Contents

The College of Information Science and Technology
2008-2009 Graduate Course Descriptions

Information Science & Systems Courses ...................................................................................................................................................................... 2

Information Tech Leadership Courses .............................................................................................................................................................. 10
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credits</th>
<th>College: Information Sci &amp; Technology Department: College of Info Science &amp; Tech</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFO 503</td>
<td>Intro Info System Analysis</td>
<td>Presents information systems development as a life-cycle process, incorporating problem definition, modeling and analysis, system design, implementation, evaluation, support, and maintenance.</td>
<td>3.00</td>
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<tr>
<td>INFO 510</td>
<td>Info Resources &amp; Services I</td>
<td>Presents applied information retrieval as the foundation for information services. Provides an overview of the present-day online resources and their printed counterparts.</td>
<td>3.00</td>
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<tr>
<td>INFO 511</td>
<td>Info Resources &amp; Services II</td>
<td>Relates the applied information retrieval of INFO 510 to the larger conceptual structures of library and information science: literature-producing communities, the process of publication, publishing on the Internet, subject domains and form classes.</td>
<td>3.00</td>
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<tr>
<td>INFO 515</td>
<td>Action Research and Statistics</td>
<td>Surveys the basic statistical, tabular, and graphic methods as applied to decision making, requirements analyses, user studies, and implementation of change in information organizations when generalizability of results beyond the organization is not a primary concern. Focuses on formulating researchable problems, sampling, data gathering, and computer-assisted analysis of data. Develops skills for preparing reports and presentations and for reading research literatures.</td>
<td>3.00</td>
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<tr>
<td>INFO 520</td>
<td>Prof/Soc Aspects Info Svcs</td>
<td>Surveys the professional, social, ethical, and legal issues that affect information service professionals and organizations. Addresses such topics as information law, access, ownership, and censorship. Studies professional organizations and the sociology of professions.</td>
<td>3.00</td>
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<tr>
<td>INFO 525</td>
<td>Schl Lib Progs/Srvcs</td>
<td>Introduces the field of school libraries/media centers. Examines the context in which K12 information programs and services exist; explores key concepts related to information work in schools; explains the major functions of the school-based information services. Develops practical skills in meeting users’ information needs, such as answering virtual reference questions and creating online resources.</td>
<td>3.00</td>
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<tr>
<td>INFO 530</td>
<td>Foundations of Info Systems</td>
<td>Introduction to concepts and applications of Information Systems (IS) and Information Technology (IT) as applied throughout library and information science. Topics include the structure of information systems, hardware and software concepts, basic principles of system analysis and design, and contemporary applications of computers in organizational environments.</td>
<td>3.00</td>
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<tr>
<td>INFO 532</td>
<td>Software Development</td>
<td>Provides a hands-on introduction to software development. Includes programming concepts and a series of programming exercises done by students working in pairs or in small groups. Also covers general concepts and issues in software development to help students understand why creating high quality software is very difficult.</td>
<td>3.00</td>
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<tr>
<td>INFO 540</td>
<td>Perspectives on Info Systems</td>
<td>Examines various types of information systems and the ways in which these systems support activities of individuals and organizations. Investigates application architectures that occur commonly in information systems. Provides an overview of knowledge domains that comprise the information systems discipline.</td>
<td>3.00</td>
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<tr>
<td>INFO 604</td>
<td>Object-Oriented Prgmg Info Sys</td>
<td>This course provides a hands-on introduction to object-oriented programming language. The language will be a class-based object-oriented programming language in common usage in industry. The class will cover classes, objects, constructors and destructors, access control, inheritance, and use of object libraries and language specific features.</td>
<td>3.00</td>
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<tr>
<td>INFO 605</td>
<td>Database Management I</td>
<td>A first course in database management systems. Covers database design, data manipulation, and data-base integrity. Emphasizes concepts and techniques related to the entity-relationship model and relational database systems. Discusses normalization up to third normal form and commercial query languages.</td>
<td>3.00</td>
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<tr>
<td>INFO 606</td>
<td>Database Management II</td>
<td>Examines both traditional database systems and recent advances in database systems. Topics include formal treatment of normalization and denormalization, extended entity-relationship models, advanced query processing techniques, query optimization, physical database design and indexing, and object-oriented database systems.</td>
<td>3.00</td>
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<td>INFO 608</td>
<td>Human-Computer Interaction</td>
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This course focuses on the design and evaluation of human-computer interfaces covering such topics as task analysis techniques for gathering design information, iterative design through prototyping, and formative and summative usability testing; theoretical foundations of HCI and cognitive modeling of user interactions; the integration of HCI techniques into the software development life cycle and the use of user constraints to generate new interaction designs.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 610  Analy of Interactive Systems
This course focuses on the evaluation of human-computer interfaces covering such topics as heuristic evaluation, inspection and design reviews, cognitive walkthroughs, ethnographic observation, user testing, interviews, and questionnaires; the usability engineering lifecycle, comparison of usability evaluation methods, selection or design of appropriate methods, reporting usability evaluation findings, and the development of user interface standards and guidelines.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 611  Design of Interactive Systems
Focuses on interactive system design methods in common use covering such topics as interactive design, iterative design, usability analysis, prototyping and evaluation, mental models, conceptual models, interaction styles, the use of guidelines; normative, descriptive, and formative approaches to work analysis; modeling user's activities, defining and validating requirements, presenting interactive system designs, and the theoretical foundations underlying the design of interactive systems.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 612  Knowledge Base Systems
Introduces the concepts, principles, and techniques of knowledge base systems, with a focus on implementation of a working expert system. Presents the expert system development life cycle with a focus on analysis and conceptual modeling techniques.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 613  XML and Databases
Introduces background and basics of XML and XML Schema. Focuses on storing and extracting XML data in Relational Database Systems. Covers the process of modeling real-world problems in XML. Investigates native XML database management systems.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 614  Distrib Comput & Networking
Presents the fundamentals of data communications, networking, and distributed computing technologies. Focuses on the broad foundational coverage of key technologies as well as the key concepts in network planning, design, and management. Major topics include network models, data and voice communications, local-area and wide-area technologies, IP networks and their applications, internetworking (with an emphasis on the Internet), client/server systems, and distributed computing applications.

