Library and Information Science

School of Library and Information Science
Bloomington

Dean
Professor Blaise Cronin*

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Departmental URL
www.slis.indiana.edu

Graduate Faculty
(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Distinguished Professors
David Kaser* (Emeritus), Herbert White* (Emeritus)

Professors
Blaise Cronin*, Stephen Harter* (Emeritus), Susan C. Herring*, Javed Mostafa*, Thomas Nisonger*, Yvonne R. Rogers*, Debora Shaw*

Associate Professors

Assistant Professors
Noriko Hara, Lokman Meho, Pnina Shachaf, Kiduk Yang

Adjunct Professors
William Aspray* (Informatics), Michael McRobbie* (Informatics)

Adjunct Assistant Professors
Kaipana Shankar (Informatics)

Senior Fellow
Charles H. Davis*

Graduate Advisor
Director of Doctoral Program Javed Mostafa*, LI 011, (812) 855-2018
Degrees Offered

Doctor of Philosophy, and, jointly with other academic programs, Master of Library Science and Doctor of Jurisprudence; Master of Information Science and master's degrees in folklore and ethnomusicology, public affairs, and Russian and East European studies; Master of Library Science and master's degree in African American and African Diaspora Studies, art history, comparative literature, English, folklore and ethnomusicology, history, history and philosophy of science, journalism, Latin American and Caribbean studies, music theory or musicology, public affairs, and Russian and East European studies. The School of Library and Information Science offers the Specialist in Library and Information Science, the Master of Library Science, the Master of Information Science, the Master of Library Science with specializations in African studies librarianship, archives and records management, library technology management, music librarianship, rare books and manuscripts librarianship, and the Master of Library Science or Master of Information Science with specialization in chemical information degrees. For further information, see the School of Library and Information Science Bulletin.

Graduate Certificate in Information Architecture

Admission Requirements:

Applicants must meet requirements for admission to the master's degree programs in the School of Library and Information Science: www.slis.indiana.edu

Course Requirements:

Students must complete 18 graduate credit hours; credits counted toward another degree may not be applied toward the Certificate. Required courses: L540 Foundations of Information Architecture (3 cr.); L545 Systems Analysis and Design (3 cr.); L577 Management of Information System Design (3 cr.); L583 Indexing Theory and Practice (3 cr.); L542 Introduction to Human Computer Interaction (3 cr.); L690 Capstone in Information Architecture (3 cr.)

Special School Requirements

(See also general University Graduate School requirements.)

Dual Master's Degree Programs with the University Graduate School

African American and African Diaspora Studies (M.A.) and M.L.S.
Art History (M.A.) and M.L.S.
Comparative Literature (M.A.) and M.L.S.
English (M.A.) and M.L.S.
Folklore and Ethnomusicology (M.A.) and M.I.S.
Folklore and Ethnomusicology (M.A.) and M.L.S.
History (M.A.) and M.L.S.
History and Philosophy of Science (M.A.) and M.L.S.
Journalism (M.A.) and M.L.S.
Latin American and Caribbean Studies (M.A.) and M.L.S.
Musicology or Music Theory (M.A.) and M.L.S.
Russian and East European Studies (M.A.) and M.I.S.
Russian and East European Studies (M.A.) and M.L.S.

African American and African Diaspora Studies (M.A.) and Master of Library Science (M.L.S.)
The dual M.A./M.L.S. program requires completion of a minimum of 58 credit hours of graduate course
work. (The degrees, if completed separately, would require 68 credit hours.) Students must apply for admission to the master's programs of both the School of Library and Information Science and the Department of African American and African Diaspora Studies and meet the admissions criteria established for each. The two degrees must be awarded at the same time.

Requirements for the Master of Library Science are as follows:

1. Completion of the M.L.S. Foundation courses (15 credit hours).
2. Either SLIS L623 Information in the Humanities or SLIS L625 Information in the Social Sciences (3 cr.).
3. SLIS elective courses (12 cr.) to bring the total of SLIS credit hours completed to 30.

A minimum of 28 credit hours is required in the Department of African American and African Diaspora Studies for the Master of Arts degree. For specific requirements, see the University Graduate School Bulletin.

Art History (Master of Arts) and Master of Library Science
This program is designed to prepare students for professional library and information specialist positions in fine arts and related libraries and information centers. The program requires a minimum of 60 credit hours of graduate course work including a comprehensive set of required courses and overlapping electives. Students must apply for admission to the master's programs of both the School of Library and Information Science and the School of Fine Arts/History of Art and meet the admission criteria established for each. The two degrees must be awarded simultaneously.

Requirements for the Master of Library Science degree are as follows:

1. Completion of SLIS M.L.S. Foundation course requirements (15 credit hours).
2. Other required SLIS courses (9 cr.): L596, L623, and L630.
3. SLIS elective courses (6 cr.) chosen from among L570, L571, L576 or L583 to bring the total of SLIS credit hours completed to 30.

At least 30 credit hours in the School of Fine Arts are required. Course work must include A500, A575, and no fewer than two seminars in two areas. Also required are four lecture courses at the 400 and 500 levels, at least two of which must be in Western art. See specific requirements under "Art History" in the University Graduate School Bulletin.

Comparative Literature (Master of Arts) and Master of Library Science
This program prepares candidates for positions in academic, research, and other libraries with a humanities orientation. The total program consists of at least 50 graduate credit hours. Students must apply for admission to the master's programs of both the School of Library and Information Science and the Department of Comparative Literature and meet the admission criteria established for each. The two degrees must be awarded simultaneously.

Requirements for the Master of Library Science degree are as follows:

1. Completion of SLIS M.L.S. Foundation course requirements (15 credit hours).
2. At least 15 credit hours of SLIS elective courses appropriate to the student's background and interests to bring the total of SLIS credit hours to 30.

