANSHIP 3 Credit Hours
Provides an introduction to international and comparative librarianship.
Prerequisite: graduate standing.
Pre/corequisite: LIS 60000 or LIS 60010.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60675 YOUTH LITERATURE IN THE DIGITAL REALM 3 Credit Hours
From apps, to eBooks, to multi-platform books, to books with augmented reality, new digital formats extend books across media platforms, and provide readers with new, interactive ways of engaging with texts. However, the proliferation of new media formats means there are just as many questions related to their selection, evaluation, and use. This course aims to answer those questions and to critically examine digital formats and related implications for stakeholders in the field of literary production for young people, including librarians, publishers, authors, illustrators, and readers. Pre or co-requisite: LIS 60000 or LIS 60010.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60691 SEMINAR IN LIBRARY SCIENCE 1-3 Credit Hours
(Repeatable for credit) (Slashed with LIS 80691) Advanced research by small groups of students who are qualified to examine problems of certain special areas.
Prerequisite: Graduate standing.
Schedule Type: Seminar
Contact Hours: 1-3 other
Grade Mode: Standard Letter

LIS 60692 PRACTICUM-LIBRARIES AND INFORMATION CENTERS 2,3 Credit Hours
(Repeatable for credit) Supervised library or information center work experience of a professional nature of not less than 100 clock hours, directed readings and preparation of a paper.
Prerequisite: Graduate standing and special approval.
Schedule Type: Practicum or Internship
Contact Hours: 2-3 other
Grade Mode: Satisfactory/Unsatisfactory-IP

LIS 60693 VARIABLE TITLE WORKSHOP-LIBRARY AND INFORMATION SCIENCE 1-3 Credit Hours
(Repeatable for credit) Intensive examination of special topics of interest to practicing librarians. May be repeated. Maximum workshop credit accepted for MLIS degree is 4 semester hours.
Prerequisite: Graduate standing.
Schedule Type: Workshop
Contact Hours: 1-3 other
Grade Mode: Satisfactory/Unsatisfactory
LIS 60695 SPECIAL PROBLEMS IN LIBRARY SCIENCE 1-10 Credit Hours
(Repeatable for credit) (Slashed with 80695) Individual research at high levels of specialization. Intended for persons in sixth year program.
Prerequisite: Graduate standing and special approval.
Schedule Type: Lecture
Contact Hours: 1-10 lecture
Grade Mode: Standard Letter-IP

LIS 60700 FOUNDATIONS OF MUSEUM STUDIES 3 Credit Hours
(Slashed with LIS 80700) Intended for those interested in learning more about museums or specializing in museum studies. The goal is to introduce students to various aspects of all types of museums as dynamic networked systems positioned around objects, people and ideas. Covers history and types of museums, the roles of objects and ideas, structure, function, museum workers and users, and the purpose and future of museums.
Prerequisite: graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60701 MUSEUM COLLECTIONS 3 Credit Hours
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: LIS 60700; and graduate standing.
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. Introduction to the research and theory on museum user experience. Inquiry involves examining notions of learning, engagement, and transformative experiences of users, characteristics of users and the social dynamics of the museum experience. In addition, reviews several programmatic techniques and methods used in museums to increase engagement and learning for patrons.
Prerequisite: LIS 60700; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60704 THE MUSEUM SYSTEM 3 Credit Hours
Museums are by their very nature complex and dynamic systems composed of people, objects and activities. Comprised of an "outer" subsystem and an "inner" subsystem, the museum as a whole functions as an organic body, with all of its parts working together to function successfully. This system exists within a larger landscape, one filled increasingly with new types of interactions, unlimited access and constant feedback. This course explores this holistic system from both practical and conceptual viewpoints, examining the role of administration throughout the system as well as considering current issues such as sustainability, advocacy and relationships with community and users add to an overall understanding of the museum system.
Prerequisite: LIS 60700; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60705 MUSEUM ORIGINS 3 Credit Hours
(Slashed with LIS 80705) While the collecting of objects can be found as far back as ancient times in various parts of the world, the birth of the modern museum finds its roots in Europe. In the context of today's world, students will "go back in time" to understand the origins of western museums and the creation, use, and meaning of publicly shared collections over time. Students will explore the history of the modern museum and spend time visiting actual sites and collections that played a role in this history. Exploring the past in this way is geared specifically to help today's museum workers gain a better understanding of their own role and purpose in their community, society, and nation.
