

Louisiana State University  
School of Library and Information Science  
**LIS 7008: Information Technologies and Systems**  
Fall 2021  
Instructor: Seungwon Yang

Catalog Description

Introduction to hardware, software, telecommunications and networks, and system issues relating to information technologies.

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Contact information

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Course Description

This course offers an overview of how technologies work and are applied to the information and library environments. It introduces fundamental concepts and issues in computer systems, networking, and information retrieval systems. This course equips students with knowledge regarding how information is organized, processed, and used using technologies and systems.

Course Objectives

Upon satisfactory completion of this course, students should be able to:

- Describe how computers and computer networks work
- Use common information technology (IT) tools in the library setting
- Discuss detail technologies within IR systems
- Demonstrate the skills of identifying various IT systems, applying search strategies for different information retrieval (IR) systems, and comparing different IR systems

Textbook

- *Neal-Schuman Library Technology Companion: A Basic Guide for Library Staff* (6th edition) by John J. Burke. Published by American Library Association.

**Note:** a PDF copy of the textbook, *Introduction to Modern Information Retrieval* (3rd edition) by G. G. Chowdhury from Neal-Schuman Publishers, Inc., will be provided as well.

Additionally, other book chapters and papers might be assigned as needed. Please see the Readings section in pages 2-3.

Course Topics and Schedule

- Topics to be covered in the class are presented in the table below. The discussion topics, homework assignments, midterm and final exams, and their due dates are marked as 'D (discussion)', 'H (homework)', or 'E (exam)'.
- Students are required to complete and submit their homework assignments, discussions, and exams by their due dates, unless otherwise specified.
- The main topics of the homework assignments and discussions are presented in page 3.

No.	Week	Topic	Assigned	Due
1	Aug 24	Course Introduction and syllabus review	.	.
2	Aug 31	Canceled due to <i>Hurricane Ida</i>	.	.
3	Sep 7	Information resources and computing devices in libraries ; Library web services and social networking	D1	.
4	Sep 14	Building and maintaining the technology environment in libraries	H1	D1
5	Sep 21	Concepts of information retrieval (IR) systems	.	.
6	Sep 28	Database technology	H2	H1
7	Oct 5	Bibliographic formats, cataloging, and metadata	.	.
8	Oct 12	<b>Midterm Exam (E1)</b>	E1	H2
9	Oct 19	Subject analysis, representation, and automatic indexing	D2	.
10	Oct 26	Vocabulary control and abstracting	D3	D2
11	Nov 2	Search strategies and users of IR systems	H3	D3
12	Nov 9	User-centered models and user interfaces	.	.
13	Nov 16	Evaluation of IR systems	H4	H3
14	Nov 23	Thanksgiving Break (no class)	.	.
15	Nov 30	Privacy and security concerns for IR systems, current trends	.	H4
16	Dec 7	<b>Final Exam (E2)</b>	E2	.

\* Keys:

- D1-D3: Discussion postings in the Moodle forum
- H1-H4: Homework assignments
- E1, E2: Midterm and final exams

### Readings Assigned

Week 1: Course introduction and syllabus review

- Course syllabus

Week 2: Information resources and computing devices in libraries

- Neal-Schuman: Ch. 3, 4, 5, 6

Week 3: Library web services and social networking

- Neal-Schuman: Ch. 7, 8, 9, 10

Week 4: Building and maintaining the technology environment for libraries

- Neal-Schuman: Ch. 11, 12, 13, 14, 15

Week 5: Concepts of information retrieval systems

- Chowdhury: Ch. 1

Week 6: Database technology

- Chowdhury: Ch. 2

Week 7: Bibliographic formats, cataloging, and metadata

- Chowdhury: Ch. 3, 4
- Week 8: Midterm Exam (no class)
- Review assigned readings for Weeks 2-7
- Week 9: Subject analysis, representation, and automatic indexing
- Chowdhury: Ch. 5, 6
- Week 10: Vocabulary control and abstracting
- Chowdhury: Ch. 7, 8
- Week 11: Search strategies and users of information retrieval systems
- Chowdhury: Ch. 9, 10
- Week 12: User-centered models and user interfaces
- Chowdhury: Ch. 11, 12
- Week 13: Evaluation of information retrieval systems
- Chowdhury: Ch. 13, 14
- Week 14: Thanksgiving Break (no class)
- Review assigned readings for Weeks 9-13
- Week 15: Privacy and security concerns for information systems, current trends
- Chowdhury: Ch. 23
- Week 16: Final Exam (no class)

#### Homework Assignments (a total of 4)

1. IT system identification
  2. Database related
  3. Searching exercise
  4. Cross system comparison
- The homework assignments are designed to help students learn important concepts in the lectures and reading materials, as well as skills for using information technology tools and information retrieval systems.