At least 20 graduate credit hours are required in comparative literature course work. The Department of Comparative Literature requires certification in at least two foreign languages, which does not count toward the 20 credit hour total required for the degree. Emphasis in the course work may be in Western literatures, East-West relations studies, Third World literatures, film studies, or studies of the interrelations of the arts (literature, music, the visual arts). For specific requirements see the entry for the Department of Comparative Literature in the University Graduate School Bulletin.

English (Master of Arts) and Master of Library Science
Study for these two degrees can be combined for a total of 54 credit hours rather than the 66 credit hours
required for the two degrees taken separately. Admission to each of the two master's programs is approved separately on the same basis as for applicants not in the dual program. The Department of English requires an English undergraduate major or its equivalent, and the Graduate Record Examination (GRE), both General Test and Subject Test in English Literature. A superior student who has not majored in English may be admitted conditionally, but must remove deficiencies without graduate credit.

Requirements for the Master of Library Science degree are as follows:

1. Completion of SLIS M.L.S Foundation courses (15 credit hours);
2. SLIS L623 Information in the Humanities (3 credit hours); and
3. SLIS elective courses (12 credit hours) to bring the total of SLIS credit hours completed to 30.

A minimum of 24 credit hours is required in the Department of English. All students must fulfill the core requirements as outlined in the English Department's Master of Arts with Concentration in Literature or Special Field Master of Arts degree requirements. No thesis or examination is required for the M.A. in English. The M.A. in English does require reading proficiency in one of the following languages: French, German, Greek, Italian, Latin, Russian, Spanish.

Both degrees must be awarded simultaneously to receive the benefit of the overlapping electives. Consult the University Graduate School Bulletin for additional details on the M.A. in English.

**Folklore and Ethnomusicology (Master of Arts) and Master of Information Science**

Study for these two degrees can be combined for a total of 57 credit hours rather than the 72 credit hours required for the two degrees taken separately. Students take at least 36 graduate credit hours in information science, and at least 21 credit hours in folklore and ethnomusicology. To graduate under the dual-degree option, the two degrees must be awarded simultaneously.

- **Master of Information Science** (36 credit hours): 15 credit hours of required Foundation/Specialization courses, 21 credit hours of SLIS elective courses.
- **Master of Arts in Folklore and Ethnomusicology** (21 credit hours): consult the Department of Folklore and Ethnomusicology.

Students must apply for admission to the master's programs of both the School of Library and Information Science and the Department of Folklore and Ethnomusicology. Admissions criteria established for each program must be met. For specific M.A. requirements, see the University Graduate School Bulletin.

**Folklore and Ethnomusicology (Master of Arts) and Master of Library Science**

Study for these two degrees can be combined for a total of 51 credit hours rather than the 66 credit hours required for the two degrees taken separately. Students take at least 30 graduate credit hours in library and information science, and at least 21 credit hours in folklore and ethnomusicology. To graduate under the dual-degree option, the two degrees must be awarded simultaneously.

- **Master of Library Science** (30 credit hours): 15 credit hours of required Foundation courses, plus 15 credit hours of SLIS elective courses.
- **Master of Arts in Folklore and Ethnomusicology** (21 credit): Consult the Department of Folklore and Ethnomusicology.

Students must apply for admission to the master's programs of both the School of Library and Information Science and the Department of Folklore and Ethnomusicology. Admissions criteria established for each program must be met. For specific M.A. requirements, see the University Graduate School Bulletin.

**History (Master of Arts) and Master of Library Science**

Interest in public history, genealogy, historic preservation, and archives and museum administration creates a demand for professionals with expertise in both historical research and information management. The dual M.L.S./M.A. in history program requires completion of a minimum of 50 credit hours of graduate course work. Students must apply for admission to the master's programs of both the
School of Library and Information Science and the Department of History and meet the admission criteria established for each. The two degrees must be awarded simultaneously.

Requirements for the Master of Library Science degree are as follows:

1. Completion of SLIS M.L.S. Foundation course requirements (15 credit hours).
2. Other required SLIS courses (9 cr.): L516, L586, and History H547 [Archives], L596, and L625.
3. SLIS elective courses (6 cr.) to bring the total of SLIS credit hours completed to 30.

A minimum of 20 credit hours is required in the Department of History for the Master of Arts degree. For specific requirements, see the entry for the Department of History in the University Graduate School Bulletin.

History and Philosophy of Science (Master of Arts) and Master of Library Science
This program meets the growing demand for information professionals with a scientific academic specialty and prepares students for a variety of positions in library, research, and archival settings. The program consists of a total of approximately 51 credit hours for both degrees. Students must apply for admission to the master's programs of both the School of Library and Information Science and the Department of History and Philosophy of Science and meet the admission criteria established for each. The two degrees must be awarded simultaneously.

Requirements for the Master of Library Science degree are as follows:

1. Completion of SLIS M.L.S. Foundation course requirements (15 credit hours).
2. Other required SLIS courses (9 cr.): L586, L596, and L624.
3. SLIS elective courses (6 cr.) to bring the total of SLIS credit hours completed to 30.

A minimum of 21 credit hours is required in the Department of History and Philosophy of Science for the Master of Arts degree. For specific requirements, see the University Graduate School Bulletin.

Journalism (Master of Arts) and Master of Library Science
The dual M.L.S./M.A. in journalism program provides excellent preparation for professional library and information specialist positions in news media and in corporate, academic, and public libraries. The program consists of a total of approximately 51 credit hours for both degrees. Students must apply for admission to the master's programs of both the School of Library and Information Science and the School of Journalism and meet the admission criteria established for each. The two degrees must be awarded simultaneously.

Requirements for the Master of Library Science degree are as follows:

1. Completion of SLIS M.L.S. Foundation course requirements (15 credit hours).
2. Other required SLIS courses (9 cr.): L570, L628, and at least one of the following: L623, L624, or L625.
3. SLIS elective courses (6 cr.) to bring the total of SLIS credit hours completed to 30.

A minimum of 21 credit hours is required in journalism. For specific requirements contact the School of Journalism, and consult the University Graduate School Bulletin.