Credits: 3.00
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INFO 616  Computer-Suppt Co-Op Work
Examines human and technical issues and concepts of computer-supported cooperative work (CSCW). Covers topics including the ways groups work in the networked organization, intelligent work flow, various types of CSCW technology, CSCW software design and implementation issues, and future directions of this technology.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 617  Intro to System Dynamics
Introduces simulation, particularly of business processes, using the principles of system dynamics.

Credits: 3.00
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INFO 618  C.ptr-Support Collab
Learning Examines socio-technical issues and concepts of computer-supported collaborative learning (CSCL). Covers how individuals and groups learn in classes, teams and collaborations with computer support; theory of collaborative knowledge building; CSCL software design, implementation and evaluation issues, and future directions. Review of current research, literature, theories, issues, technologies, and methodologies.

Credits: 3.00
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INFO 620  Info Sys Analysis & Design
Offers an advanced treatment of systems analysis and design with special emphasis on object-oriented analysis and design techniques based on the Unified Modeling Language (UML). Discusses major modeling techniques of UML including use-case modeling, class modeling, object-interaction modeling, dynamic modeling and state diagrams and activity diagrams, subsystems developments, logical design, and physical design.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 621  Developing Multimed Info Systm
Introduces concepts and practices associated with the creation, utilization, and evaluation of multimedia for information delivery. Includes the basics of digitizing and manipulating text, sound, and video/still images while engaging in a theoretical exploration of the impact of interactive digital media on human cognitive and communication processes. Covers multimedia design and implementation with an emphasis on creating interactive multimedia information systems.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 622  Content Representation
Focuses on fundamental decisions in designing subject access systems and alternative approaches to indexing. Explores current issues in content representation: principles of subject analysis; natural language vs. vocabulary control; manual, computer-assisted, and automatic indexing; faceted indexing and classification systems; image indexing and retrieval; indexing and the World Wide Web. Includes evaluation of indexer consistency and indexing system performance.