#### Discussions (a total of 3)

1. The technologies and social media use by the libraries
2. Automatic indexing, TFIDF, etc.
3. Major library classification schemes

The discussions are designed to help students acquire knowledge of various topics in this course by reading the assigned materials, and then sharing their understanding for further discussions via Moodle forums.

#### Exams (midterm and final):

Students will be taking two exams. They are automated exam managed by the Moodle platform, and around 20-30 questions will be on the exam. They will be an open-book and open-Internet type exams. Submitted answers should be strictly one's own work.

#### Grading Scheme

- The course grade and scores for each course requirement will be assigned on a 100-point scale. A letter grade will be assigned according to the following policy:
  - A-: 90-93, A: 94-97, A+: 98-100
  - B-: 80-82, B: 83-86, B+: 87-89
  - C-: 70-72, C: 73-76, C+: 77-79
  - D-: 60-62, D: 63-66, D+: 67-69
  - F: below 60

### Grading Policies

Course grades will be assigned based on homework assignments, discussions, and the two exams.

Scores for each evaluation component shown below will be combined to produce a single overall score as follows:

Component	Percentage
Homework assignments (12% x 4)	48
Discussions (4% x 3)	12
Exam #1 Midterm	20
Exam #2 Final	20
<b>Total</b>	<b>100</b>

### Late Submissions:

- After a due date, the score of the submitted homework/discussion will be weighted 10 percent less per each day. For example, if you received 100 points out of 100 from a homework assignment, which was submitted one day past the due date, 90 points will be recorded as your final score (10% off). If you received 100 points and it was late two days, you will receive 80 points (20% off), etc.
- For discussions and homework assignments submitted 7 or more days after the due date, only 30% of the score will be considered. For example, if you scored 100 points, but it was submitted 3 months after the due date, you receive 30 points.

### Expectations

LSU's general policy states that for each credit hour, you (the student) should plan to spend at least two hours working on course related activities outside of class. Since this course is for three credit hours, you should expect to spend a minimum of six hours outside of class each week working on assignments for this course. For more information see: <http://catalog.lsu.edu/content.php?catoid=12&navoid=822>.

LIS 7008 is a core course for the MLIS degree at SLIS. All core courses must be completed with a grade of B or higher (note that a B- is not a satisfactory grade for these courses). If you do not earn at least a B, you must retake the course. Failure to earn a B a second time will mean you are ***ineligible to complete the degree program***.

### Academic Integrity

Louisiana State University adopted the Commitment to Community in 1995 to set forth guidelines for student behavior both inside and outside of the classroom. The Commitment to Community charges students to maintain high standards of academic and personal integrity. All students are expected to read and be familiar with the LSU Code of Student Conduct and Commitment to Community, found online at [www.lsu.edu/saa](http://www.lsu.edu/saa). It is your responsibility as a student at LSU to know and understand the academic standards for our community.

Students who are suspected of violating the Code of Conduct will be referred to the office of Student Advocacy & Accountability. For undergraduate students, a first academic violation could result in a zero grade on the assignment or failing the class and disciplinary probation until graduation. For a second academic violation, the result could be suspension from LSU. For graduate students, suspension is the appropriate outcome for the first offense. The most recent version of the Code of Student Conduct is available at <http://www.lsu.edu/saa>

#### Information for Students with Disabilities

LSU policy requires a student who claims disability status to make a formal request for accommodation through the Office of Disability Services, 115 Johnston Hall, phone 225-578-5919. This office provides the necessary evaluation and recommendations to ensure full participation in the course. For more information, go to <http://www.lsu.edu/disability>.

#### LSU Student Code of Conduct

The LSU student code of conduct explains student rights, excused absences, and what is expected of student behavior. Students are expected to understand this code as described here: <http://students.lsu.edu/saa/students/code>. **Any violations of the LSU student code will be duly reported to the Dean of Students.**

#### Attendance

Policy Statement 22 governs what will be accepted as an excused absence in this course. A student is required to notify the instructor in advance of the deadline if the student is unable to complete the assignment by the deadline due to an excuse consistent with Policy Statement 22. In the event of an emergency, a student must notify the instructor within five days and request an extension for any missed assignments. The instructor reserves the right to request documentation before granting approval for a make-up assignment.