Latin American and Caribbean Studies (Master of Arts) and Master of Library Science
The School of Library and Information Science and the Center for Latin American and Caribbean Studies jointly offer a three-year program that qualifies students for two master's degrees. Study for these two degrees in the dual program (M.A./M.L.S.) can be completed in a total of 51 credit hours rather than the 66 credit hours that would otherwise be required to take the two degrees separately. In the dual degree, specific courses contribute to both degrees. The two degrees must be awarded simultaneously.

Requirements for the Master of Library Science degree are as follows:

1. Completion of SLIS M.L.S. Foundation course requirements (15 credit hours).
2. Other required SLIS courses (9 cr.): L570, L596 (under the supervision of the Latin American bibliographer), and L620 (Topic: Latin American Bibliography).

3. SLIS elective courses (6 cr.) to bring the total of SLIS credit hours to 30.

Students take 21 credit hours of advanced courses relating to Latin American and Caribbean Studies (LTAM). The interdisciplinary seminar LTAM L501 (3 credits) must be taken, together with 18 credit hours in other LTAM courses or those Latin American and Caribbean Studies courses that are cross-listed with other departments. All other requirements for completion of the Latin American Studies M.A., including language proficiency and thesis or oral examination, remain as listed in the University Graduate School Bulletin.

Application for admission to the dual M.A./M.L.S. degree program must be made to the LTAM program and the University Graduate School for study toward the M.A. and to SLIS for study of the M.L.S. Students must be accepted by all three units in order to be admitted to the program.

Musicology or Music Theory (Master of Arts) and Master of Library Science

The dual-degree program combines an M.L.S. with an M.A. in musicology or an M.A. or M.M. in music theory. It combines the advantages of top-ranked graduate programs in library and information science and in music, and the librarians and professional staff of one of the country's largest music libraries. Through enrollment in these curricula, students may earn two master's degrees by a combination of work in the School of Library and Information Science (SLIS) and the School of Music amounting to approximately 60 credit hours (6 credits are shared between the two degrees). Applicants are expected to hold at least a bachelor's degree in music from an accredited four-year collegiate institution. For this program, students must apply for admission to both schools and the Music Librarianship Specialization and meet the admission criteria established for all three. (The admissions committee for the specialization consists of the IU music librarians.) Degrees from both schools must be awarded simultaneously.

Requirements for the Master of Library Science degree are as follows:

1. Completion of SLIS M.L.S. Foundation course requirements (15 credit hours).
2. MUS M539 Introduction to Music Bibliography (3 cr.).
3. SLIS L596 Internship in Library and Information Science (6 cr.). 3 credits will normally be in music cataloging; the other 3 credits may also be in music cataloging or else in music collection development, reference, or technology (P: M539, L520).
4. SLIS L631 Seminar in Music Librarianship (3 cr.) (P: M539, P or C: L520 or consent of instructor). Music library administration, circulation, collection development, facilities and design, recording collections, reference, and technology; music printing and publishing.
5. SLIS elective courses sufficient to bring the total of SLIS credit hours completed to 30.

For the requirements for the M.A. in musicology or the M.A. or M.M. in music theory, see the School of Music Bulletin.

Russian and East European Studies (Master of Arts) and Master of Information Science

Study for the two degrees can be combined for a total of 60 credit hours rather than the 72 credit hours required for the two degrees taken separately.

Requirements for the Master of Information Science degree are as follows:

1. Completion of SLIS M.I.S. Foundation, Cross-Cutting Areas, and Specialization Areas course requirements (15 credit hours).
2. SLIS electives (21 cr.), not including SLIS L596 and REEI R620, which are considered part of the Russian and East European Studies degree, chosen in consultation with the advisor, to bring the total of credit hours to 36.

Students take 24 credit hours in Russian and East European Studies, including R600, R601, R620, four area studies courses (one each from the social science group, the historical/geographical group, the
sociocultural group, and the literature group), SLIS L596 (in an area pertinent to REEI), and complete all other requirements for the Russian and East European Studies M.A., including the language proficiency exam, M.A. essay, and oral defense.

Application for admission to the dual M.A./M.I.S. degree program must be made to the School of Library and Information Science for study toward the Master of Information Science and to the Russian and East European Institute for study toward the Master of Arts degree. Applicants must be accepted by both degree programs. The student must select an M.A. essay committee of three faculty members representing both REEI and the School of Library and Information Science. Both degrees will be awarded simultaneously. Consult the University Graduate School Bulletin for REEI details.

**Russian and East European Studies (Master of Arts) and Master of Library Science**

Study for the two degrees can be combined for a total of 54 credit hours rather than the 66 credit hours required for the two degrees taken separately.

Requirements for the Master of Library Science degree are as follows:

1. Completion of SLIS M.L.S. Foundation course requirements (15 credit hours).
2. SLIS electives (15 cr.), not including SLIS L596 and REEI R620 (SLIS L610), which are considered part of the Russian and East European Studies degree, chosen in consultation with the advisor, to bring the total of credit hours to 30.
3. Students take 24 credit hours in Russian and East European Studies, including R600, R601, R620, four area studies courses (one each from the social science group, the historical/geographical group, the sociocultural group, and the literature group), SLIS L596 (in an area pertinent to REEI), and complete all other requirements for the Russian and East European Studies M.A., including the language proficiency exam, M.A. essay, and oral defense.

Application for admission to the dual M.A./M.L.S. degree program must be made to the School of Library and Information Science for study toward the Master of Library Science and to the Russian and East European Institute for study toward the Master of Arts degree. Applicants must be accepted by both degree programs. The student must select an M.A. essay committee of three faculty members representing both REEI and the School of Library and Information Science. Both degrees will be awarded simultaneously. Consult the University Graduate School Bulletin for REEI details.

**Doctor of Philosophy Degree**

**Admission Requirements**

Bachelor's degree, a minimum of GRE: (V=500, Q=500, A=4.5) is required, but since entry is competitive, higher scores are usually needed and an undergraduate grade point average of at least 3.2. In addition to a personal statement of 800-1,000 words, we require a single-authored writing sample. A published article, a technical white paper, a grant proposal, or a paper submitted to fulfill course requirements are examples of papers that are acceptable. Questions about the writing sample should be directed to the program director. We strongly encourage school visits.