Prerequisite: graduate standing and special approval.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 60706 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 60000, LIS 60607 and LIS 60620; or LIS 60010, LIS 60020, LIS 60300, LIS 60400, LIS 60606, LIS 60618, LIS 60622, or LIS 60630 and LIS 60650; and overall minimum GPA of 3.000; 24 hours completed in the MLIS degree program; and School Library Media concentration; and graduate standing; and special approval.
Schedule Type: Practicum or Internship
Contact Hours: 10 other
Grade Mode: Standard Letter-IP

LIS 60707 CULMINATING EXPERIENCE FOR DUAL DEGREE 6 Credit Hours
Culminating experience for students pursuing dual degree in M.Ed. / MLIS and K-12 School Library Media licensure. Must be in a supervised educational library or information center. Must not be less than 200 hours of professional work.
Prerequisite: ADED 62146, CI 67310, CI 67330, EPSY 65524, LIS 60607, LIS 60624, LIS 60630 and SPED 63200; and LIS 60001, LIS 60002, LIS 60600, LIS 60626 and LIS 60629, or LIS 60010, LIS 60020, LIS 60300, LIS 60400, LIS 60500 and LIS 60618; and graduate standing; and special approval.
Schedule Type: Research
Contact Hours: 6 other
Grade Mode: Satisfactory/Unsatisfactory-IP
LIS 61095  SELECTED TOPICS IN LIBRARY SCIENCE  1-3 Credit Hours
(Repeatable for credit) (Slashed with LIS 61095) Offered irregularly as resources and/or opportunities permit. Topics will be announced in the schedule of classes.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 1-3 lecture
Grade Mode: Standard Letter

LIS 61096  INDIVIDUAL INVESTIGATION  1-3 Credit Hours
(Repeatable for credit) Research or individual investigation for master's level graduate students. Maximum 3 credits per registrations. Maximum 4 credits toward master's degree.
Prerequisite: special approval and graduate standing.
Schedule Type: Individual Investigation
Contact Hours: 1-3 other
Grade Mode: Standard Letter-IP

LIS 80001  ACCESS TO INFORMATION  3 Credit Hours
(Slashed with LIS 60001) Examination of information access issues. Topics include discussion of information needs, use of information sources, and information access services.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80002  ORGANIZATION OF INFORMATION  3 Credit Hours
(Slashed with LIS 60002) Introduction to the theory and practice of organizing information in various information environments. Familiarity with principles, standards, tools and current systems relating to organization of information.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80003  INFORMATION TECHNOLOGY FOR LIBRARY AND INFORMATION PROFESSIONALS  3 Credit Hours
(Slashed with LIS 60003) Provides basic information technology concepts and skills necessary for library and information professionals. Topics include computer hardware and software basics; operating systems; file management; software installation and configuration; basic PC applications; information systems concepts, development, and evaluation; search skills; Internet and web concepts, tools, and applications; emerging technologies and tools.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80601  INFORMATION SOURCES AND REFERENCE SERVICES  3 Credit Hours
Introduction to use and evaluation of basic sources of reference information, computerized and noncomputerized; reference interview and question-negotiation techniques; administration of reference and information services.
Prerequisite: LIS 60001 or 80001; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80602  CATALOGING AND CLASSIFICATION I  3 Credit Hours
Principles of cataloging with emphasis on Dewey Decimal and Library of Congress Classification systems, Library of Congress subject headings, online cataloging and administration.
Prerequisite: LIS 60002 or 80002; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80603  CATALOGING AND CLASSIFICATION II  3 Credit Hours
Theory and practice of providing description and access to library materials. Examples and assignments will be taken from all types of library materials, print and nonprint.
Prerequisite: LIS 60002 or 80002; and LIS 60602 or 80602; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80607  SCHOOL LIBRARY MANAGEMENT  3 Credit Hours
(Cross-listed with LIS 60607) Management of school libraries.
