University of Kentucky

School of Information Sciences (SIS)

LIS 638-201: Internet Technologies and Information Services

Spring 2022 (January 10 to May 6)

Instructor	Office Hours
Dr. Jackie Brodsky Email: jackie.brodsky@uky.edu Preferred Communication: Canvas Inbox link	*Virtual office hours are available via Zoom on Tuesdays at 7 p.m. Eastern and by appointment (see Office Hours link on Canvas)*

Response Time: Within 24 hours during weekdays (expect a delay during weekends and holidays)

Course Information

This is an asynchronous online course. Please visit https://uk.instructure.com (Canvas) for course home page.

COURSE DESCRIPTION

A course examining the development and evolution of the Internet and Web, examining network protocols (TCP/IP) and Internet client/server architecture; web page design, creation, and evaluation; the markup, styling, and scripting languages (HTML, XML, CSS, JS, PHP) used for web development, as well as the tools supporting Web 2.0 and beyond. Topics include the sematic web, the mobile web, and search engine technologies used for Internet information retrieval. Prerequisite: LIS 636 or consent of instructor. (Same as CJT 638).

3 credits

STUDENT LEARNING OUTCOMES

After successful completion of this course, students will be able to:

1. Understand the historical background and evolution of today's Internet.
2. Examine network topologies and models (OSI model).
3. Develop an understanding of the technological foundations of the Internet and core Internet protocols (TCP/IP, SMTP, FTP, Telnet, ICMP, RSS, and HTTP).
4. Understand client/server relationships in the context of the Internet and intranets.

5. Identify important Internet content and graphics formats and understand the access issues they present users and the software they require.
6. Develop a framework for evaluating web resources and designs.
7. Develop advanced web publishing and design skills using the Hypertext Markup Language (HTML).
8. Examine web enhancements possible with web programming techniques (ASP, PHP and JavaScript).
9. Examine other markup beyond HTML, including DHTML, XHTML, and XML for information delivery and data structuring.
10. Develop an understanding of the Internet in the context of information storage and retrieval models, IR issues, how searchable Internet indexes are constructed, the limitations of search engines, and future trends.
11. Examine Web 2.0, cloud computing, and the mobile web in the context of library services.
12. Consider current and future web issues and trends, especially as they pertain to LIS.

COURSE MATERIALS

Required textbook:

Miller, Joseph B. (2014) Internet Technologies and Information Services (2nd edition). Westport, CT: Libraries Unlimited, ISBN 978-1-61069-473-5.

Additional readings:

Other required readings will be made available on the course site in Canvas.

COURSE CONDUCT

The course includes online lectures, discussions, exercises, case studies, assignments, and project. As this is an online course with no set meeting times, we will consider Monday as the first day of class each week, with assignments due on Sunday nights at 11:59 Eastern. Readings should be completed by at least Wednesday in order to participate in online discussions. Course lectures and materials will appear no later than midnight on Sunday of each week. Regarding discussion boards, you will need to respond to the topic/question as well as respond to a classmate's post. The discussion board is asynchronous, so you can join in the discussion whenever it is convenient for you to do so.

Canvas as the Main Platform of the Course

This class uses Canvas as a required part of the course. Teaching materials (syllabus, lectures, notes, discussions, assignments, resources, etc.) will be made available in Canvas. All assignments should also be submitted in Canvas. Students can check grading status and progress in Canvas. Please visit the Canvas information pages at http://www.uky.edu/canvas/ to learn about Canvas. For technical support, call the UKIT Service Desk at (859) 218-HELP (4357) or email helpdesk@uky.edu.

Communication

All course-related communication (online discussions, questions regarding assignments, etc.) will occur within Canvas. ***Please post your course-related questions on the Canvas discussion boards*** because other students may have the same questions and will receive the benefits from answers. Important announcements will be made in Canvas. Students are required to check Canvas on a regular basis. Failure to read announcements cannot be used as an excuse for not being informed.

Please do not expect an immediate response to Canvas inbox messages. However, under ordinary circumstances, it is expected that the instructor will respond within 24 hours during weekdays. Please expect a delay during weekends and holidays.

METHODS OF ASSESSMENT

Your final grade is determined by your performance on the items in the table below. Assignments and projects (in installments) will be assigned as the course continues. We will also have online graded discussion boards. There will be no exams.

Each assignment will be posted at least two weeks before the corresponding due date. Please submit your assignments and project via the appropriate assignment at the Assignments Link on Canvas. The table below shows the list of assignments, project, and participation, and the points for each component. Graded Discussions will be submitted by posting in the appropriate discussion forum at the Discussions link on Canvas.