**Course Requirements**

A total of 90 credit hours, including L701, L702, L710, L790, and L799 dissertation (15 credit hours).

**Major**

Any area of information science approved by the student's advisory committee.

**Minor**

A total of 12 to 15 credit hours.
Research Skills
Basic requirement: introductory statistics course and a second graduate course in statistics or in research design. The research-skill requirement may then be completed by passing, with a grade of B or higher, a third graduate course in statistics or in research design.

Qualifying Examination
Written paper and oral presentation, over the field of concentration, emphasizing theory and research methods. Examination over the minor field at the discretion of the minor-field department.

Final Examination
Confined to dissertation and related matters.

Ph.D. Minor in Information Science
The School of Library and Information Science offers an outside minor through the University Graduate School for Ph.D. students in other fields. Ordinarily, students will take from 12 to 15 credit hours of graduate credit in fulfilling this option (minimum: 12 credit hours).

Courses
For course descriptions, see the School of Library and Information Science Bulletin.

L501 Introduction to Information Science (3 cr.)
L503 User Needs and Behavior in Theory and Practice (3 cr.)
L505 Organization and Representation of Knowledge and Information (3 cr.)
L509 Introduction to Research and Statistics (3 cr.)
L514 Library Preservation: Principles and Practice (3 cr.)
L516 Introduction to Archives and Records Management (3 cr.)
L517 History of Libraries (3 cr.)
L520 Bibliographic Access and Control (3 cr.)
L522 Perspectives on Librarianship, Literacy, Communications, and Reading (3 cr.)
L524 Information Sources and Services (3 cr.)
L526 Library Automation (3 cr.)
L527 Management of Libraries and Information Centers (3 cr.)
L528 Collection Development and Management (3 cr.)
L530 Legal Bibliography and Law Library Administration (3 cr.)
L533 Library Materials for Children and Young Adults (3 cr.)
L534 Principles and Techniques of Storytelling (3 cr.)
L535 Library Services for Children and Young Adults (3 cr.)
L540 Foundations of Information Architecture (3 cr.)
L542 Introduction to Human-Computer Interaction (HCI) (3 cr.)
L543 Strategic Intelligence (3 cr.)
L544 Information Technology Standardization (3 cr.)
L545 Systems Analysis and Design (3 cr.)
L546 User-Centered Database Design (3 cr.)
L547 Organizational Informatics (3 cr.)
L548 Computer Programming for Information Management (3 cr.)
L550 Issues in the Management of Library Services and Programs (3 cr.)
L551 Information Inquiry for School Teachers (3 cr.)
L552 Audio and Video Information Sources and Delivery (3 cr.)
L553 The School Library Media Specialist (3 cr.)
L554 Bibliographic Instruction (3 cr.)
L559 Introduction to Health Science Librarianship (3 cr.)
L561 The Information Industry (1-3 cr.)
L562 Information Accounting (3 cr.)
L563 Information Policy, Economics, and Law (1-3 cr.)
L564 Computerization in Society (3 cr.)
L565 Computer-Mediated Communication (3 cr.)
L566 Digital Libraries (3 cr.)
L567 Gender and Computerization (3 cr.)
L570 Online Information Retrieval (3 cr.)
L571 Information Architecture for the Web (3 cr.)
L574 Communication in Electronic Information Environments (3 cr.)
L575 Information Design for Collaborative Information Spaces (3 cr.)
L577 Design of Information Systems (3 cr.)
L578 User Interface Design for Information Systems (3 cr.)
L579 Information Visualization (3 cr.)
L582 Subject Access Systems (3 cr.)
L583 Indexing Theory and Practice (3 cr.)
L584 Technical Services (3 cr.)
L585 Descriptive Bibliography (3 cr.)
L586 Administration of Manuscripts and Personal Papers Collections (3 cr.)
L587 Rare Book Libraries and Librarianship (3 cr.)
L592 Bibliometric Techniques and Problems (3 cr.)
L594 Research in Library and Information Science (1-3 cr.)
L595 Workshop for Librarians and Information Specialists (cr. arr.)
L596 Internship in Library and Information Science (2-6 cr.)
L597 Topics in Library and Information Science (1-4 cr.)
L600 Readings in Library and Information Science (1-6 cr.)
L605 Seminar in Education for Librarianship and Information Studies (3 cr.)
L608 Seminar in Intellectual Freedom (3 cr.)
L610 International Information Issues (3 cr.)
L620 Topics in Information, Literature, and Bibliography (3 cr.)
L622 Library Materials for Adults (3 cr.)
L623 Information in the Humanities (3 cr.)
L624 Information in Science and Technology (3 cr.)
L625 Information in the Social Sciences (3 cr.)
L628 Government Information: Collection, Organization, and Dissemination (3 cr.)
L629 Business Information Sources (3 cr.)
L630 Seminar in Art Librarianship (3 cr.)
L631 Seminar in Music Librarianship (3 cr.)
L633 Seminar on Issues and Trends in Children's or Young Adult Literature (3 cr.)
L641 Information Retrieval: Theory and Practice (3 cr.)
L642 Concepts and Contemporary Issues in Human-Computer Interaction(3 cr.)
L643 Evaluation of Information Systems (3 cr.)
L651 Evaluation of Resources and Services (3 cr.)
L658 Personnel Management in Libraries and Information Centers (3 cr.)
L665 Computer-Mediated Discourse Analysis (3 cr.)
L681 Metadata (3 cr.)
L682 Electronic Records Management (3 cr.)
L697 Advanced Topics in Information Systems (1-4 cr.)
L701 Introduction to Doctoral Research in Library and Information Science (3 cr.)
L702 Research Practicum (1-6 cr.)
L709 Introduction to Research and Statistics (3 cr.)
L710 Research in Information Science (3 cr.)
L763 Research Problems and Methods in Information Science (3 cr.)
L764 Seminar in Information Science (3 cr.)
L765 Research in Information Systems (2-4 cr.)
L790 Seminar in Doctoral Research (3 cr.)
L799 Ph.D. Thesis (cr. arr.)
Cross-Listed Courses

Computer Science
A538 Network Technologies and Administration (3 cr.)

