

ICT Information Communication Technology

ICT 150 EXPERIENCE ICT. (3)

Through the exploration of social and technological theories related to Information Communication Technology and the evolution and current applications of ICT, students will gain a better understanding of how emerging technologies have led to the need and development of ICT as a discipline; its shared commonalities with other disciplines; its distinct characteristics; its applications in the workplace and personal contexts; and its impact and future implications on individuals, organizations, and societies.

ICT 200 INFORMATION LITERACY AND CRITICAL THINKING. (3)

This course provides an introduction to the concepts and practices of information literacy. It explores how to effectively and ethically find, evaluate, analyze, and use information resources in academic and everyday-life situations. Emphasizing critical inquiry and critical thinking, this course will explore the theories and definitions surrounding the term “information literacy.” Students will put this theory into practice by developing problem-solving skills that allow them to meet information needs throughout their lifetimes. Students will gain a better understanding of how information and knowledge function in society and will discover methods of finding, accessing, evaluating, and using different information sources in an effective and ethical manner. (Same as IS 200.)

***ICT 201 PERSONAL KNOWLEDGE MANAGEMENT. (3)**

Gain knowledge about information sources, information retrieval and professional information management. Learn how information sources are described, organized, and disseminated using metadata standards and publishing practices. Acquire the skills to locate and retrieve quality sources of information with search engines and databases. Implement knowledge management technologies and apply an understanding of social factors in order to create efficient and usable organizational work flows. (Same as IS 201.)

ICT 202 TECHNOLOGIES FOR INFORMATION SERVICES. (3)

This course is designed to teach the fundamental concepts of information technology in ways relevant to professional practice in informatics and the information professions. It explores applications of computers and networks to information problems. Included are features of hardware, types of software, commercial systems and search engines. (Same as IS 202.)

ICT 205 ISSUES IN INFORMATION AND COMMUNICATION TECHNOLOGY POLICY. (3)

This course introduces students to the legal, political, and ethical issues confronting today’s information professionals and the subsequent impact of these issues on information and communication technology (ICT) policy and law development. The rapidly evolving ICT infrastructure and the global shift to an information society will provide the context for the course. Emphasis will be placed on: organizational policy development, information ethics, computer ethics, freedom of speech and expression online, information filtering, intellectual property, cyber law, and pertinent legal and political acts related to the present information and communication infrastructure.

ICT 300 ICT IN SOCIETY. (3)

This course studies the impacts of information and communication technology (ICT) on individuals and society. It examines current issues related to the flow of information in society, including the impact of technology and the development of the information economy. The role of the information profession within the context of information society issues is also explored. This course is a Graduation Composition and Communication Requirement (GCCCR) course in certain programs, and hence is not likely to be eligible for automatic transfer credit to UK.

ICT 301 INTRODUCTION TO DATABASES. (3)

This course is intended to give students a solid background in databases, with a focus on relational database management systems. Topics include data modeling, database design theory, data definition and manipulation languages, storage and indexing techniques, query processing and optimization, and database programming interfaces.

ICT 302 CONTENT MANAGEMENT SYSTEMS. (3)

The course focuses on the practice and theory of designing, building and maintaining content management systems.

ICT 303 SYSTEMS ANALYSIS. (3)

This course examines and applies the principles of information systems analysis. It surveys project management, feasibility and analysis, systems requirement definition and resource allocation. It utilizes a structured systems development methodology that spans the entirety of the information system lifecycle, which starts with the conception of the need for a specific information system and ends with the implementation of that system. The course utilizes a case study approach in which students initiate the analysis and logical design of a limited-scope information system. Prereq: IS 202. (Same as IS 303.)

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ICT 307 COPYRIGHT. (3)

In the age of digital information, the technology, economics, and law of intellectual property are constantly in flux. In order to continue to effectively provide access to information, ICT professionals need to play a role in managing these changes. This introductory course examines the basic conceptual elements of copyright protection, and its adaptation and application to new media and information communication technologies.

#ICT 326 ELECTRONIC INFORMATION RESOURCES FOR HEALTH PROFESSIONALS. (3)

This course is a survey of electronic information resources for health professionals, including databases and Web resources, but with a focus on MEDLINE. Discussion of relevant controlled vocabularies, their use in formulating and executing search strategies, and alternative interfaces to MEDLINE are addressed. The course also includes reference management software, an evidence based health care component, and discussion of systematic reviews. Prereq: STA 210 or equivalent. (Same as IS 326.)