Prerequisite: doctoral standing and special approval.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80608  THE PUBLIC LIBRARY  3 Credit Hours
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 60600 or 80600; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80609  MARKETING THE LIBRARY  3 Credit Hours
(Slashed with LIS 60609) Introduction to the theory and practice of marketing the library. Topics include the evaluation of customer needs, the marketing mix, merchandising, public relations, relationship marketing, and the design and development of a marketing plan for libraries.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
LIS 80610 MANAGEMENT OF LIBRARY AND INFORMATION CENTERS
3 Credit Hours
(Slashed with LIS 60610) Identifies and discusses management functions of libraries and related organizations; includes planning and decision-making, human resource management, measurement and evaluation, fiscal and project management.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80611 GOVERNMENT INFORMATION SOURCES AND SERVICES
3 Credit Hours
(Slashed with LIS 60611) Library treatment of U.S. government publications, with brief attention to municipal and state publications, and major documents of Great Britain, Canada and the United Nations. Will not include materials covered in LIS 8/60601.
Prerequisite: LIS 60001 or LIS 80001; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80612 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: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80613 INFORMATION NEEDS, SEEKING AND USE
3 Credit Hours
Surveys theories related to people's interactions with information. The theories covered include information context and situation, information needs, information seeking, exploration of information sources, communication and collaboration in the information search process, information use, and other interactions among people, information, and information systems.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80614 SELECTION AND ACQUISITION OF LIBRARY MATERIALS
3 Credit Hours
(Slashed with LIS 60614) Factors affecting selection in public, academic, school and special libraries (reading habits, censorship, publishing trends); community analysis, selection policies and process; selection sources; acquisitions.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80615 THE ACADEMIC LIBRARY
3 Credit Hours
Governance, administration and services of libraries in institutions of postsecondary education.
Prerequisite: LIS 60600 or 80600; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80616 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 60600 or 80600; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80618 INFORMATION LITERACY INITIATIVES AND INSTRUCTION
3 Credit Hours
(Slashed with LIS 60618) Invites information professionals from any library point-of-view (school, public, academic, archives, special, etc.). Topics include definitions and history of information literacy standards and objectives, developing an information literacy agenda, library pedagogy and learning styles, information literacy needs assessment, program development and delivery, and experiential learning for students in library communities.
Prerequisite: LIS 60001 or LIS 80001; and LIS 60600 or LIS 80600; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80619 LEGAL INFORMATION SOURCES AND SERVICES
3 Credit Hours
(Cross-listed with AS 43001 and AS 53001 and AS 73001 and LIS 60619) Fundamentals of legal research methods and major sources of American legal literature in print and electronic formats as used in other disciplines. Students learn how to formulate a research plan based on legal analysis of issues using relevant, authoritative legal resources.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80620 HEALTH INFORMATION RESOURCES
3 Credit Hours
(Cross-listed with LIS 60620) Identifies print and electronic sources of health information with emphasis on electronic sources. Medical patient and consumer health information is presented. This course is designed for the health educator, librarian, nurse or other health care professional.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80621 SOCIAL SCIENCES INFORMATION SOURCES AND SERVICES
3 Credit Hours
Content, bibliographic structure and communication patterns in the social sciences with emphasis on information sources and services in sociology, history, education, political science, anthropology, related disciplines.
Prerequisite: LIS 60001 or 80001; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
LIS 80622  SCIENCE AND TECHNOLOGY INFORMATION SOURCES AND SERVICES  3 Credit Hours
Content, bibliographic structure and communication patterns in the sciences with emphasis on pure and applied fields, e.g., mathematics, biology, physics.
Prerequisite: LIS 60001 or 80001; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80623  BUSINESS AND FINANCE INFORMATION SOURCES AND SERVICES  3 Credit Hours
Historical development; applications to current business, labor, governmental, educational and sociological information needs; interpretation to executives and others; printed sources and databases.
Prerequisite: LIS 60001 or 80001; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80624  CATALOGING FOR SCHOOL LIBRARIES  3 Credit Hours
(Cross-listed with LIS 60624) Organization and administration of print and non-print materials in school libraries. Application of appropriate descriptive cataloging rules, subject headings and classification policies for children’s, teen and educational materials K-12.