Graduate
G732 Bibliography of Sub-Saharan Africa (3 cr.)

Fine Arts
A575 Research Sources in Art History (2 cr.)

Music
M539 Introduction to Music Bibliography (3 cr.)

Course Descriptions

L501 Introduction to Information Science (3 cr.) Information science students are introduced to the dynamic and shifting information professions, complex organizations, and emerging careers in the field. Issues in information management, user-oriented systems design, socio-technical concepts, and usability are major themes for the course.

L503 User Needs and Behavior in Theory and Practice (3 cr.) This course introduces students to the concepts of information analysis from a human perspective, focusing particularly on the theoretical models and practical techniques that underpin the field. Sociological and psychological perspectives will be examined in order to develop an approach to the assessment of users' information needs.

L505 Organization and Representation of Knowledge and Information (3 cr.) Introduces students to various disciplines' approaches to the understanding, organization, representation (summarizing), and use of knowledge and information. This survey looks for commonality among the approaches taken in information science, cognitive psychology, semiotics, and artificial intelligence, among others. The goal is to identify criteria for evaluation and improvement of ways to organize and represent information for future retrieval. Information systems currently used in libraries and information centers will be studied as examples. Emphasis in the course is on concepts and ideas, with appropriate attention to terminology and technology.

L507 The Management of Information Environments (3 cr.) The course is fundamental for understanding organizations as a foundation for managing information and for performing general management activities. The course offers introductory coverage of four main areas: models of organization, group and individual behavior, operations and facilities planning, and budgeting and fiscal planning, especially as these apply to information management environments.

L509 Introduction to Research and Statistics (3 cr.) P: L401, completion of 9 credit hours in SLIS, or consent of instructor. The research process, including concepts, design, conduct, and evaluation. Principles and characteristics of approaches and methodologies relevant to research in the field. Examples of data sources and introduction to methods of statistical description and analysis; ethical issues.

L514 Preservation of Library and Information Resources (3 cr.) Examines causes of library and archival materials deterioration. Develops conceptual framework and management perspective for preservation programs using technical standards, program development tools, scientific and administrative research reports, and advocacy literature. Explores the new information technologies and media as both preservation tools and challenges.
L516 Introduction to Archives and Records Management (3 cr.) Introduces basic theories, methods, and significant problems in archives and records management. The course also discusses how archivists are responding to the challenge of managing and preserving electronic records.

L517 History of Libraries (3 cr.) Development of libraries and information service from earliest times to the present, with emphasis on the library in relation to social, economic, cultural, and political trends.

L520 Bibliographic Access and Control (3 cr.) Historical development and principles essential to the understanding of the conceptual foundations of providing bibliographic access and control of materials and information. Discussion and examples in the application of AACR2r will be presented to illustrate and reflect current practice. Emphasis is on monographic publications.

L522 Perspectives on Librarianship, Literacy, Communications, and Reading (3 cr.) Overview of the library as a social institution, historically, currently, and for the future, within social, economic, political, and cultural contexts. Focuses on the institution, the collections and formats, and the users to create an understanding of the role and importance of libraries.

L524 Information Sources and Services (3 cr.) P or C: L401. This course introduces students to the basic information sources and services among different types of libraries and information centers, including academic, public, special, and school media.

L526 Library Automation (3 cr.) P or C: L401. Principles for the design, selection, implementation, and management of automated systems of all types in libraries, including systems for technical services processing, reference and user services, and management. Focus is on present and future applications of technology in libraries, their technical features, and their implications for library services and management. When possible, some practical experience with a particular application will be provided.

L527 Management of Libraries and Information Centers (3 cr.) Management and administration of all types of libraries. Covers basics of organizational structure, planning, budget management, human resources issues and skills, and an understanding of the manager in the context of the organization.

L528 Collection Development and Management (3 cr.) Theoretical and pragmatic aspects of the selection, evaluation, and management of collections in all types of libraries. Acquisitions, publishers and publishing, policy making, and intellectual freedom and censorship are also covered.

L530 Legal Bibliography and Law Library Administration (3 cr.) P: L524 or consent of instructor. An introduction to basic legal materials and law librarianship. Primary and secondary resources; indexes; digests and citators; specialized research methods; current developments in automated legal research. History of law libraries in the U.S., their organization and administration. The role of law librarians in law schools and law firms.

L533 Library Materials for Children and Young Adults (3 cr.) Evaluation and use of books, magazines, recordings, films, radio and television broadcasts, and other sources of information and recreation.

L534 Principles and Techniques of Storytelling (3 cr.) P or C: L533 or consent of instructor. The history, philosophy, and value of storytelling. Guidance in techniques of this oral art form and its adaptation to special needs and programs.

L535 Library Services for Children and Young Adults (3 cr.) P or C: L533 or consent of instructor. This course emphasizes the history, philosophy, and description of children and young adult library services. It takes a holistic look at the role of the youth services librarian from planning and evaluation to specific services and programs, and examines the current and future outlook for this type of librarianship. Emphasis is on the public library, but cooperation with appropriate services and programs such as school media centers is also discussed.
L540 Foundations of Information Architecture (3 cr.) Effective information system design integrates knowledge of formal structures with understanding of social, technological, and cognitive environments. Drawing from a range of disciplines, this course investigates how people represent, organize, retrieve, and use information to inform the construction of information architectures that facilitate user understanding and navigation in conceptual space.

L542 Introduction to Human-Computer Interaction (3 cr.) Examines the human factors associated with information technology and seeks to provide students with knowledge of the variables likely to influence the perceived usability, and hence the acceptability, of any information technology. In so doing it will enable students to progress further towards specialist work in the important field of human-computer interaction.