Type	Topic	Points	Subtotal
Assignments	1. Internet Exercise	10	47
	2. HTML Exercise	10	
	3. CSS and Scripting Exercise	10	
	4. XML Exercise	10	
	5. Topical Presentation	7	
Project	Final Project: Website Design and Development	25	25
Participation	Online Discussions (4 points per discussion)	28	28
Total:			**100**

Online Discussions

Students are expected to participate in the discussions via the Canvas discussion boards. I will post discussion questions/activities. You will be responsible for posting during that discussion time as well as responding to a classmate's post. Each discussion time will last for two weeks (Monday through Sunday). Your post should be up during the first week, and responses during the second week. You may earn up to 4 points for each discussion (2 for post, and 2 for response).

Posts should include a substantive and thoughtful contribution to each discussion topic, during that discussion time. No credit will be given for posts that occur after the deadline for that topic. Posts should be substantive (usually meaning at least 100 words, but I am not a stickler for word count) and thoughtful. "I agree" is not a credit-worthy response. Please compose your post concisely (usually meaning 100-200 words). I encourage you to complete your discussion posts and other work in a word-processing program such as Word, etc., and then copy and paste it into Canvas. If you compose it within Canvas and there is a technology-related failure, you will likely lose your work.

Grade Expectations

Grades are based on the quality of the submitted work, not upon how well others performed (there is no "grading on a curve"). The following are grade expectations and divisions.

Grade		Expectation
A	90-100 points	Exceptional achievement
B	80-89 points	High achievement
C	70-79 points	Average achievement
E	0-69 points	Failing

Very often in assignments and projects, you will need to offer opinions. Simply stating your opinion does not constitute a complete response. You must support any opinion with arguments and evidence. For example, the question "compare and contrast different organization structures" might be interpreted by a student as follows (note the associated grades A, B, C, or E):

A: Describe commonly used organization structures, noting where they are similar and different. Identify the important characteristics of an organization structure and systematically evaluate each of the listed organization structures on these dimensions. Suggest situations in which each might be most or least appropriate.
B: Describe commonly used organization structures, noting where they are similar and different.
C: Describe commonly used organization structures, one at a time.
E: Write anything you can think of about organization structure, in no particular order. If you give conclusions, they are not supported by anything you have written.

Late Assignment Policy

Some of the assignments will be discussed in the following online discussions after the assignments are due. Most assignments will help build a base for future assignments and the project. Thus, all assignments should be submitted on time as specified. An overdue assignment will get a **penalty of 20% of total points for each day late**. No assignments or projects will be accepted after five days, except in the case of "excused absences." (See more information below.) *Please communicate with me*

if you suspect your assignment will be late. We can work out an extension, but only if there is communication.

Grading and Feedback for Assignments

Most assignments will be returned within 7 days after the due date. Any expected delays will be communicated to you.

Re-Grading Assignments

The grade for each assignment is recorded in Canvas before the assignment is returned to the student. It is the student's responsibility to ask questions or request re-grading of an assignment within 5 business days from the time the assignment is returned. No re-grading requests will be accepted after 5 business days.

Technology Information and Requirements

Technology Requirements
Minimum technical requirements for UK courses and suggested hardware, software, and internet connections are available at Public - Student Hardware & Software Guidelines (service-now.com).

Technical Support

For account help, contact UK's Information Technology Services | see blue (uky.edu) online, by email at mailto:218help@uky.edu, or by phone at 859-218-HELP (4357).

Resources

Distance Learning Library Services
Carla Cantagallo, Distance Learning Librarian – carla@uky.edu, (859) 218-1240
UK Writing Center
PresentatuionU for help with communication projects

Excused Absences and Acceptable Excuses

Senate Rules 5.2.5.2.1 defines the following as acceptable reasons for excused absences: (a) significant illness, (b) death of a family member, (c) trips for members of student organizations sponsored by an educational unit, trips for University classes, and trips for participation in intercollegiate athletic events, (d) major religious holidays, (e) interviews for graduate/professional school or full-time employment post-graduation, and (f) other circumstances found to fit "reasonable cause for nonattendance" by the instructor of record. Students should notify the professor of absences prior to class when possible. If a course syllabus requires specific interactions (e.g., with the instructor or other students), in situations

where a student's total EXCUSED absences exceed 1/5 (or 20%) of the required interactions for the course, the student shall have the right to request and receive a "W," or the Instructor of Record may award an "I" for the course if the student declines a "W." (*Senate Rules 5.2.5.2.3.1*)