Credits: 3.00
College: Information Sci & Technology
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INFO 624 Information Retrieval Systems
Covers the theoretical underpinnings of information retrieval to provide a solid base for further work with retrieval systems. Emphasizes systems that involve user-computer interaction. Covers aspects of information retrieval including document selection, document description, query formulation, matching, and evaluation.

Credits: 3.00
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INFO 625 Cognition & Info Retrieval
Applies cognitive processing and concept formation to the case of humans interacting with information storage and retrieval systems, including automated systems. Links theoretical models of cognitive processes to research studies that examine actual information-seeking behavior.

Credits: 3.00
College: Information Sci & Technology
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INFO 626 Language Processing
Studies the problems and techniques of automating human language use and understanding. Introduces different annotations of human language and examines how spoken language differs from written language. Includes syntactic inference, parsing, semantic interpretation, and natural language planning, and discusses how to combine analyses of spoken language with analyses of written language.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 627 Reqmts Engineering & Mgmt
Provides students with an opportunity to explore and experience methodologies, tools, and techniques for eliciting, analyzing, specifying, and managing requirements in modern software development organizations. Focuses on the intersection of requirements engineering, strategic IS and business planning, and business process reengineering. Students will also learn about change management in requirements engineering context in response to a fast-paced, changing world. Upon completion of the course, each student should have new skills and insights that are immediately applicable to the performance of the requirements engineering project function.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 628 Info Sys Implementation
Addresses issues involved in implementing an information system in the context of a real organization, including ensuring quality in the delivered system. Focuses on the detailed design, coding, test, and distribution aspects of software system implementation.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 629 Concepts in Artificial Intell
Introduces the concepts, principles, and techniques of artificial intelligence (AI), with emphasis on its application to information systems.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 630 Evaluation of Info Systems
Focuses on the evaluation of software and software system development. Covers a variety of methodologies, techniques, and tools for measuring both software and software development attributes in modern software development organizations. Includes both graphical approaches for representing these attributes and statistical approaches for modeling various software relationships.

Credits: 3.00
College: Information Sci & Technology
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INFO 631 Info Technology Integration
Focuses on integration of information technologies from an organizational perspective. Coverage includes IT Product and service selection and evaluation, impact of emerging technologies, standards, and vendor strategies. Emphasizes financial considerations including return on investment, time cost of money, depreciation, and system life.

Credits: 3.00
College: Information Sci & Technology
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INFO 632 Info Svcs Design & Eval
Offers perspectives on the design and evaluation of information services and products. Considers the distinguishing features of information organizations and units; the nature of service effectiveness; service quality; market positioning; client-provider relations; needs analysis; information valuation; information economics; information in organizations; and the introduction of information services innovations.

Credits: 3.00
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INFO 633 Information Visualization
Introduces concepts and principles of information visualization from both theoretical and practical perspectives. Emphasizes the development of critical thinking and problem solving abilities in the context of information visualization. Provides exposure to current information visualization tools.

Credits: 3.00
College: Information Sci & Technology
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INFO 634 Data Mining
This course introduces the concepts and principles of knowledge discovery in databases (KDD), with a focus on the techniques of data
mining and its function in business, governmental, medical or other information-intensive environments.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 635 Scholarly & Professional Comm
Provides an overview of traditional and contemporary communication patterns and the generation and use of information in research, scholarly, and professional communities. Considers models of communication and information-seeking behavior underlying the development of these communities, formal and informal communication networks, and the structure of the literatures produced.