L543 Strategic Intelligence (3 cr.) Introduces different concepts of strategic intelligence, and different contexts in which these are applied; the idea of intelligence is not restricted to national security, or corporate competition: it can apply at the level of the individual citizen, company, community, or country.

L544 Information Technology Standardization (3 cr.) P: L401. This course presents students with an opportunity to learn about specific information technology standards of interest to information professionals. Additionally, students will learn about various standardization activities and their impact in organizational settings.

L545 Systems Analysis and Design (3 cr.) Using a behavioral approach to information systems, this course covers information systems designed to conform to the needs of users.

L546 User-Centered Database Design (3 cr.) P: L401 or consent of instructor. Concerned with a comprehensive view of the processes involved in developing formal access to information from a user-centered point of view. Considers various database models such as flat file, hierarchical, relational, and hypertext in terms of text, sound, numeric, image, and geographic data. Students will design and implement databases using several commercial database management systems.

L547 Organizational Informatics (3 cr.) Introduces information, technology, and social behavior in the organizational context. Concepts of organization theory, organization behavior, knowledge and information management, and organizational intelligence provide a critical foundation for managing information, people, and information and communication technologies in rapidly changing and dynamic environments.

L548 Computer Programming for Information Management (3 cr.) P: L401 or consent of instructor. Introduces basic skills for programming and manipulation of data structures for bibliographic and full text information systems.

L550 Issues in the Management of Library Services and Programs (3 cr.) Study of management and service issues in a specific type of library or information environment. May be repeated for credit when topic varies.

L551 Information Inquiry for School Teachers (3 cr.) This course is intended to be an opportunity for teachers and future teachers (including school library media specialists as teachers) to practice methods in critically thinking about information/media, and to use that process as a means to teach their students to be critical reviewers and communicators as well.

L552 Audio and Video Information Sources and Delivery (3 cr.) P: L503 or consent of instructor. User-focused approach to decision making in the digital audio and video information environment. Emphasizes collection development in support of user services, including access to remote collections and evaluation of multimedia materials and delivery mechanisms, and issues related to emerging technologies. Scope includes adult and young adult audiences.
L553 The School Media Specialist (3 cr.) P or C: L524 and L533, or consent of instructor. Establishes the professional teaching and administrative role of the certified school library media specialist in K-12 settings. Situations are examined that pertain specifically to policy development, budgeting, collection development, instructional design, support staff training, facility design, district supervision, and information networking within the modern school corporation. Students make site visits to leading school information centers, conferences, and media fairs.

L554 Bibliographic Instruction (3 cr.) Reviews important educational theories for application to secondary school, college, and university settings which provide training and education programs to teach students skills leading to information literacy. Standards from AASL and ACRL are applied to instructional design and practice including lecture, collaboration with faculty, and evaluation of online tutorials.

L559 Introduction to Health Sciences Librarianship (3 cr.) P or C: L524. Health sciences library administration, materials organization, and information services. Emphasis on National Library of Medicine classification, subject headings, printed indexes, and online databases.

L561 The Information Industry (1-3 cr.) This course examines various aspects of the information industry: products, producers, suppliers, trends, and market opportunities. Focus varies with the topic; for example, structural market characteristics, or technical developments and their impact. May be repeated for credit when topic varies.

L562 Information Accounting (3 cr.) P: L527 or L547. This course evaluates a variety of approaches to assessing the costs and benefits of information investments. The aim is to provide students with a range of information accounting techniques and impact assessment methodologies to help them better understand the true costs and value of information.

L563 Information Policies, Economics, and the Law (1-3 cr.) Data creation, publication, dissemination, and use occur in a complex social context. Legal and regulatory structures continue to evolve to control these processes. This course explores international and U.S. principles, laws, and regulations affecting the information industry. Focus varies with the topic; for example, copyright of electronic information sources or transborder data flow. May be repeated for credit when topic varies.

L564 Computerization in Society (3 cr.) Surveys social consequences of computerization when it is shaped and used by business, public agencies, and individuals.

L565 Computer-Mediated Communication (3 cr.) Computer-mediated communication (CMC) is human-to-human interaction via computer networks such as the Internet. This course examines potentials and constraints of several types of CMC, and considers how content and dynamics are influenced by the systems’ technical properties and the cultures that have grown up around their use.

L566 Digital Libraries (3 cr.) Examines the design and operation of digital libraries and related electronic publishing practices from a socio-technical perspective. Students develop understanding of major issues, concepts, and trends, enabling them to understand the socio-technical character of digital libraries that can and will be effectively supported and used by various groups.

L567 Gender and Computerization (3 cr.) This course explores the relationship between information communication technologies (ICTs) and the gender of the people who design, use, administer, and make policy concerning computer systems and computer networks such as the Internet.

L570 Online Information Retrieval (3 cr.) P: L401 or consent of instructor. Principles, methods, and techniques of advanced online information retrieval (IR). Characteristics of and search strategies for the use of bibliographic, referral, citation, fact, numeric, and full text databases and search systems. Considers standards, use of communications software, front-ends and micro-based IR systems, and creation of in-house databases.
L571 Information Architecture for the Web (3 cr.) Focuses on Web site development. Students study information architecture as an approach for site organization and design, and learn about project management for complex web development tasks. In lab sessions, students work with advanced markup languages and scripting and develop sites, typically for real clients.

L574 Communication in Electronic Information Environments (3 cr.) Examines conceptual perspectives on information in organizations, covering topics such as types of information, information activities, organizational culture and information technology, communication as information flow, obtaining and using information from the environment, managing information in specialized extended communities, and ethical and quality issues. Focus varies by type of community studied. May be repeated for credit when the topic varies.

L575 Interface Design for Collaborative Information Spaces (3 cr.) Provides an overview of two-dimensional and three-dimensional interface design. Topics covered include task and user analysis, interface goals and design methods, and empirical evaluation.