Prerequisite: doctoral standing and special approval.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80625  LIBRARY MATERIALS AND SERVICES FOR YOUNG CHILDREN  3 Credit Hours
(Cross-listed with LIS 60625) Selection and utilization of materials in relation to needs, abilities and interests of the young child.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80626  LIBRARY MATERIALS AND SERVICES TO TEENS  3 Credit Hours
(Cross-listed with LIS 60626) Selection and utilization of books and materials in relation to needs, abilities and interests of teens.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80627  ART AND STORY: THE STUDY OF CHILDREN'S PICTUREBOOKS  3 Credit Hours
(Cross-listed with LIS 60627) Engages students in the study and application of art and story in children's picturebooks through the lenses of book history, publishing studies, children's book illustration and storytelling, visual literacy and visual storytelling. Readers of picturebooks are studied as well, from professional readers, like librarians and book reviewers, to picturebook consumers.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80628  HUMANITIES INFORMATION SOURCES AND SERVICES  3 Credit Hours
Philosophy, literature, fine and performing arts.
Prerequisite: LIS 60001 or 80001; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80629  LIBRARY MATERIALS AND SERVICES FOR SCHOOL AGE CHILDREN  3 Credit Hours
(Slashed with LIS 60629) Selection and utilization of materials in relation to needs, abilities and interests of school-age children.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80630  REFERENCE SOURCES AND SERVICES FOR YOUTH  3 Credit Hours
Organization and administration of information sources and information services for children and young adults (K-12). Evaluation, selection and utilization of print and electronic sources.
Prerequisite: doctoral standing and special approval.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80631  INTRODUCTION TO DIGITAL PRESERVATION  3 Credit Hours
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 60002 or 80002; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80633  DIGITAL CURATION  3 Credit Hours
Management and preservation of digital objects and records throughout their lifecycle. Essential technologies and standards for building and maintaining robust, trusted digital repositories. Emphasizes the use and reuse of scholarly data, business and government records, cultural heritage materials, and other digital objects to create resources supporting communities of practice in their work.
Prerequisite: LIS 60631 or 60638 or 80631 or 80638; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
LIS 80636 KNOWLEDGE ORGANIZATION STRUCTURES, SYSTEMS AND SERVICES  
3 Credit Hours
(Slashed with LIS 60636) Introduction to various types of knowledge organization systems, services, and structures (KOS) used in the networked environment. Understanding of the functional philosophical, logical, and linguistic fundamentals of KOS. Explanation of design options, features of KOS, and procedures to be used in the thesaurus, taxonomy and ontology construction.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80637 METADATA ARCHITECTURE AND IMPLEMENTATION  
3 Credit Hours
(Slashed with LIS 60637) Principles and theories of metadata development in the digital environment. Main focus is given to the design and applications of metadata schemas for distinct domains and information communities, issues in metadata interoperability, vocabulary control, quality control and evaluation. Examination of international standards, activities and projects with the use of case study approach.
Prerequisite: LIS 60002 or 80002; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80638 DIGITAL LIBRARIES  
3 Credit Hours
Issues related to the development and maintenance of digital libraries, including technology, collection development and management, project management, digital preservation, user-centered design, public services, rights management and funding.
Prerequisite: LIS 60003 or LIS 80003; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80639 IMPLEMENTATION OF DIGITAL LIBRARIES  
3 Credit Hours
Explores issues related to implementation of digital libraries and provides hands-on experience for students to build digital library prototypes (small-scale) with open source software. The major emphasis is on design and implementation of key digital library functions, including building digital collections, defining and creating metadata, indexing, browsing and retrieval, customizing interface, implementing services, encoding and transforming for data exchange, and testing the usability and effectiveness.
Prerequisite: LIS 60003 or 80003; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80640 LIBRARY AUTOMATION  
3 Credit Hours
Analysis, design and selection of automated library systems. Considers system analysis and requirements, networking technologies, database management systems, multimedia and hypermedia, and client-serving computing. Also, proposals to vendors, contract negotiation, implementation, staffing, training, system maintenance and evaluation.
Prerequisite: LIS 60002 or 80002; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80641 INFORMATION STORAGE AND RETRIEVAL SYSTEMS  
3 Credit Hours
Fundamentals of information retrieval models and methods, including information storage structures, full-text indexing, structured indexes, search engines and web retrieval, human-computer interaction, and the user's experience, system performance and evaluation.
Prerequisite: LIS 60003 or LIS 80003; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80643 ONLINE REFERENCE SYSTEMS  
3 Credit Hours
Use of information technologies to search for and retrieve electronic information, primarily through the Internet. Analysis of database structures and electronic records; search principles and heuristics; database system producers; system interfaces; and evaluation of results.
