SCHOOL OF INFORMATION SCIENCE

Department Website (https://sc.edu/study/colleges_schools/cic/library_and_information_science/)

Tom Reichert, Ph.D., Dean

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As a professional school grounded strongly in the sciences and liberal arts, the School of Information Science emphasizes the value of a broad educational foundation as well as proficiency in information and communication skills. Information Science is the study of the cognitive, social, technological, and organizational roles of information in all its forms and rests on three foundations: content, people, and technology. That is, the substance of the information being created, communicated, stored, and/or transformed; the people who interact with this content; and the technology used to support content creation, communication, storage, or transformation.

The program emphasizes research-based learning and incorporates opportunities for service learning, internship, and work-study in a wide range of public and private organizations and agencies. In addition to providing a strong background for graduate work in library and information science, law, social science, and business, the graduate will be well suited to compete for beginning level positions as a competitive intelligence analyst, consultant, database developer and analyst, data mining specialist, information architect, archivist and records manager, information broker, information consultant, Internet researcher, knowledge management consultant, online searcher, navigation designer, researcher/analyst, Web designer/developer/programmer, and others related to organizational needs for workers who understand information resources and services.

Progression Requirements

Each student within the school is expected to make orderly progress toward a baccalaureate degree.

- 1. All students must maintain a minimum 2.00 GPA on USC courses in order to maintain good standing in the School and to graduate with a B.S. in Information Science. Grades will be reviewed at the end of each semester. Students who have less than a 2.00 GPA on USC work are not in good standing and will be placed on probation within the School. With the exception of upper-division courses, they may continue to take course work toward their degree if seats are available.
- All majors within the School will be expected to pass all Information Science courses used toward the degree with a minimum grade of C.

Programs

- Informatics Minor (https://academicbulletins.sc.edu/undergraduate/ information-communications/library-information-science/ informatics-minor/)
- Information Science, B.S. (https://academicbulletins.sc.edu/ undergraduate/information-communications/library-informationscience/information-science-bs/)

 User Experience and Design Minor (https://academicbulletins.sc.edu/ undergraduate/information-communications/library-informationscience/user-experience-design-minor/)

Courses

ISCI 201 - Data, Information & Society (3 Credits)

Major concepts, principles, theories, issues, and trends in the development of Information Science.

ISCI 202 - Information Literacy and Technology (3 Credits)

An introduction to the basic information technologies used in all types of information organizations and the essential concepts and skills needed for information literacy.

Carolina Core: INF

ISCI 203 - Al: Cognitive Aspects and Social Impacts (3 Credits)

Artificial intelligence (AI) focusing on the futurology of superior intelligence, misinformation, cognitive-bias, cyber decision-making, and other information science and communication concepts.

ISCI 215 - Ethics in the Era of Big Data (3 Credits)

Ethical issues surrounding the use of data and information at the individual and organizational levels.

Carolina Core: VSR

ISCI 249 - Principles of User Experience and Design (UX/UI) (3 Credits)

An exploration of theoretical and practical foundations of user-centered design from both the design and research perspectives.

Cross-listed course: JOUR 249

ISCI 250 - Information Design (3 Credits)

Overview of responsive website design, development and basic content management systems. Examine the current tools and standards and learn how they function together in a modern web environment. Emphasis on the myriad of viewing devices and specific reference to the unique needs of information intensive institutions.

ISCI 259 - User Experience Research Methods and Tools (3 Credits)

User behavior and priorities; gather, analyze, and communicate key insights to develop effective products and services.

ISCI 283 - Battling Misinformation, Deepfakes, and Conspiracy Theories (3 Credits)

Relevant history and practical coverage of the news media; digital participation and democratic citizenship; systems of power and oppression; how individuals and groups interpret media frames and arguments.

ISCI 301 - Text Mining in Big Data Analytics (3 Credits)

Introduction to the concepts, issues, theories, and techniques of information storage and retrieval systems.

 $\label{eq:constraint} \textbf{Prerequisite: C} \ \text{or better in ISCI 201}.$

ISCI 310 - Information Science Data Analysis and Evaluation (3 Credits)

Overview of major types of research methods and techniques within the field of information science. Methods of data analysis, evaluation of published research, and ethical principles.

Prerequisite or Corequisite: C or better in ISCI 201, STAT 110 or STAT 201.

Graduation with Leadership Distinction: GLD: Research

ISCI 315 - Cyberethics and Information Policy (3 Credits)

Problems and ethical issues that arise in the development and implementation of information policies in Information Science.

ISCI 316 - Blockchain and Cryptocurrency (3 Credits)

Introduces blockchain technology and its applications in various professional areas, businesses, and industries. No prior blockchain knowledge is required to be successful in this foundational course.

ISCI 317 - Blockchain, Privacy, and Decentralization (3 Credits)
Introduces bitcoin, cryptocurrency, data privacy, self-sovereign identity, and other blockchain concepts and applications with in the context of professional areas, businesses, and industries. No prior blockchain knowledge is required to be successful in this foundational course.

ISCI 325 - Children's Literature (3 Credits)

A study of materials for children from birth through elementary school (age 13) with emphasis on the evaluation, selection, and use of those materials to meet the educational, cultural, and recreational needs of children.

Graduation with Leadership Distinction: GLD: Community Service

ISCI 330 - Introduction to Computer Technology & Applications for Info Env (3 Credits)

The basic information technology concepts and applications relevant to library and related information environments. Unique information technology needs and applications of information-intensive organizations.

ISCI 340 - Cyber Security and Information Science (3 Credits)

This course provides students with essential skills and training in information and cyber security leading to the option to complete the CCSA certification process through Check Point Software Technologies.

ISCI 380 - Special Topics in Information Science (3 Credits)

Examination of selected current and emerging topics in the field of information science and data analytics. May be repeated for credit as topics vary.