L577 Design of Information Systems (3 cr.) P: L548. Students identify, design, and implement a significant information design project, such as acquisitions, organization, or search and retrieval for an online public access system.

L578 User Interface Design for Information Systems (3 cr.) P: L401 or consent of instructor. This course focuses on established principles and methods to design effective interfaces for information systems, emphasizing document retrieval, filtering, visualization, correlation, analysis, and research.

L579 Information Visualization (3 cr.) Introduces information visualization, highlighting processes which produce effective visualizations. Topics include perceptual basis of information visualization, data analysis to extract relationships, and interaction techniques.

L582 Subject Access Systems (3 cr.) P: L505. Principles, development, characteristics, and internal structures of subject access systems. Evaluation of the strengths and weaknesses of the major classification schemes and current subject heading systems.

L583 Indexing Theory and Practice (3 cr.) P: L505 or consent of instructor. Theoretical concepts of subject indexing and thesaurus construction for information retrieval. Examines alternative approaches to traditional indexing techniques. Evaluation and use of appropriate computer software.

L584 Technical Services (3 cr.) P: L527 or consent of instructor. Principles of organization and function of library technical services, including acquisition, cataloging, serials, circulation. Special emphasis on research and development in library systems and technology. Includes file organization, documentation system development, analysis, and evaluation for manual, mechanical, and automated applications.

L585 Descriptive Bibliography (3 cr.) P: Consent of instructor. The development of the practice of printing, typefounding, and papermaking; the principles and practice of the bibliographical description of printed books, with emphasis on the period to 1880.

L586 Administration of Manuscripts and Personal Papers Collections (3 cr.) P: Consent of instructor. Introduction to the nature, functions, and methodology of the organization and administration of archives and manuscript collections. The course will consist of lectures, discussions, field trips, and special projects.

L587 Rare Book Libraries and Librarianship (3 cr.) P: Consent of instructor. Introduction to the development, organization, and operation of rare book libraries and special collections. Includes an overview of the fundamentals of book collecting, both private and institutional, the antiquarian book trade and auction market, and the profession and practice of rare book librarianship.
L588 History of the Book to 1450 (3 cr.) Covers the introduction and development of writing and the history of the manuscript and printed book, from their beginnings to approximately the year 1450. Although there will be some coverage of the non-Western book, the emphasis will be on the history of the book in the West.

L589 History of the Book 1450 to the Present (3 cr.) A survey of the book from 1450 to the present, with emphasis on the development of the book in the West. Focuses on the physical aspects of the book from the mid-fifteenth through the twentieth centuries, and on some of the many roles of the book in society during this period; also increases awareness of current scholarly trends in the history of the book.

L592 Bibliometric Techniques and Problems (3 cr.) Focuses on bibliometric techniques and the research problems that they are used to address; introduces the principal bibliometric techniques used in library and information science research with particular emphasis on their role in the study of scholarly communication.

L594 Research in Library and Information Science (1-3 cr.) P: Consent of instructor. Individual research in a problem in the field of library and information science.

L595 Workshop for Librarians and Information Professionals (cr. arr.) P: Consent of instructor. Group study of specific problems in the library and information field. Generally includes a hands-on element. No more than 6 hours of L595 credit may be used toward the requirements for any SLIS degree.

L596 Internship in Library and Information Science (2-6 cr.) P: Permission of faculty advisor. Graded S/F. Supervised internship in an information management environment. Professionals in library and information management mentor each graduate student. Sixty on-site hours must be completed for each credit earned. Students document their experiences through journals, abstracts of related publications, and a final presentation. Normally, at least 21 credits must be completed before enrollment. Guidelines and placement sites are available on the SLIS Web site.

L597 Topics in Library and Information Science (cr. arr.) P: Consent of instructor. Study of specific topics in librarianship and information science. May be repeated for credit when topic varies.

L600 Readings in Library and Information Science (1-6 cr.) P: Consent of instructor. Readings and study in any area of library or information science having an extensive literature. A student may enroll for this course twice in the same semester under different instructors. Normally L600 is completed under the direction of a full-time faculty member. Readings done under L600 shall not duplicate the content of any course now in the curriculum of the School of Library and Information Science.

L605 Seminar in Education for Librarianship and Information Science (3 cr.) P: Consent of instructor. An overview of the history, purpose, and methods in education for librarianship and information science. American and international systems will be covered as well as standard accreditation requirements for higher education programs. Students will be evaluated on their demonstration of lecture delivery, group discussion management, analysis of a mentor teacher, and presentation of instruction through distance education.

L608 Seminar in Intellectual Freedom (3 cr.) P: 9 hrs. of SLIS graduate credit or permission of instructor. Beginning with a history of and alternative philosophical justifications for censorship, the student is introduced to constraints, obligations, and problems relating to intellectual freedom.

L610 International Information Issues (3 cr.) Comparison of information policies, information standards, and library systems as they affect commercial, scholarly, scientific, and political information contexts.

L620 Topics in Information, Literature, and Bibliography (3 cr.) The purpose of this course is to provide the opportunity for greater in-depth study of the information and literature sources related to area studies, specific academic disciplines, and/or specific library patron audiences. Examples include Slavic materials, Latin American bibliography, and international legal bibliography. Depending on the potential
market, the demand for knowledge concerning the specific information, literature, and material, and the expertise of available faculty, there are a wide range of possible topics.

L622 Library Materials for Adults (3 cr.) P: L524. A review and discussion of trends reflected in subject content and use of book and nonbook materials for patrons in secondary school and public libraries in relation to changing young adult and adult needs, and the role of libraries in meeting such needs.

L623 Information in the Humanities (3 cr.) P: L524 or consent of instructor. Introduction to information sources and services in the disciplines of performing arts, music, fine arts, literature, language, philosophy, and religion. In addition, the course addresses information needs and behavior patterns of users seeking these types of information.

L624 Information in Science and Technology (3 cr.) P or C: L401, L524. General materials, reference books, periodicals, government documents, nonbook media in the individual literature of individual disciplines; patents and report literature. Examination of production, publication, distribution, and forms of scientific and technical literature.