Credits: 3.00
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INFO 636 Software Engineering Process I
Focuses on behaviors and activities of individuals developing software with a disciplined software engineering approach. Provides hands-on experience in which students complete programming exercises using a defined software engineering process. Requires students to plan, estimate, measure, and analyze their work, and to define, analyze, and improve development processes and create process documentation.

Credits: 3.00
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INFO 637 Software Engr Process II
Focuses on behaviors and activities of teams developing software with a disciplined software engineering approach. Provides hands-on experience in which students complete team activities using a defined software engineering process. Covers topics including planning and estimating for team projects, reviews and inspections, standards, software reuse, and configuration management.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 638 Software Project Management
Focuses on first-line management of software system development. Covers major themes including estimation (software cost factors, estimation models, and risk management), planning (work breakdown, scheduling, staffing, resource allocation, and creation of a project plan), and execution (team building, leadership, motivation, process tracking, control recovery, and communication within and outside the project).

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 640 Managing Information Orgs
Applies theories and techniques of management to libraries, information centers, and information enterprise, concentrating on political processes, leadership, communication, human resources, organizational structure, decision making, planning, and control. Also includes elements of project management.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 643 Information Services In Orgs
Examines various organizational structures and the influence of structure and environment on patterns of information processing and utilization by organizations. Emphasizes the role of function driving the demand for information. Focuses on the structure of information services, resources, and technology as a means of attaining organizational goals. Includes not only traditional business data but all forms of knowledge and emphasizes strategic and tactical uses.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 644 Knowledge Assets Mgt in Orgs
Focuses on the nature, acquisition, and use of knowledge assets and their strategic role in organizations. Examines the role of information professionals in organizing, managing, and providing access to these important assets using formal and informal knowledge management systems.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 646 Information Systems Management
Addresses information technology-enabled change and policy issues in the management of information systems (IS). Stresses systems development, staffing and organization, technology infrastructure, project selection, justification and funding, and data. Studies the issues and their resolution in the context of an IS plan. Emphasizes communication about the issues to senior management.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 648 Healthcare Informatics
The course presents an overview of all aspects of healthcare informatics, including medical, nursing and bioinformatics. It provides an introduction to the applications of information systems in a variety of healthcare environments, including education, research and clinical settings. It includes extensive reading and critical discussion of relevant professional research literature.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 649 Library Programming
Provides an overview of the broad range of cultural, educational, and social library programming initiatives available for children, adolescents, and adults in academic libraries, public libraries, and school library media centers. Teaches community analysis, planning and evaluation. Emphasizes the collaborative nature of developing and implementing library programs.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 650 Public Library Service
Surveys information services provided through public libraries, with attention to governmental and funding issues, determinants of use, extending services to non-users, and cooperation among libraries.

Credits: 3.00
College: Information Sci & Technology
INFO 651  Academic Library Service
Examines the role of library service in higher education, with emphasis on problems of organization, administration, services, and the relationship of the library to the overall educational program.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 652  Internet Info Resource Dsgn
Offers a hands-on introduction to creating sophisticated websites to support users' information needs. Covers website design, implementation, and evaluation. Requires the student to establish a website, compose its text and graphic files, use scripts for interactive application, install a search engine, and create reports on usage.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 653  Digital Libraries
This course introduces research and development in the world of digital libraries. Focuses on intellectual access to digital information resources. Topics include foundations and architectures of digital libraries, searching and resource organizing, knowledge representations and discovery, metadata and standards, interfaces and information visualization, intellectual property rights and electronic publishing.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 655  Programming Internet Info Sys
Provides a hands-on workshop in programming for Internet information systems using an appropriate programming language (Java is used currently). Covers fundamental concepts such as object-oriented programming, client-server programming, multi-threaded programming, graphical user interface design, and application development.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 656  Internet Info Systems II
This course provides additional design and programming skills for the development of Internet information systems with an emphasis in server-side programming. It covers various web servers, applications servers, and other server technologies, as well as tools and methods for creating dynamic web-based information systems. It discusses issues related to the development of server-based information on the web.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 657  Digital Library Technologies
Introduces technologies that enable the design and implementation of digital libraries. Focuses on hands-on activities relating to content description technologies (such as XML) systems technologies, and user interface technologies. Students learn through building components of digital libraries collaboratively.
Credits: 3.00
College: Information Sci & Technology