Religious Observances

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays. *Senate Rules 5.2.5.2.1(4) requires faculty to include any notification requirements within the syllabus. If no requirement is specified, two weeks prior to the absence is reasonable and should not be given any later. Information regarding major religious holidays may be obtained through* the Ombud's website *or calling 859-257-3737.*

Verification of Absences

Students may be asked to verify their absences in order for them to be considered excused. *Senate Rule 5.2.5.2.1* states that faculty have the right to request appropriate verification when students claim an excused absence due to: significant illness; death in the household, trips for classes, trips sponsored by an educational unit and trips for participation related to intercollegiate athletic events; and interviews for full-time job opportunities after graduation and interviews for graduate and professional school. (Appropriate notification of absences due to University-related trips is required prior to the absence when feasible and in no case more than one week after the absence.)

Make-Up Work

Students missing any graded work due to an excused absence are responsible: for informing the Instructor of Record about their excused absence within one week following the period of the excused absence (except where prior notification is required); and for making up the missed work. The instructor must give the student an opportunity to make up the work and/or the exams missed due to the excused absence, and shall do so, if feasible, during the semester in which the absence occurred. The instructor shall provide the student with an opportunity to make up the graded work and may not simply calculate the student's grade on the basis of the other course requirements, unless the student agrees in writing. According to *SR 5.2.5.2.2*, if a student adds a class after the first day of classes and misses graded work, the instructor must provide the student with an opportunity to make up any graded work.

Excused Absences for Military Duties

If a student is required to be absent for one-fifth or less of the required course interactions (e.g., class

meetings) due to military duties, the following procedure (per *SR 5.2.5.2.3.2*) shall apply:

1. Once a student is aware of a call to duty, the student shall provide a copy of the military orders to the Director of the Veterans Resource Center. The student shall also provide the Director with a list of his/her courses and instructors.
2. The Director will verify the orders with the appropriate military authority, and on behalf of the military student, notify each Instructor of Record via Department Letterhead as to the known extent of the absence.
3. **The Instructor of Record shall not penalize the student's absence in any way and shall provide accommodations and timeframes so that the student can make up missed assignments, quizzes, and tests in a mutually agreed upon manner.**

Unexcused Absences

If an attendance/interaction policy is not stated in the course syllabus or the policy does not include a penalty to the student, the instructor cannot penalize a student for any unexcused absences. (*SR 5.2.5.2.3.3*)

Prep Week and Reading Days

Per *Senate Rules 5.2.5.6*, the last week of instruction of a regular semester is termed "Prep Week." This phrase also refers to the last three days of instruction of the summer session and winter intersession. The Prep Week rule applies to ALL courses taught in the fall semester, spring semester, and summer session, including those taught by distance learning or in a format that has been compressed into less than one semester or session. This rule does not apply to courses in professional programs in colleges that have University Senate approval to have their own calendar.

Make-up exams and quizzes are allowed during Prep Week. In cases of "Take Home" final examinations, students shall not be required to return the completed examination before the regularly scheduled examination period for that course. No written examinations, including final examinations, may be scheduled during the Prep Week. No quizzes may be given during Prep Week. No project/lab practicals/paper/presentation deadlines or oral/listening examinations may fall during the Prep Week unless it was scheduled in the syllabus AND the course has no final examination (or assignment that acts as a final examination) scheduled during finals week. (A course with a lab component may schedule the lab practical of the course during Prep Week if the lab portion does not also require a Final Examination during finals week.) Class participation and attendance grades are permitted during Prep Week. The *Senate Rules* permit continuing into Prep Week regularly assigned graded homework that was announced in the class syllabus.

For fall and spring semester, the Thursday and Friday of Prep Week are study days (i.e. "Reading Days"). There cannot be any required "interactions" on a Reading Day. "Interactions" include participation in an in-class or online discussion, attendance at a guest lecture, or uploading an assignment. See *Senate Rules 9.1* for a more complete description of required interactions.

Accommodations Due to Disability

In accordance with federal law, if you have a documented disability that requires academic accommodations, please inform your instructor as soon as possible during scheduled office hours. In order to receive accommodations in a course, you must provide your instructor with a Letter of Accommodation from the Disability Resource Center (DRC). The DRC coordinates campus disability services available to students with disabilities. It is located on the corner of Rose Street and Huguelet Drive in the Multidisciplinary Science Building, Suite 407. You can reach them via phone at (859) 257-2754, via email (drc@uky.edu) or visit their website (uky.edu/DisabilityResourceCenter). DRC accommodations are not retroactive and should therefore be established with the DRC as early in the semester as is feasible.