ICT 327 CONSUMER HEALTH INFORMATION SEEKING. (3)

This course will provide students with a foundation in the history and development of consumer health information seeking in addition to practical experience in locating, evaluating, and providing health information to diverse and special populations within educational and healthcare settings. Students will gain an understanding of the lifecycle of consumer health information – from policy development, to creation, to dissemination, and use – and the role of healthcare professionals in providing that information. Current issues and trends, as well as future directions in consumer health information provision and health information seeking will be discussed. (Same as IS 327.)

ICT 351 TECHNOLOGY SECURITY. (3)

An introduction to the various technical and administrative aspects of information security and assurance. This course provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing a consistent, reasonable information security system with appropriate intrusion detection and reporting features.

ICT 390 SPECIAL TOPICS IN ICT. (3)

Intensive study of one aspect of information communication technology under the leadership of an authority in the area.

ICT 395 INDEPENDENT STUDY IN INFORMATION COMMUNICATION TECHNOLOGY. (3)

Opportunities for directed study in subjects or problems of interest to a student. Observation and research required, and a written report describing the work accomplished. Prereq: Consent of instructor and approval of proposal.

ICT 406 E-COMMERCE REGULATION. (3)

Business and commercial transactions conducted via electronic means are subject to complex legislation and regulation that changes frequently. The relevant legislation and regulatory mechanisms govern commercial transactions as well as any electronic marketing, such as promotional emails or online newsletters. This course provides an overview of the regulatory framework governing e-commerce transactions, relevant standards and ethical considerations, protocols to ensure consumer protection, and emergent issues relating to compliance and enforcement.

ICT 410 PRIVACY. (3)

As new information and communication technologies are developed, they increasingly raise concerns about the collection, use, storage, and sharing of personally identifiable information. This course provides an overview of privacy, privacy laws, privacy-related technologies, and self-regulatory efforts to mitigate potential privacy risks. The study of privacy will be approached from philosophical, historical, legal, policy, and technical perspectives.

ICT 550 SECURITY INFORMATICS. (3)

This course introduces students to policy concerns relating to security informatics, and highlights theoretical and practical approaches to designing secure information and communication technology (ICT) systems. It addresses key issues such as authentication, risk analysis, access control, database and network security, and information assurance.

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ICT 552 CYBERCRIME AND DIGITAL LAW ENFORCEMENT. (3)

The global reach of the Internet, the low marginal cost of online activity, and the relative anonymity of users have contributed to a wide escalation in cybercrimes. Consequently, information and communications technologies (ICT) are being increasingly employed to instigate threats to global civil society. This course provides an overview of cybercrime and the digital law enforcement practices put in place to respond to them. The course will focus on the types and extent of current cybercrimes, how the justice system responds to these crimes, the various constitutional protections afforded to computer users, the law and policies that govern cybercrime detection and prosecution, and related technologies.

ICT 596 INTERNSHIP IN ITC. (3)

Provides students with supervised work-and-learning experience in a professional environment under the direction of a University faculty member and an employee of a participating firm. One hundred forty (140) hours of student time are expected during the semester. Enrollment is contingent upon the availability of internships. Students are selected on the basis of personal qualifications, including GPA, courses taken, recommendations, and an interview.

ICT 600 INFORMATION COMMUNICATION TECHNOLOGY IN SOCIETY. (3)

We live in a world of rapid technological innovation. This innovation has allowed significant changes in the ways that we communicate and interact with forms of media. In fact, the technologies related to communication have created a culture surrounding how we see, hear, read and use information, and have significantly impacted politics, economics, policy, etc. This course studies the impacts of information and communication technology (ICT) on individuals and society, and the impact that society has on ICTs. It examines current issues related to the diffusion of new technologies in society as well as the obstacles to widespread use of individual ICTs. Students in this course will analyze the various theories related to the use of emerging communications forms, and consider the factors related to successful ICT deployment. Students will be required to look beyond “good/bad” classification of new communication technology, and conduct in-depth interrogations of ICTs, the issues that surround them and the environments in which ICTs are used.

ICT 601 INFORMATION SEEKING. (3)

This course provides an overview of the theory and practices of human information seeking behavior, including both basic models to understand user behavior, and techniques to effectively select, locate, evaluate, and use information to meet diverse information needs and facilitate human-computer interaction. (Same as LIS 601.)

