Indiana University Department of Library and Information Science Indianapolis

S503/303 Organization and Representation of Knowledge and Information

Fall 2016 Syllabus

Instructor: Ayoung Yoon, Ph.D.
ayyoon@iupui.edu

Office phone: 317-278-2388
Office hours by appointment

Course site: https://iu.instructure.com/courses/1577449/

COURSE DESCRIPTION

The representation and organization of information resources is a primary focus of the information profession. Organizational and representational structures such as classification schemes, indexes, and catalogs have been devised to provide access to information. The recent explosive growth in both the number and variety of information resources underscores the continuing need for application of effective methods of representation and organization. This course introduces students to various approaches to the understanding, organization, representation, and use of information. The goal is to identify criteria for evaluation and improvement of ways to organize and represent information for future retrieval in theory and in practice. Information systems currently used in libraries and information centers will be studied as examples with appropriate attention to terminology and technology.

COURSE LEARNING OUTCOMES

Upon successful completion of this course, students will:

1. Make distinctions between data, information, and knowledge.
2. Understand the basic principles and functions of representational structures such as taxonomy, ontology, thesauri, metadata, and folksonomy.
3. Compare and contrast, give strengths and weaknesses of various organization systems.
4. Have a working knowledge of the new cataloging standard RDA for MARC21 records and the conceptual entity-relationship module FRBR.

5. Apply the principles of consistency and uniformity (Authority Control) to recognize authorized headings, see, and see also references for personal, corporate, and geographic names.

6. Assign authorized subject headings according to the online version of the Library of Congress Subject Headings (LCSH) list with corresponding DDC and LCC.

**MLS Program Outcomes**

Organize and Represent Information Resources

- Understand and effectively apply principles of representation and systems of organization to provide access to resources in a variety of library and information environments.

**Core Competencies of Librarianship** as formulated by the American Library Association were approved and adopted as policy by the ALA Council, January 27, 2009. A person graduating from an ALA accredited master's program in library and information science should know and, where appropriate, be able to employ the following:

3. Organization of Recorded Knowledge and Information
3A. The principles involved in the organization and representation of recorded knowledge and information.
3B. The developmental, descriptive, and evaluative skills needed to organize recorded knowledge and information resources.
3C. The systems of cataloging, metadata, indexing, and classification standards and methods used to organize recorded knowledge and information.

**Principles of Graduate and Professional Learning**

This course addresses the following:

- Demonstrating mastery of the knowledge and skills expected for the degree and for professionalism and success in the fields.
- Thinking critically, applying good judgment in professional and personal situations.
- Communicating effectively to others in the field and to the general public.
- Behaving in an ethical way both professionally and personally.
How we will conduct “Class”

While online courses afford great convenience, they also demand extra effort from both an instructor and students. Because there is no face time for lectures, discussions, group work, or other activities, all this must take place through the course site on Sakai. This involves extensive writing and creation of slides, videos, and other media we will use to communicate our ideas and questions. The syllabus, assignments, and many of the readings (unless available online) will be posted on Canvas. In each week I will provide slides or notes and brief “lectures” on important points (there are a few weeks of exception depending on the topic), but much of the work of the course will take place in the forums via discussion of the readings, videos, and slides, and your own work (discussion, assignments, quiz, and exercises).

Technology requirements for online class

- Internet service provider (ISP). The most important component is a high quality Internet connection. Cable Modem, DSL, ISDN or other high speed, broadband service is strongly recommended. Dial-up modems, while usable, will result in frustrating results during “live” conferencing or other multimedia activities. Using wireless connection when signal is weak will cause similar frustrating results.
- Computer Requirements. Students need to have access to a properly functioning computer throughout the semester. Because this is a web-based class, it is assumed that every student has daily, reliable, high-speed Internet access. Lack of access WILL NOT be accepted as an excuse for timely participation or late assignments. You should have access to:
  - A Pentium 4 or later Windows computer with Windows XP or Vista
  - OR
  - An Apple PowerPC G4 or later Apple computer with Mac OS X 10.5 – Leopard or later
- Note: the use of a tablet or mobile device will not give you all the functionality needed for the course.
- Minimum 2 GB of memory (RAM)
- A current word processing software, latest version of MSWord preferred Note: software downloads free to students at https://iuware.iu.edu/
- Sound capability to listen to audio files
- A headset if you are working in a public place to listen to audio files
- Browser Requirements
  - Current versions of Internet Explorer or Firefox for Windows computers
  - Current versions of Firefox, Safari or Chrome for Apple computers
• Software. Student computers need to be capable of running the latest versions of plug-ins, recent software and have the necessary tools to be kept free of viruses and spyware. Some courses require special software that students may have to purchase or check for free access from IUWare. URL: http://iuware.iu.edu/
• Technical Assistance. For help with Canvas technical issues or if you are having difficulty with any of the technology used for the course, check the materials at https://kb.iu.edu/d/bcll