INFO 658  Information Architecture
Introduces fundamental concepts, methods and theories in Information Architecture for virtual, physical, and hybrid worlds. Focuses on organization, representation, and navigation of conceptual space. Topics include foundations, Web design, cognitive aspects, search, interaction design, knowledge organization, and user experience.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 660  Cataloging & Classification I
Introduces and provides intensive practice in the fundamentals of library cataloging and classification with primary focus on modern printed materials, but also includes reference to other media. Instruction on critical reading, interpretation, and use of current professional standards and documentation for the creation of MARC records. Encompasses discussion of relevant historical and theoretical issues in the construction of contemporary bibliographic databases.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 661  Cataloging & Classif II
Introduces and provides intensive practice in the fundamentals of cataloging nonprint library materials (sound recordings, films/videos, computer files, microforms, graphics), serials, books printed before 1800, and archival/manuscript collections. Provides instruction in RLIN searching. Examines major problems and routines affecting cataloging with copy. Discusses issues related to library automation, actual uses of catalog records, and the emergence of new media.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 662  Metadata & Resource Descript
Introduces the critical roles played by metadata for resource description and discovery. Provides instruction on application and implementation of current metadata schemes and tools. Provides practice in creating metadata records, analyzing the usage of metadata elements and vocabulary schemes, and evaluating the metadata quality of digital repositories.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 663  Tech Process In Libraries
Focuses on management, policy, and organizational issues related to the administration of technical services in libraries. Includes acquisitions, copy cataloging, original cataloging, serials control, circulation, and preservation. Emphasizes management in an automated environment where traditional methods are being supplanted by new technologies and related organizational changes.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 664  Library Automation
Provides an overview of information technology applications in library settings, focusing on underlying concepts and management issues.
Credits: 3.00
INFO 665  Collection Development
Introduces the basic steps of collection development, including community analysis, preparation of policy, criteria for selection of materials, acquisition, weeding, and evaluation. Explores a variety of related issues, including the impact of electronic access on collection development.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 666  Serial Literature
Provides an overview of serial publishing, including selection, acquisition, handling, and bibliographic control of serials. Covers current trends in serials management, including organization of serials work, manual and automated methods of serials control, resource sharing, and issues in serials public service.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 667  Research Collection Dev
Examines the work of subject specialists in large libraries with multinational collections in history, literature, the social sciences, and area studies. Surveys acquisition arrangements, resource-sharing plans, and collection evaluation techniques. Introduces foreign and international resources, including national and trade bibliographies, government documents, archival collections, and microforms, in both English and foreign languages.
Credits: 3.00
College: Information Sci & Technology
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INFO 668  History of the Book
Examines the metamorphosis of written text from the Western medieval manuscript to the printed book to present-day digital media. Topics include methods of production, intellectual and graphical content, social impact, and the role of church, state, and economic factors.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 669  Curatorship Spec Collect
Focuses on the functions of a curator of special collections. Such collections include both modern and historical collections of printed materials, manuscripts and archival collections, and collections of allied materials, including works of art. Gives special attention to the research uses of such materials together with reference to exhibitions, departmental publications, specialized reference sources, collection management, acquisitions, conservation, preservation, funding development, and donors.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 672  Resources in the Humanities
Studies the major information resources in the fields of religion, philosophy, the performing arts, the visual arts, language, and literature. Emphasizes user needs, bibliographic organization of the materials, collection building, and the provision of reference and information services.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 673  Resources in Social Sci
Studies major information resources in the social sciences, including history, geography, political science, sociology, anthropology, psychology, demography, economics, and education. Emphasizes bibliographic organization, collection building, user needs, and reference service.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 674  Resources in Science & Tech
Studies major information resources in pure and applied sciences, including the physical and biological sciences, engineering and technology, and interdisciplinary subjects. Emphasizes bibliographic organization, collection building, user needs, and reference service.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 675  Medical Bibliography
Covers the major types of reference tools, including representative titles in the basic medical sciences and clinical specialties, the history and development of medical bibliography, introduction to online searching, and analysis of the reference interview and of typical reference questions. Covers print and electronic reference tools with an emphasis on the integration of electronic tools (Internet, database and CD-ROMs) into the reference collection. Range of materials includes representative titles from collections in hospital libraries, academic health science libraries, consumer health centers, and special libraries (including corporate and non-profit). Covers medical reference information, including the analysis and synthesis of available resources.
Credits: 3.00
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Department: College of Info Science & Tech