Prerequisite: LIS 60001 or 80001; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80644 INFORMATION SCIENCE  
3 Credit Hours
(Slashed with LIS 60644) Focal areas of information science: information retrieval systems, bibliometrics, citation analysis, systems analysis and evaluation, information technologies, information theory, information architecture, knowledge management and user experience.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80645 DATABASE SYSTEMS  
3 Credit Hours
Characteristics and concepts of database systems; different types of database models; conceptual database design and implementation; the relational database model and its application in practice: key issues, principles, and techniques; current database technologies.
Prerequisite: LIS 60003 or 80003; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80647 NETWORK AND SOFTWARE RESOURCES FOR INFORMATION SYSTEMS  
3 Credit Hours
(Slashed with LIS 60647) Study, use and evaluation of current and emerging information technologies; network and software resources for libraries and information centers, including network analysis and management, standards, protocols and client-server technologies; and techniques for accessing and evaluating such technologies and resources.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
LIS 80648  WEB SITE DEVELOPMENT, DESIGN AND MANAGEMENT  3 Credit Hours
Students significantly advance both their theoretical knowledge and practical skills by developing and implementing a comprehensive web content strategy. Focus is on developing and maintaining website content, organizing and presenting content, and acquiring skill in the use of web technologies needed by content managers to publish, manage, and disseminate content on the web and in the mobile environment.
Prerequisite: LIS 60003 or LIS 80003; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80649  INDEXING AND ABSTRACTING  3 Credit Hours
Prerequisite: LIS 60002 or 80002; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80650  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 60600 or 80600; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80651  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 60002 or 80002; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80652  FOUNDATIONS OF RECORDKEEPING IN SOCIETY  3 Credit Hours
(Slashed with LIS 60652) An introduction to the core principles and practices of recordkeeping and the multiple and complex roles records and archives play in identity, evidence, transparency, memory, accountability, equity, representation and trust in society. This course covers historical and contemporary recordkeeping contexts related to individuals, family, community, organization, corporate, academia and government, as well as traditional, nontextual and digital formats of records and archives.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80654  PRESERVATION AND CONSERVATION OF HERITAGE MATERIALS  3 Credit Hours
Types and causes of deterioration of various kinds of library, archival, and museum collections; storage and preventive care, preservation through photographic reproduction and digital conversion, and conservation of rare materials.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80655  COPYRIGHT: UNDERSTANDING USER RIGHTS AND RESPONSIBILITIES  3 Credit Hours
(Slashed with LIS 60655) Exploration of advanced copyright topics such as mass digitization, creative arts and other issues in fair use, library, archive and educational uses including the TEACH Act, digital first sale rights, Digital Millennium Copyright Act, and an introduction to copyright reform.
Prerequisite: None.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80656  LICENSING OF INFORMATION PRODUCTS AND SERVICES  3 Credit Hours
(Slashed with LIS 60656) Topics related to licensing of information products and services including online contract formation, software licenses (End User License Agreements), database and website terms of service, detailed understanding of common terms and conditions in license agreements and an introduction to music licensing and Creative Commons licensing.
Prerequisite: None.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
LIS 80657  THEORY AND METHODS OF ARCHIVAL ACQUISITION, SELECTION AND APPRAISAL  3 Credit Hours
(Slashed with LIS 60657) This course provides a comprehensive introduction to the theory, methods and traditions employed by records professionals to form and shape archives as societal memory. This course focuses primarily on acquisition, selection, documentation and appraisal theory and methods. Students will also examine contemporary records frameworks and approaches and issues faced by archivists, special collections librarians and manuscript curators employed to identify, evaluate, acquire and dispose of records.
Prerequisite: LIS 80652; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80661  TECHNICAL SERVICES  3 Credit Hours
Principles, problems and current issues of acquiring, processing and preserving conserving materials in libraries and information centers.
Prerequisite: LIS 60002 or 80002; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80665  RARE BOOK LIBRARIANSHIP  3 Credit Hours
(Slashed with LIS 60665) Study of the theory and practice of rare book librarianship through lectures, readings, discussion and practical exercises.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80666  ETHICAL CONCERNS OF LIBRARY AND INFORMATION PROFESSIONALS  3 Credit Hours
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 60600 or 80600; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80668  INTERNATIONAL AND COMPARATIVE LIBRARIANSHIP  3 Credit Hours
Provides an introduction to international and comparative librarianship.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80694  COLLEGE TEACHING OF LIBRARY SCIENCE  2,3 Credit Hours
(Repeatable for credit) Staff training and experience in college teaching.