Readings and Sources

Readings are on Canvas or links on the World Wide Web. It is expected that students will have read the materials every week, as we will be referring to them in lectures and in the exercises.

Required reading materials:

• No textbook is used in this class.
• Some readings are available online and URLs are offered in the agendas.
• Required readings have been selected to encourage participation in class discussion forums and assignments. All required and recommended readings are available on the Canvas worksite for S503.

Canvas

Canvas will be an integral part of S503. If you have problems accessing Canvas, please contact the University Information Technology Services (UITS) Support Center at 317-274-HELP. All course announcements will be found in Canvas along with the class syllabus, course schedule, exercises for grade, practice exercises, and other course documents.

Assignments and Grading

Grades will be based on class participation (including assigned tasks), discussion, and exercise with a series of assignments.

1. Class discussion throughout the semester: One post & one reply/comment to others’ post
   • Initial post is due every Wednesday 11:59 pm or midnight;
   • Reply/comment is due the next day (Thursday) 11:59 pm or midnight.
   • 5 points per discussion
   • No discussion is required during the week that you have quiz or exercise
Students are required to post a brief reflection (couple paragraphs) of assigned readings and a discussion to answer the questions if I post. In addition to the reflection, students are also required to post a comment (at least one) to other students' reflection, by "reply" to the original post.

A few rules about posting discussion:

• We will use "Discussions" on Canvas for posting and relying.
• The tone of your voice should be similar to the tone you would use in a classroom discussion, and should be placed in the appropriate forum.
• In the class discussion, present more than your opinion. If you present an opinion, present some support from the readings or from other sources that you have discovered (direct quotation is acceptable with appropriate reference information) or logical argument from commonly accepted beliefs. It also applies to your comments to others, and you should "agree" or "disagree" using supporting facts or information new to the discussion.
• Be respectful when you disagree with others. Instead of using a vague statement (e.g., “It could be …” or “It seems as if”), make strong statement with supporting materials (e.g., literature or your own experiences).

2. Quiz and exercise

All assignments are due every Wednesday 11:59 pm or midnight.

• Week5. Metadata Quiz (10 points)
• Week7. FRBR exercise (10 points)
• Week9. Subject analysis exercise (9 points)
• Week10. Cataloging exercise (8 points)
• Week12. Linked data exercise (8 points)

3. Research paper

• Due Week 15. (20 points)

**Evaluation**

The final letter grade will be assigned based on the following range with a total of 100 points possible:

<table>
<thead>
<tr>
<th>96-100 = A</th>
<th>83-86 = B</th>
<th>73-75 = C</th>
</tr>
</thead>
<tbody>
<tr>
<td>91-95 = A-</td>
<td>79-82 = B-</td>
<td>69-72 = C-</td>
</tr>
</tbody>
</table>
The meaning of the letter grades follows the DLIS Grading Policy:

**A:** Outstanding achievement. Student performance demonstrates full command of the course materials and evinces a high level of originality and/or creativity that far surpasses course expectations. The grade of A+ is not granted in DLIS, except in very exceptional cases.

**A-:** Excellent achievement. Student performance demonstrates thorough knowledge of the course materials and exceeds course expectations by completing all requirements in a superior manner.

**B+:** Very good work. Student performance demonstrates above-average comprehension of the course materials and exceeds course expectations on all tasks defined in the course syllabus.

**B:** Good work. Student performance meets designated course expectations, demonstrates understanding of the course materials, and has performed at an acceptable level.

**B-:** Marginal work. Student performance demonstrates incomplete understanding of course materials.

**C+, C, C-:** Unsatisfactory work and inadequate understanding of course materials.

**D+, D, D-:** Unacceptable work; course work completed at this level will not count toward the MLS degree.

**F:** Failing. May result in an overall grade point average below 3.0 and possible removal from the program.

Note: The course instructor will issue the grade F if a student does not finish all required assignments.