INFO 677  Resources in Business
Focuses on meeting user needs for specific types of business information using strategies for identification, evaluation, selection, and use of specific sources. Sources include topical dictionaries and directories; indexes and abstracts; and numeric and full-text databases. Emphasizes the use of value-added print and electronic resources to meet user needs for information related to companies, industries and markets; corporate and international finance and investments; economic and demographic statistics; and one or more of the following topics: accounting, human resources, insurance and risk management, intellectual property, information systems, operations and logistics.
Credits: 3.00
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INFO 678  Competitive Intelligence
Focuses on the analysis of existing information in order to uncover hidden knowledge about the environment internal and external to (or competing with) an organization. Examines how to analyze and integrate various types of information (patents, financial production, market); how to use the new knowledge in strategic, tactical and
operational decision-making; how to produce reports; and the ethics of competitive intelligence.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 679  Information Ethics
Presents the philosophical foundations of applied ethics and technology with primary focus on the uses and abuses of information, human moral agency in relation to new information and communication technologies, and the meaning of social responsibility in the global information society, including the concepts of global information justice and human rights.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 680  US Government Publications
 Studies the nature of United States federal government documents and techniques for their acquisition, organization, and use.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 681  Legal Bibliography
 Introduces the fundamentals of legal research, including sources and research strategies.

Credits: 3.00
College: Information Sci & Technology
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INFO 683  Resources for Children
 Acquaints prospective professionals with the resources published for use by and with children in grades K to 8. Provides an opportunity to develop basic standards for evaluation of resources. Includes recent research concerning children and the central role of resources in the development of their reading/viewing/listening interests and tastes.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 684  Resources for Young Adults
 Acquaints prospective professionals with the materials intended for use by and with young adults. Provides an opportunity to develop basic standards for evaluation of materials and to learn about recent research concerning young adults and their information needs, reading interests, tastes, and development.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 688  Instr Role Info Specialist
 Examines the instructional role of the information professional. Emphasizes the planning, implementation, and evaluation of instruction for the purpose of information education.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 701  Career Integrated Education I
This course provides relevant off-campus employment for students wanting to strengthen their work skills. It is particularly useful for students changing careers, for international students hoping to gain work experience in the U.S., and for students seeking to work abroad.

Credits: 3.00
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INFO 702  Career Integrated Education II
This course is a continuation of INFO 701. It provides relevant off-campus employment for students wanting to strengthen their work skills. It is particularly useful for students changing careers, for international students hoping to gain work experience in the U.S., and for U.S. students seeking to work abroad.

Credits: 3.00
College: Information Sci & Technology
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INFO 710  Information Forensics
Focuses on the principles and practices of the forensic investigation and analysis of information in modern organizations and distributed information systems. Includes studies of information processes, events, time measurement, casual factors, information volatility, technical and procedural forensic methods, rules of evidence and case law.