#ICT 610 ICT RESEARCH METHODS. (3)

Information and Communication Technologies (ICTs) are pervasive in our increasingly global society and, importantly, have the potential to improve lives and society. This course is designed to provide you with a sophisticated understanding of the philosophy, theory, design, and analysis of both qualitative and quantitative research in communication. During this course you will be exposed to a variety of methodological designs and statistical procedures to allow you to complete your own research projects during your time as a graduate student here at the University of Kentucky. Using a variety of methods ranging from the foundational (e.g., interviews, surveys) to cutting edge (e.g., big data analysis, geospatial mapping) and readings from a variety of contexts (e.g., education, healthcare, risk and crisis), this course is designed to equip you with the research and methodological tools to understand how ICTs affect individuals, relationships, groups, organizations, social movements, and policies and to use these methodological tools in applied settings.

ICT 626 ELECTRONIC INFORMATION RESOURCES IN THE HEALTH SCIENCES. (3)

Survey of electronic information resources in the health sciences, including databases and Web sources. Discussion of relevant controlled vocabularies and their use in formulating and executing search strategies. The course also includes an evidence based health care component whereby students learn to analyze critically the biomedical literature and determine reference and research relevancy. (Same as LIS 626.)

ICT 627 CONSUMER HEALTH INFORMATION RESOURCES. (3)

History and development of consumer health information resources; role of professional and governmental agencies in provision of consumer health information; policy issues related to provision of consumer health information. Consumer health professional literature, user information needs, user resources, and information services. Identification, selection, utilization, and evaluation of consumer health information for special populations within specialized educational and healthcare settings. Trends and issues in consumer health informatics. (Same as LIS 627.)

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ICT 630 INFORMATION RETRIEVAL. (3)

This course reviews important information retrieval (IR) theories and models; explores a brief history of IR research; and examines various IR applications. Students will get familiar with IR foundations such as document indexing or query expansion/optimization strategies, as well as understand overall system architectures for selected IR applications. Students will explore how to analyze and compare IR systems, how to select the best IR systems for particular tasks and how to design a prototype for an efficient IR system. Prereq or concur: LIS 636 or LIS 637 or LIS 638. (Same as LIS 630.)

ICT 636 INTRODUCTION TO COMPUTER INFORMATION SYSTEMS. (3)

A broad introduction to the use of computers as tools for creativity, communications, organizing information, and problem-solving. The basic concepts of computer hardware, software, networking, and the Internet are covered. Students also will be introduced to basic techniques for designing and creating a web site.

ICT 638 ADVANCED WEB DESIGN. (3)

This course serves as a hands-on introduction to advanced web design techniques. Topics include the web development process, creating dynamic content, advanced layout and design, client-side and server-side scripting languages, graphic file types and optimization, web forms, multimedia, and web servers and databases. Prereq: ICT 636, or consent of instructor.

ICT 640 HEALTH INFORMATION RESOURCE SERVICES. (3)

A survey of information agencies and health science libraries, including topics related to: the healthcare community and their information needs, information resources in the health sciences, controlled medical terminologies and classification systems, search and retrieval of information resources, issues in the management of collections and access to health libraries. (Same as CJT/LIS 640.)

#ICT 650 INTRODUCTION TO LEADERSHIP IN INFORMATION PROFESSIONS. (3)

The primary purpose of this course is to expose students to leadership strategies and challenges in the information professions. Primary attention is placed on: 1) the role of communication in effective leadership; 2) innovation and change in the information professions and the leadership styles available for addressing such changes; 3) ethical frameworks in communication leadership; 4) issues management and organizational planning; and 5) leadership communication strategies for managing conflict and crises. Prereq: Graduate student status in the ICT, LIS, or CJT graduate programs.

ICT 651 TECHNOLOGY SECURITY. (3)

An introduction to information security including vocabulary and terminology, threats to information systems, cryptology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies and controls is also discussed. It is expected that each student will possess some knowledge of programming, operating systems, and networking, although advanced knowledge in those areas is not necessary.

ICT 658 KNOWLEDGE MANAGEMENT. (3)

Organizational knowledge is a valuable strategic asset. Knowledge management refers to the systematic management of an organization's knowledge assets so that they can be leveraged for sustainable advantage. This course examines how knowledge is created, captured, organized, diffused, and implemented in an organization. Topics covered include knowledge management processes and practices, corresponding technologies, collaboration tools, and people and cultural issues. (Same as LIS 658.)

ICT 690 SPECIAL TOPICS IN LIBRARY AND INFORMATION SCIENCE. (3)

Intensive study of one aspect of library and information science under the leadership of an authority in the area. (Same as LIS 690.)

#ICT 695 INDEPENDENT STUDY IN INFORMATION COMMUNICATION TECHNOLOGY. (3)

Opportunities for directed study in subjects or problems of interest to a student. Observation and research required, and a written report describing the work accomplished. Prereq: Consent of instructor and approval of proposal.