A final grade of "I" or "Incomplete" will NOT be given except in extreme situations. Inform the instructor if you are having difficulty completing the requirements of this course.

**Late Submissions**
In fairness to students who turn in assignments on time, late papers will be penalized. The earned grade will be lowered one grade level (e.g., from A- to B+) for each day that the assignment is late.

**Important note on plagiarism and academic ethic**
Unless otherwise specified in an assignment, all submitted work must be your own, original work. Any experts from the work of others must be clearly identified as a quotation, and a proper citation provided. Be aware of the IUPUI policy on plagiarism.
All cases of plagiarism (unattributed quotation or paraphrasing) of anyone else’s work, (e.g. from published materials) will be officially reported by academic misconduct. Indiana University and the Department of Library and Information Science policies on academic dishonesty will be followed.

See the source to learn more about

- Plagiarism: http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml
- Code of student rights, responsibilities, & conduct: http://studentcode.iu.edu/

Students found to be engaging in plagiarism, cheating, and other types of dishonesty will receive a failing grade for the course.

*AES and Special needs*

If you need an accommodation for a disability or have any other special need, please make an appointment to discuss this with me. I will be most able to address special circumstances if I know about them early in the semester. My office hours and contact information are listed at the beginning of this syllabus.

Accommodations will be made for qualified students with disabilities registered with Adaptive Educational Services. The AES office is located in Taylor Hall, UC 100. The phone numbers are 317/274-3241 or 317/278-2050 TTD/TTY, by fax 317/274-2051, or by email aes@iupui.edu.

**ELECTRONIC PORTFOLIO PARTICIPATION**

Students admitted to the DLIS, program beginning fall, 2011 and forward are required to participate in the electronic portfolio or ePortfolio system. In this site, you will upload materials from courses that address each of the MLS program goals. Talk to your instructor for guidelines and suggestions for submission of course work to this system.

**ONLINE WRITING CENTER**

The Online Writing Center is an experimental service that will allow you to meet with a writing center tutor in cyberspace if you are taking one of the selected online courses. http://www.iupui.edu/~uwc/OWC.html

**ADMINISTRATIVE WITHDRAWAL**
A basic requirement of this course is that you will participate in class and conscientiously complete writing and reading assignments. Keep in touch with me if you are unable to attend class or complete an assignment on time. If you miss more than half our class assignments without contacting me, you will be administratively withdrawn from this section. Administrative withdrawal may have academic, financial, and financial aid implications. Administrative withdrawal will take place after the full refund period, and if you are administratively withdrawn from the course you will not be eligible for a tuition refund. If you have questions about the administrative withdrawal policy at any point during the semester, please contact me.” Learn more at http://registrar.iupui.edu/withdrawal-policy.html
S503/303 Organization and Representation of Knowledge and Information

Course Overview at a glance

**Week 1** (Aug 25 – Aug 31). Introduction to Organization and Representation of Information

**Week 2** (Sept 1 – Sept 7). Data, information, knowledge: Purpose and principles of information organization

**Week 3** (Sept 8 – Sept 14). Introduction to Categorization: Theory and Application

**Week 4** (Sept 15 – Sept 21). Introduction to Classification: Theory and Application & Faceted Classification

**Week 5** (Sept 22 – Sept 28). Introduction to Metadata

**Week 6** (Sept 29 – Oct 5). Systematic Representation I. FRBR and RDA

**Week 7** (Oct 6 - Oct 12). Systematic Representation II. MARC21

**Week 8** (Oct 13 – Oct 19). Systematic Representation III. Authority Control and Name Authorities

**Week 9** (Oct 20 – Oct 26). Systematic Representation IV. Subject Analysis & LCSH

**Week 10** (Oct 27 – Nov 2). Classification System: Dewey Decimal classification system (DDC) & Library of Congress (LC) classification (LCC)

**Week 11** (Nov 3 – Nov 9). Classification System: Indexing Languages-Taxonomy, Ontologies, Folksonomy/Social Tags

**Week 12** (Nov 10 – Nov 16). Semantic Web and Linked Data

**Week 13** (Nov 17 – Nov 23). Future of Organization

**Week 14** (Nov 24 – Nov 30). Thanksgiving week

**Week 15** (Dec 1 – Dec 7). Re-visit organization and representation of information & Course evaluation. (No class. Work on final project)