Credits: 3.00
College: Information Sci & Technology
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INFO 720  Data Mining in Bioinformatics
Provides an introduction to data mining in bioinformatics, focusing on methods and applications in biological datasets. Topics include: DNA/protein sequence analysis and alignment techniques, data mining approaches to protein and gene expression analysis, and life science database management.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 731  Org & Soc Issues Hlthcare Info
Presents an overview of sociotechnical issues in healthcare informatics, focusing on patient care and biomedical research settings. Deals with the human, social, and technological aspects of healthcare IT. Focuses on the role of information professionals in applied healthcare IT settings.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 740  Data Mining in Bioinformatics
Presents an overview of sociotechnical issues in healthcare informatics, focusing on patient care and biomedical research settings. Deals with the human, social, and technological aspects of healthcare IT. Focuses on the role of information professionals in applied healthcare IT settings.

Credits: 3.00
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INFO 770  Special Topics
May be repeated for credit if topic varies.

Credits: 2.00 to 12.00
College: Information Sci & Technology
Department: College of Info Science & Tech
INFO 782  Issues in Informatics
Examines recent developments in a selected informatics area as a case study. Focuses on research results and leading edge application if information technology in practice. Helps students prepare for success in information science and technology fields.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 799  Independent Study
Provides individual investigation in special areas of information science and technology not regularly covered in the courses offered. Topic for study must be approved, in advance of registration, by the faculty adviser, the instructor involved, and the associate dean. May be repeated for credit if topic varies.
Credits: 2.00 to 12.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 811  Applied Research Methods
Provides an overarching understanding of several applied research methodologies that are relevant to decision makers, practitioners and scholars. Stresses identification of the appropriate research methodology for a given problem, as well as the advantages and disadvantages of each. Emphasizes real-world factors associated with the research process.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 812  Research Statistics I
This course provides the knowledge and tools necessary for conducting and understanding many types of empirical studies in the field of information science. It examines the fundamentals of descriptive and inferential statistics, and hypothesis testing.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 813  Quantitative Methods
Introduces research designs and methods of quantitative analysis for various problems in information systems, management of information resources, and scholarly and professional communication. Presents statistical techniques through packaged computer programs.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 816  Qualitative Research Methods
Provides doctoral students with an opportunity to explore and experience qualitative research methods, tools, and techniques, with emphasis on historical, philosophical, and theoretical underpinnings of the qualitative perspective. Concerned with analysis of the social construction and reproduction of human activity. Explores interpretive research methods that try to analyze social sense-making.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 830  Issues in Info Studies
This doctoral seminar course examines a current research topic in library information science or information systems. Students may repeat the course in different research topics.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 861  Topics in Information Science
This course introduces students to the community of practice in information science research by a broad introduction to a common body of knowledge. It helps prepare students to join in the collective work to expand that body of knowledge. It covers a variety of the most important texts and papers in the field of information science. Must have doctoral student status or master student with permission of instructor.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 863  Topics in Information Systems
This course introduces students to the community of practice in information systems research by a broad introduction to a common body of knowledge. It helps prepare students to join in the collective work to expand that body of knowledge. It covers a variety of the most important texts and papers in the field of information systems. Must have doctoral student status or master student with permission of instructor.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 865  Seminar in Research Methodology
Centers around the creation of a research proposal. Emphasizes problem identification, research problem statement, hypothesis construction, ethnographic methods of inquiry, validity, and reliability. Must have doctoral student status or master student with permission of instructor.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 866  Seminar Info Sys Research
Examines interdisciplinary information systems theory and research. Combines quantitative and qualitative methods in such areas as conceptual modeling, simulation, and human factors research. Considers research literature in both experimentation and design. Must have doctoral student status or master student with permission of instructor.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 891  Field Study
Designed for students who lack experience in managing and teaching in a media center. Provides supervised field experience in a selected school media center or classroom in the Delaware Valley area. Discussion sessions accompany the on-site experience.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 893  Practicum I
Provides relevant professional experience that will strengthen work skills. Particularly useful for students without prior work experience, career changers, or those exploring possible work environments. Associated academic coursework provides the opportunity to more deeply explore professional issues, and places the practical work experience within the context of larger workplace trends.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 894 Practicum II
Provides relevant professional experience that will strengthen work skills. Particularly useful for students without prior work experience, career changers, or those exploring possible work environments. Associated academic coursework provides the opportunity to more deeply explore professional issues, and places the practical work experience within the context of larger workplace trends.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 895 Workshop
Considers special issues and problems in information science and technology in a series of short courses and workshops.