Non-Discrimination Statement and Title IX Information

In accordance with federal law, UK is committed to providing a safe learning, living, and working environment for all members of the University community. The University maintains a comprehensive program which protects all members from discrimination, harassment, and sexual misconduct. For complete information about UK's prohibition on discrimination and harassment on aspects such as race, color, ethnic origin, national origin, creed, religion, political belief, sex, and sexual orientation, please see the electronic version of *UK's Administrative Regulation 6:* ("Policy on Discrimination and Harassment") (https://www.uky.edu/regs/ar6-1). In accordance with Title IX of the Education Amendments of 1972, the University prohibits discrimination and harassment on the basis of sex in academics, employment, and all of its programs and activities. Sexual misconduct is a form of sexual harassment in which one act is severe enough to create a hostile environment based on sex and is prohibited between members of the University community and shall not be tolerated. For more details, please see the electronic version of *Administrative Regulations 6:2* ("Policy and Procedures for Addressing and Resolving Allegations of Sexual Assault, Stalking, Dating Violence, Domestic Violence, and Sexual Exploitation") (https://www.uky.edu/regs/ar6-2). Complaints regarding violations of University policies on discrimination, harassment, and sexual misconduct are handled by the Office of Institutional Equity and Equal Opportunity (Institutional Equity), which is located in 13 Main Building and can be reached by phone at (859) 257-8927. You can also visit Institutional Equity's website (https://www.uky.edu/eeo).

Faculty members are obligated to forward any report made by a student related to discrimination,

harassment, and sexual misconduct to the Office of Institutional Equity. Students can confidentially report alleged incidences through the Violence Intervention and Prevention Center (https://www.uky.edu/vipcenter), Counseling Center (https://www.uky.edu/counselingcenter), or University Health Service (https://ukhealthcare.uky.edu/university-health-service/student-health). Reports of discrimination, harassment, or sexual misconduct may be made to Institutional Equity here.

Academic Offenses

Senate Rules 6.3.1 ("Plagiarism")

Per University policy, students shall not plagiarize, cheat, or falsify or misuse academic records. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the University may be imposed. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty.

Senate Rule 6.3.1 states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about a question of plagiarism involving their work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording, or content from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism.

Plagiarism includes reproducing someone else's work (including, but not limited to a published article, a book, a website, computer code, or a paper from a friend) without clear attribution. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work which a student submits as his/her own, whoever that other person may be, except under specific circumstances (e.g. Writing Center review, peer review) allowed by the Instructor of Record or that person's designee. Plagiarism may also include double submission, self-plagiarism, or unauthorized resubmission of one's own work, as defined by the instructor.

Students may discuss assignments among themselves or with an instructor or tutor, except where prohibited by the Instructor of Record (e.g. individual take-home exams). However, the actual work must be done by the student, and the student alone, unless collaboration is allowed by the Instructor of Record (e.g. group projects).

When a student's assignment involves research in outside sources or information, the student must carefully acknowledge exactly what, where and how he/she has employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an

appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas which are so generally and freely circulated as to be a part of the public domain.

Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

Senate Rules 6.3.2 ("Cheating")

Cheating is defined by its general usage. It includes, but is not limited to, the wrongfully giving, taking, or presenting any information or material by a student with the intent of aiding himself/herself or another on any academic work which is considered in any way in the determination of the final grade. The fact that a student could not have benefited from an action is not by itself proof that the action does not constitute cheating. Any question of definition shall be referred to the University Appeals Board.

Senate Rules 6.3.3 ("Misuse of Academic Records")

Maintaining the integrity, accuracy, and appropriate privacy of student academic records is an essential administrative function of the University and a basic protection of all students. Accordingly, the actual or attempted falsification, theft, misrepresentation or other alteration or misuse of any official academic record of the University, specifically including knowingly having unauthorized access to such records or the unauthorized disclosure of information contained in such records, is a serious academic offense. As used in this context, "academic record" includes all paper and electronic versions of the partial or complete permanent academic record, all official and unofficial academic transcripts, application documents and admission credentials, and all academic record transaction documents. The minimum sanction for falsification, including the omission of information, or attempted falsification or other misuse of academic records as described in this section is suspension for one semester.

Statement of Diversity, Equity, and Inclusion (DEI)

The University of Kentucky is committed to our core values of diversity and inclusion, mutual respect and human dignity, and a sense of community (Governing Regulations XIV). We acknowledge and respect the seen and unseen diverse identities and experiences of all members of the university community (https://www.uky.edu/regs/gr14). These identities include but are not limited to those based on race, ethnicity, gender identity and expressions, ideas and perspectives, religious and cultural beliefs, sexual orientation, national origin, age, ability, and socioeconomic status. We are committed to equity and justice and providing a learning and engaging community in which every member is engaged, heard, and valued.