ISCI 402 - Management in Data Driven Organizations (3 Credits)

History, development, and implementation of theories and practices associated with managing information environments.

ISCI 410 - Knowledge Work as an Organizational Asset (3 Credits)

Introduction to the background, principles, practices, and technologies of knowledge management for library and information professionals.

Prerequisites: C or better in ISCI 301.

ISCI 415 - Social Issues in Information and Communications Technologies (3 Credits)

Examines the design, uses, and effects of information and communication technologies (ICTs) from the standpoint that society and technology mutually shape one another.

ISCI 420 - Information and Communication Needs and Assessment (3 Credits)

An overview of the communication models, major concepts, trends, and other related issues of information transfer with a focus on information seeking and use in digital age.

Prerequisites: C or better in ISCI 201 or JOUR 101.

ISCI 429 - Information Management for Journalists (3 Credits)

Online resources specific to mass communications, research strategies, organization and creation of digital information.

ISCI 430 - User-Centered Information Architecture (3 Credits)

Processes and techniques for designing user-centered information systems on the Web. Issues of needs analysis, content development, cognitive models, human-computer interaction, interface design, and usability testing.

Prerequisites: ISCI 202.

ISCI 434 - Introduction to Knowledge Discovery (3 Credits)

The students will review knowledge discovery basics concepts, techniques, tools, and applications. This course is project based and the students will develop new Wikipedia pages by reading papers in a selected domain.

Prerequisites: MATH 122 or MATH 141 or MATH 142 or MATH 170 or MATH 172 or STAT 515 or STAT 201 or STAT 205.

ISCI 435 - Planning and Sustaining Digital Projects (3 Credits)

Theoretical and technological foundations of building the digital information infrastructure. Emphasis on technical aspects of managing digital assets for Intranet and Internet use.

Prerequisites: C or better in ISCI 202, ISCI 402.

ISCI 440 - Competitive Intelligence (3 Credits)

Strategies and techniques for locating competitive intelligence information.

Prerequisites: ISCI 201, ISCI 202, ISCI 301, ISCI 402.

ISCI 450 - Information Issues in Community Institutions (3 Credits)

Problem of identifying or defining cultural heritage and the issues and problems in preserving, accessing, and managing cultural heritage information. Issues such as copyright/ownership, technical problems of preservation and intellectual access, and the different ways in which libraries, archives, museums, zoos and other cultural heritage institutions operate.

ISCI 480 - Emerging Topics in Information Science (3 Credits)

Examination of selected current and emerging topics in the field of information science. May be repeated once for credit as topics vary.

ISCI 494 - Independent Study in Information Science (3 Credits) Independent study in an area of information science relevant to the students professional goals. May be repeated once for credit as topics

Prerequisites: C or better in any ISCI course.

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Graduation with Leadership Distinction: GLD: Research **Experiential Learning:** Experiential Learning Opportunity

ISCI 496 - Internship in Information Science (3 Credits)

Supervised field experience in an information agency relevant to students professional goals. Approval of the appropriate internship application must be submitted early in the semester preceding enrollment.

Prerequisites: C or better in any ISCI course.

Graduation with Leadership Distinction: GLD: Professional and Civic Engagement Internships

Experiential Learning: Experiential Learning Opportunity

ISCI 501 - Teaching and Training in Distributed Environments (3 Credits)

Knowledge and skills for applying complementary technologies for learning in distributed learning environments (Pre-K-lifelong) through lecture, demonstration, and discussion.

ISCI 523 - Materials for Early Childhood (3 Credits)

Media resources and techniques for children from birth to 9 years. Reading interests and developmental needs of young children. Authors, illustrators, indexes, bibliographic tools, evaluation sources, and professional literature. Not open to students enrolled in M.L.I.S. program.

ISCI 525 - Materials for Children (3 Credits)

Media resources for children. Reading interests of children and their curricular and independent needs for information. Authors, illustrators, indexes, bibliographic tools, and sources of evaluation of materials for children. Techniques and literature for read-aloud programs and storytelling. Not open to students enrolled in M.L.I.S. program.

ISCI 527 - Materials for Adolescents (3 Credits)

Media resources for adolescents. Reading interests of adolescents and their curricular and independent information needs. Study of relationships of media to information needs and critical comparison between classic and contemporary materials for adolescents. Indexes, bibliographic tools, and sources of evaluation of materials. Not open to students enrolled in M.L.I.S. program.

ISCI 529 - Special Topics in Library and Information Studies (3 Credits) Specific topics of current concern to the library, information, and media professions to be identified by title. Not open to students enrolled in M.L.I.S. program.

ISCI 530 - Applications of Information Technology and the Infrastructure (3 Credits)

Introductory knowledge for school library media specialists, teachers, administrators, parents, and other citizens interested in practical applications of information technology to support learning, decision making, and community building.

ISCI 534 - Knowledge Discovery Techniques (3 Credits)

Knowledge discovery techniques and applications. **Prerequisites:** ISCI 434 for Undergraduate Students.

ISCI 560 - Data Visualization (3 Credits)

Foster theoretical insights about data visualization. Prepare temporal, geospatial, and textual data for visual representations. In hands-on sessions, students practice data visualization techniques and apply them in a wide range of real-world scenarios.

ISCI 600 - Storytelling: Theory, Practice, and Development (3 Credits) Storytelling methods, techniques, and materials encompassing heritage, art, literature, and programming.

ISCI 608 - Information Behavior and Practices (3 Credits)

Focuses on theories, models, and concepts of information behavior. Emphasizes information seeking and use practices and activities in relation particular communities, channels and barriers to information, and the impacts of technology. Provides an introduction to methods that can be used to study information needs, information seeking behavior, and related phenomena.