LBSC 670 Organization of Information
Spring 2010

Instructor
Pengyi Zhang (pengyi@umd.edu)
Office: HBK 4111B
Office hours: Tuesdays 11:00 am-12:00 pm or by appointment
Tel: (240)-481-4224

Teaching Assistant
Rebecca Trinite (rtrinite@gmail.com)
Office: HBK 4111F
Office hours: Thursdays 4:00-5:00 pm

Section
0101 0201
Time & Place
Tuesdays, 2:00-4:45 pm, HBK 0109 Tuesdays, 5:30-8:15 pm, HBK 1112
Blackboard site
http://elms.umd.edu/

Description
Functions and evaluation of document and information retrieval systems; analysis and representation of data, information, knowledge, language, and text; metadata for the control of documents and other objects.

Objectives
• To understand the role of organizing information for various types of users and user situations;
• To understand differentiate different types of information representation, organization, and retrieval systems and techniques;
• To be familiar with the basic principles and practices for organizing information and to develop skills for organizing information;
• To learn how to evaluate existing applications, techniques, and classifications from a user-centered perspective;
• Apply theories and principles to the design and analysis of information systems and the representation of information for organization and retrieval.

Textbook
ISBN 012-654261-9

Used copies may be available online ($20-30), new copies from instructor ($75).
Supplementary readings
You should read the assigned chapters in the text and supplementary readings as shown on the course schedule before each class. Supplementary readings will be made available throughout the semester. Whether these readings are available through the Libraries' subscription databases (Research Port), the Course Reserves mechanism in Blackboard, the Reserve desk at the library, or freely available on the Web.

Grading
Class participation: 10%
Assignments (6 total): 30% (5% each)
Midterm: 20%
Final exam: 20%
Team project: 20%

Assignments
There will be 6 assignments. They will be graded on a 5 point scale. Assignments will be posted on Blackboard on Tuesday when there is an assignment for that week, and are due absolutely no later than 11:59 PM the following Tuesday. For assignments turned in late within 24 hours, 30% credits will be taken off your original grade. Assignments turned in late more than a day will not be accepted.

Exams
There will be a mid-term and a final exam.
- Midterm: the midterm exam will be a timed exam. It will be posted to Blackboard when class starts on Tuesday, March 9 (Week 7). You must email your completed exam to the instructor before the class ending time. I will be available throughout the exam by phone and email in case any questions or problems arise. The midterm will be open book, open notes. Collaboration with classmates during the exam is prohibited.
- Final: a take-home final will be posted immediately following the last class meeting on May 11. You have one week to complete the final. Final exams will not be accepted after the due date and time: 11:59 PM on Tuesday, May 18. The final exam will be open book, open notes. Collaboration with classmates is prohibited.

Team project
The team project will be your opportunity to demonstrate what you have learned over the course of the semester. Each team could consist of 2-4 members. The project can be several things, only a few of which are listed here:
- Critique of an existing thesaurus, classification, database structure, etc., with some concrete suggestions for improvements or re-working;
- Design of an information structure for a domain, which would support various user tasks;
- A survey of literature about a particular concept, process, technology, etc., that has to do with the organization of information. If you focus on one topic, your discussion should demonstrate an in-depth understanding.

Be creative with what you would like to do for the team project. Real-life
problems are encouraged.
You should submit a 1-page project proposal on March 30. The instructor will provide feedback on your proposal. The project presentations will be on May 4 and May 11.

**Blackboard**

The purpose of the Blackboard module will be for you to have a centralized location from which to:

1. Access course materials, including the syllabus, homework assignments, and reserve readings;
2. Communicate informally with classmates and/or establish study groups and help networks;
3. Discuss and clarify course readings and concepts with classmates and the instructor. Participation on Blackboard can also be counted toward your grade for class participation.

**Students with disability**

The instructor will be happy to discuss academic accommodations for students with disability.

Examinations and other required class activities may be rescheduled for religious observance or other appropriate reasons; please talk to the instructor as soon as possible so that alternatives can be worked out.

**Academic integrity**

The regulations described in the University publication entitled *Academic Integrity* apply.

*From the Student Honor Council:*

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit [http://www.shc.umd.edu](http://www.shc.umd.edu).

To further exhibit your commitment to academic integrity, remember to sign the Honor Pledge on all examinations and assignments:

"I pledge on my honor that I have not given or received any unauthorized assistance on this examination (assignment)."