We strive to rectify and change behavior that is inconsistent with our principles and commitment to diversity, equity, and inclusion. If students encounter such behavior in a course, they are encouraged to speak with the instructor of record and/or the Office of Institutional Equity and Equal Opportunity. Students may also contact a faculty member within the department, program director, the director of undergraduate or graduate studies, the department chair, any college administrator, or the dean. All of these individuals are mandatory reporters under University policies.

Online Classroom Behavior

Your classmates may have vastly different backgrounds, experiences, and opinions. Please treat each other with respect in discussion forums and in all other aspects of this course.

Course Recordings

The University of Kentucky Code of Student Conduct defines Invasion of Privacy as using electronic or other devices to make a photographic, audio, or video record of any person without their prior knowledge or consent when such a recording is likely to cause injury or distress.

Meetings of this course may be recorded. All video and audio recordings of lecturers and class meetings, provided by the instructors, are for educational use by students in this class only. They are available only through the Canvas shell for this course and are not to be copied, shared, or redistributed.

As addressed in the Code of Student Conduct, students are expected to follow appropriate university policies and maintain the security of linkblue accounts used to access recorded class materials. Recordings may not be reproduced, shared with those not enrolled in the class, or uploaded to other online environments.

If the instructor or a University of Kentucky office plans any other uses for the recordings, beyond this class, students identifiable in the recordings will be notified to request consent prior to such use. In anticipation of such cases, students may be asked to complete an "authorization of use" form by a faculty member.

Video and audio recordings by students are not permitted during the class unless the student has received prior permission from the instructor. Any sharing, distribution, and or uploading of these recordings outside of the parameters of the class is prohibited. Students with specific recording accommodations approved by the Disability Resource Center should present their official documentation to the instructor.

Course Copyright

All original instructor-provided content for this course, which may include handouts, assignments, and lectures, is the intellectual property of the instructor(s). Students enrolled in the course this academic term may use the original instructor-provided content for their learning and completion of course requirements this term, but such content must not be reproduced or sold. Students enrolled in the course this academic term are hereby granted permission to use original instructor-provided content for reasonable educational and professional purposes extending beyond this course and term, such as studying for a comprehensive or qualifying examination in a degree program, preparing for a professional or certification examination, or to assist in fulfilling responsibilities at a job or internship; other uses of original instructor-provided content require written permission from the instructor(s) in advance.

TENTATIVE COURSE SCHEDULE (AS OF 1/10/2022)

Week (dates)	Topic(s)	Book Readings	Discussion Forum Due	Assignment Due
1 (1/10 – 1/16)	Course Introduction			
2 (1/18 – 1/23)	Introduction	1	Forum 1	
3 (1/24 – 1/30)	The World Wide Web; Network and Connection Technologies	2 & 3		1. Internet Exercise
4 (1/31 – 2/6)	Internet Technologies: TCP/IP	4	Forum 2	
5 (2/7 – 2/13)	Higher-Level Internet Protocols: Making the Internet Work	5		
6 (2/14 – 2/20)	Internet-Connected Devices and Security	6	Forum 3	2. HTML Exercise
7 (2/21 – 2/27)	Web Design and Graphics	7		
8 (2/28 – 3/6)	Web Publishing with the Hypertext Markup Language	8	Forum 4	
9 (3/7 – 3/13)	Controlling Presentation with Styles	9		3. CSS and Scripting Exercise
10 (3/14 – 3/20)	Spring Break	No Readings		
11 (3/21 – 3/28)	Introduction to Web	10 & 11	Forum 5	

Week (dates)	Topic(s)	Book Readings	Discussion Forum Due	Assignment Due
	Programming; Web Technologies and Content Management			
12 (3/29 – 4/3)	XML Primer	12		4. XML Exercise
13 (4/4 – 4/10)	Internet Content	13	Forum 6	
14 (4/11 – 4/17)	Information Retrieval	14		
15 (4/18 – 4/24)	Internet Search	15	Forum 7	5. Topical Presentation
16 (4/25 – 5/1)	Libraries and the Internet: Learning from the Past, Exploring the Future	16		Final Project
17 (5/2 – 5/6)	Wrap-Up			

Notes: MLK Birthday (January 17) is an academic holiday.

There are no readings and nothing due during Spring Break (March 14-20).