Prerequisite: doctoral standing and special approval.
Schedule Type: Lecture
Contact Hours: 2-3 lecture
Grade Mode: Satisfactory/Unsatisfactory-IP

LIS 80695  SPECIAL PROBLEMS IN LIBRARY SCIENCE  1-10 Credit Hours
(Repeatable for credit) (Slashed with LIS 60695) Individual research at high levels of specialization.
Prerequisite: doctoral standing and special approval.
Schedule Type: Lecture
Contact Hours: 1-10 lecture
Grade Mode: Standard Letter-IP

LIS 80700  FOUNDATIONS OF MUSEUM STUDIES  3 Credit Hours
Intended for those interested in learning more about museums or specializing in museum studies. The goal is to introduce students to various aspects of all types of museums as dynamic networked systems positioned around objects, people and ideas. Covers history and types of museums, the roles of objects and ideas, structure, function, museum workers and users, and the purpose and future of museums.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80701  MUSEUM COLLECTIONS  3 Credit Hours
Introduction to the organization, care and meaning of objects held in museum collections. Through both theoretical and practical concepts, basic collection management and registration skills are introduced. In conjunction, students explore the meanings made of museum objects.
Prerequisite: LIS 60700 or LIS 80700; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80702  MUSEUM COMMUNICATION  3 Credit Hours
Museums communicate to the public in a multitude of ways: interpretation, exhibition, publication, educational programming and using a web presence. Introduces important concepts, theories, applications, processes and technology used in museum interpretation and communication. Students are provided with a balance of practical techniques with thoughtful conceptual exploration.
Prerequisite: LIS 60700 or LIS 80700; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80703  MUSEUM USERS  3 Credit Hours
Intended for those interested in learning more about museums or specializing in museum studies. The goal is to introduce students to various aspects of all types of museums as dynamic networked systems positioned around objects, people and ideas. Covers history and types of museums, the roles of objects and ideas, structure, function, museum workers and users, and the purpose and future of museums.
Prerequisite: doctoral standing and special approval.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
LIS 80704 THE MUSEUM SYSTEM  3 Credit Hours
Museums are by their very nature complex and dynamic systems composed of people, objects and activities. Comprised of an "outer" subsystem and an "inner" subsystem, museum as a whole functions as an organic body, with all of its parts working together to function successfully. This system exists within a larger landscape, one filled increasingly with new types of interactions, unlimited access, and constant feedback. This course explores this holistic system from both practical and conceptual viewpoints, examining the role of administration throughout the system as well as considering current issues such as sustainability, advocacy and relationships with community and users add to an overall understanding of the museum system.
Prerequisite: LIS 60700 or 80700; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 80705 MUSEUM ORIGINS  3 Credit Hours
(Slashed with LIS 80705) While the collecting of objects can be found as far back as ancient times in various parts of the world, the birth of the modern museum finds its roots in Europe. In the context of today's world, students will "go back in time" to understand the origins of western museums and the creation, use, and meaning of publicly shared collections over time. Students will explore the history of the modern museum and spend time visiting actual sites and collections that played a role in this history. Exploring the past in this way is geared specifically to help today's museum workers gain a better understanding of their own role and purpose in their community, society and nation.
Prerequisite: doctoral standing and special approval.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

LIS 81095 SELECTED TOPICS IN LIBRARY SCIENCE  1-3 Credit Hours
(Repeatable for credit) (Slashed with LIS 61095) Offered irregularly as resources and or opportunities permit. Topics will be announced in the Schedule of Classes.
Prerequisite: doctoral standing.
Schedule Type: Lecture
Contact Hours: 1-3 lecture
Grade Mode: Standard Letter

LIS 81096 INDIVIDUAL INVESTIGATION  1-3 Credit Hours
(Repeatable for credit) Individual investigation for doctoral level students.
Prerequisite: doctoral standing.
Schedule Type: Individual Investigation
Contact Hours: 1-3 other
Grade Mode: Standard Letter-IP