Credits: 0.00 to 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

INFO 998 Ph.D. Dissertation
Provides individual work on an approved topic leading to a doctoral dissertation in information science and technology.

Credits: 1.00 to 12.00
College: Information Sci & Technology
Department: College of Info Science & Tech

Information Tech Leadership Courses

ITL 601 Emerging Trends in IT
Explores issues currently affecting the field of information service management and related information technologies. Students research and analyze emerging technology trends and their resulting business implications. This course introduces standard environments and identifies trends in technology support for information serves delivery.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

ITL 602 IT Infrastructures
Introduces techniques and concepts for managing the corporate infrastructure. Issues discussed will include telecommunications and networking. Understanding and managing security threats and responses in a network environment. Managerial level of knowledge and terminology to communicate effectively with technical and operational personnel.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

ITL 603 Service Oriented Architecture
Introduces technologies required for the Internet and distributed information systems. Covers the impact of wireless, mobile and pervasive computing environments on the organization. Explores collaboration, communication, telecommuting tools and security issues. Information System acquisition strategies and software development.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

ITL 620 Enterprise Architect & System
Overview of how IT systems support enterprise-wide information architectures and business workflows. Covers standard system architectures, electronic supply chain management and technologies for virtual organizations.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

ITL 622 Planning & Program Mgmt Office
Principles of developing a project management office. This includes development of corporate policies, procedures and standards for managing software development projects across the organization. Understand both internal and external factors that can affect a project manager. Also covers strategic acquisition strategies including vendor section, financial controls and outsourcing.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

ITL 624 Info Security & Business
Describes the underlying technologies supporting Information Security, privacy, eBusiness and eCommerce in the modern, wired world. View eBusiness as a part of overall organization strategy. Examines ways of managing threats to information security and how to develop information security strategies.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

ITL 640 Org. Aspects of IT Management
Evaluation of the policies and procedures germane to the internal operations and performance of a technology-driven organization. Emphasis is on key challenges including the management of multiple technology projects, software development processes, and communications among technology managers and senior managers, developers, programmers, and customers.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

ITL 642 IT Leadership
Principles and techniques of technology and information management for the enterprise. Impact of political processes, leadership, communication, human resources and organizational structure. Governance considerations that link IS to the other parts of the organization. IT and corporate governance.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

ITL 644 Management of IT Innovation
Develop a conceptual foundation for managing information technology innovation. It introduces concepts and frameworks for analyzing how
firms can create, commercialize and capture from technology-based products and services.

Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

ITL 660  Info Mgmt, Policy & Strategy
Information technology-enabled change and policy issues in the management of information systems (IS). Development and implementation of a long-range organizational strategy and key performance indicators for technology. IT change strategies and evaluation. System integration and the use of IT for competitive advantage.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

ITL 662  Bus Intel & Customer Care
Overview of how integrated information management forms the basis of business intelligence and customer care. Discusses the role of CRM systems, data warehouses, data portals, eSystems and similar technologies in a corporate information strategy.
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech

ITL 664  Comp Intel & Knowledge Mgmt
Credits: 3.00
College: Information Sci & Technology
Department: College of Info Science & Tech