L625 Information in the Social Sciences (3 cr.) P: L401, L524, or consent of instructor. Study of the core information tools in the fields of anthropology, economics, history, political science, psychology, and sociology. Includes key bibliographic databases and electronic network tools. Evaluation of research dealing with information channels in these fields.

L628 Government Information: Collection, Organization, Dissemination (3 cr.) P: L401, L524. Survey of government information dissemination in all formats and at all levels of government. Consideration of government information policy. Primary emphasis given to U.S. government information but with some consideration given to state and local publications in the United States, and those of international organizations.

L629 Business Information Sources (3 cr.) P: L401, L524, or consent of instructor. Introduction to basic business materials. Includes resources, research methods, current developments, automated systems, and databases.

L630 Seminar in Art Librarianship (3 cr.) P: FINA A575 or consent of instructor. Academic art library administration, collection development, reference services, technical services operations, facilities, and slide and photograph/picture collections will be emphasized.

L631 Seminar in Music Librarianship (3 cr.) P: MUS M539. Academic music library administration, collection development, technical services operations, record and performing ensemble collections, and reference services will be emphasized.

L633 Seminar on Issues and Trends in Children's or Young Adult Literature (3 cr.) P: L533 or consent of instructor. An advanced seminar, addressing such topics as: images of minority groups, societal problems (e.g., poverty and family patterns), or informational needs and materials including access and availability of print, nonprint, and computer resources. May be repeated for credit when topic varies.

L641 Information Retrieval Theory and Practice (3 cr.) P: L548 or consent of instructor. Traditional experimental design, cognitive, and naturalistic approaches to studying the fundamental concepts of information retrieval. Anomalous states of knowledge, relevance, information need, search behavior and process. Study of IR subsystems; system interface; query formulation, matching, and relevance feedback algorithms, subject indexing, and evaluation.

L642 Concepts and Contemporary Issues in Human-Computer Interaction (3 cr.) P: L542. Examines and assesses theoretical approaches developed specifically for understanding the use of, informing the design of, and assessing the value of information technologies. The course also considers contemporary
issues surrounding the situated use of information technologies, such as emotion, embodiment, interpersonal, and social aspects of interaction.

L643 Evaluation of Information Systems (3 cr.) P: L401 and 6 SLIS graduate credit hours. Theoretical and practical exploration of the issues surrounding contemporary information systems. A specific focus will be on evaluating information systems from the user perspective. This evaluation approach will cut across disciplinary frameworks: behavioral, cognitive, and social sciences. The approach will also touch on multiple research methods: online surveys, sense-making, critical incident, and network analysis.

L651 Evaluation of Resources and Services (3 cr.) P: L528. Examines the applied evaluation of library resources and services, including collections, document delivery, technical services, reference services, and overall library performance. Emphasis is placed on the available methods and methodological issues. The checklist method, availability studies, document delivery tests, use studies, applied bibliometrics, and the use of automation are covered.

L665 Computer-Mediated Discourse Analysis (3 cr.) Computer-mediated discourse analysis (CMDA), applies theories from linguistic discourse analysis, pragmatics, ethnomethodology, and semiotics in the analysis of discourse-language and language use-in computer-mediated communication. This course provides hands-on experience in applying empirical analytical methods, and in interpreting the results.

L681 Metadata (3 cr.) Metadata is essential in designing and developing effective knowledge systems; it facilitates resource discovery, database documentation, and recording digital documents' textual and conceptual histories. This course introduces principles supporting the development and implementation of metadata schemes, focusing on issues of interoperability, internal and external standardization, and evaluation.

L682 Electronic Records Management (3 cr.) Addresses the major issues and challenges facing the archival/records management professions in their quest to manage electronic records. Students will study and evaluate the impact automation has had on archival theory and practice, analyzing various models and strategies archivists have developed to manage electronic records.

L697 Advanced Topics in Information Systems (1-4 cr.) This course is a special topics seminar, focusing on a new development or application of technology related to information systems. The intention is to provide a rapid response to current trends, with topic and content changing with each offering. Examples of topics which might be offered include: hypermedia, artificial intelligence, expert systems, parallel processing, and virtual reality, or some special aspect of one of these technology trends, and their implications for information system development and use. May be repeated for credit when topic varies.

The following courses at the 700 level are open only to doctoral students.

L701 Introduction to Doctoral Research in Library and Information Science (3 cr.) P: Consent of instructor. Role and function of research in society; history of library and information science scholarship; current need for research in LIS; critical analysis of present state of knowledge in the field; relevant research methodologies; barriers to individual initiatives in research.

L702 Research Practicum (1-6 cr.) P: L701. Encourages doctoral students to begin the process of learning to conduct independent research as early as possible in their studies. The purpose is to expose the student to the experience of research in LIS under the guidance of a SLIS faculty member. Two consecutive semesters of L702 are required of all doctoral students.

L709 Introduction to Research and Statistics (3 cr.) The research process, including concepts, design, conduct, and evaluation. Principles and characteristics of approaches and methodologies relevant to research in the field. Examples of data sources and introduction to methods of statistical description and analysis; ethical issues.
L710 Research in Library and Information Science (3 cr.) P: L701 or consent of instructor to waive L701. Approval of the student's advisory committee is required for the L710 project. Students apply methods of research under faculty supervision. May be taken twice for credit.

L763 Research Problems and Methods in Information Science (3 cr.) P: Consent of instructor. Study of current problems and methodological approaches in information science research.

L764 Seminar in Information Science (3 cr.) P: Consent of instructor. Intensive study of selected topics.

L765 Research in Information Systems (2-4 cr.) P: Consent of instructor. Independent research or study.

L790 Seminar in Doctoral Research (3 cr.) P: Consent of instructor. Doctoral students develop their plans for theses subject to criticism by other doctoral students and faculty.

L799 Ph.D. Thesis (cr. arr.)