**Acknowledgments**

Many thanks to those who have taught this and similar courses for materials, ideas and inspiration: Dagobert Soergel, Yan Qu, and Katy Lawley.
Tentative schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignments due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Introduction and overview.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 26</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 2</td>
<td>The nature of information and knowledge; knowledge representation.</td>
<td>Soergel Ch. 1 Soergel Ch. 2 Buckland, M. 1999. Information as Thing. [Research Port]</td>
<td></td>
</tr>
<tr>
<td>Feb 2</td>
<td></td>
<td><a href="http://www.sims.berkeley.edu/~buckland/thing.html">http://www.sims.berkeley.edu/~buckland/thing.html</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(only need to read pages 37-43)</td>
<td></td>
</tr>
<tr>
<td>Week 3</td>
<td>Information environments; users and user characteristics; information seeking process</td>
<td>Soergel Ch. 4 Soergel Ch. 7 Wilson, T.D. (2006). On user studies and information needs. Journal of Documentation, 62(6), 658-670. [Research Port]</td>
<td>Assignment 1 due</td>
</tr>
<tr>
<td>Feb 9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 4</td>
<td>Overview of information systems.</td>
<td>Soergel Ch. 5 Taylor, Arlene G., 2009. The Organization Of Information. 3rd Edition. Ch. 2 Retrieval Tools. [Research Port]</td>
<td>Assignment 2 due</td>
</tr>
<tr>
<td>Feb 16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 5</td>
<td>Relevance and ranking; performance measurements for information systems.</td>
<td>Soergel Ch. 8 Soergel Ch. 18 Bates, Marcia. (2001). The cascade of interactions in the digital library interface. Information Processing and Management, 38, 381-400. [Research Port]</td>
<td>Assignment 3 due</td>
</tr>
<tr>
<td>Feb 23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 6</td>
<td>Data schemas and formats.</td>
<td>Soergel Ch. 3 Soergel Ch. 9</td>
<td>Midterm exam</td>
</tr>
<tr>
<td>March 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 7</td>
<td>Midterm-exam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>March 9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March 16</td>
<td>No class. (Spring Break)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What is FRBR?: A Conceptual Model for the Bibliographic Universe. Barbara Tillett. Available at the following website: [www.loc.gov/cds/FRBR.html](http://www.loc.gov/cds/FRBR.html) |  |
| Week 9  | March 30 | Subject analysis; vocabulary control. | Soergel, Ch. 12  
Soergel, Ch. 13 | Team project proposal due |
| Week 10 | April 6 | Semantic Web | A very good (and short!) [video by Manu Sporny](http://www.youtube.com/watch?v=OGg8A2zfWKh) that introduces you to the Semantic Web.  
[http://www.youtube.com/watch?v=OGg8A2zfWKh](http://www.youtube.com/watch?v=OGg8A2zfWKh)  
Hjørland, Birger. 2008. Facet, facet analysis and the facet-analytic paradigm in knowledge organization (KO). Available at [http://www.db.dk/bh/Lifeboat_KO/CONCEPTS/facet_and_facet_analysis.htm](http://www.db.dk/bh/Lifeboat_KO/CONCEPTS/facet_and_facet_analysis.htm) |  |
| Week 12 | April 20 | Exploration of classification schemes and thesauri | [Introduction to the Dewey Decimal Classification](http://www.oclc.org/dewey/versions/ddc22print/intro.pdf)  
Read pp. 1 – 11, then read sections 13.1 – 13.2 on p. 36. Skim the rest of the Introduction to gain a general understanding of the kinds of notes and rules a librarian would use during the process of classifying a document using DDC.  
[Library of Congress Main Classes](http://www.loc.gov/catdir/cpso/lcco/)  
Click through to one or two classes (preferably in subjects that you know something about) and see how the classes are subdivided. Take notice of aspects of the arrangement that are | Assignment 5 due |
different than you might have expected. If you're unfamiliar with Library of Congress call numbers, please watch this short video: 
http://www.youtube.com/watch?v=4djuA5ZfOWE

**Introduction to Library of Congress Subject Headings**
http://www.tulane.edu/~techserv/lcsh%20introd.html

You may stop reading when you get to the section called, “Verifying LCSH.” This introduction was written catalogers in mind who would be using the MARC format, so sometimes MARC-related characters will show up in the examples (usually preceded by a $). Don’t worry about the MARC-specific guidelines or codes. Just read this document to glean principles of providing subject access via LCSH.

<table>
<thead>
<tr>
<th>Week 13</th>
<th>Index language structure; Application of index language structure to searching.</th>
<th>Soergel Ch. 14</th>
<th>Soergel Ch. 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 27</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 14</th>
<th>Project presentations.</th>
<th></th>
<th>Assignment 6 due</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 15</th>
<th>Project presentations.</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>May 11</td>
<td>Final review.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| May 18   | Final exam due                                                                  |                | Final exam due    |

|