UNIVERSITY AT ALBANY
STATE UNIVERSITY OF NEW YORK
DEPARTMENT OF INFORMATION STUDIES

**IST 602: INFORMATION AND KNOWLEDGE ORGANIZATION**
**Spring 2009: Wednesday 9:00-11:50pm**

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Class meets in Draper 346

**Course Description**
The course is an introduction to fundamental concepts, theoretical principles, and practices of knowledge and information organization. This course covers essential techniques and applications that are used to facilitate access to information resources. The key themes include:

Concepts and principles of information organization
Subject analysis and aboutness,
Indexing and Abstracting,
Vocabulary control and thesaurus,
Systematic classification,
Structure of document surrogates and Authority control,
Metadata,
Visual and non-textual information,
Organization of web based information and social classification, and
Users' perspective of information representation.

**Course Objectives**
   • To introduce the fundamental concepts of information, its nature, uses and its
      organization in information retrieval systems;
   • To examine the principles, theories, standards, and methods for information
      organization;
   • To introduce approaches for understanding users and organizing information to
      meet their information needs and;
   • To promote critical thinking and problem solving abilities for addressing challenges
      of information organization in the digital age.

**Course Requirements and Grade Guidelines**
Your final grade will be based on class work, a course portfolio, a midterm exam, and a final paper. They will be weighted as follows:
Discussion Participation . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10%
Course portfolio . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10%

Assignments . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20%
Midterm exam . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 30%
Final paper . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 30%

**Class discussion participation**
Class attendance is required. Student will be expected to be able to discuss the reading assignments and to participate in class discussions.

**In-class activities**
There will be in-class activities during the class to exercise critical concepts and practices of information organization to promote better understanding the topics of classes. Students exercise in-class activities and turn them in before leaving the class. This will be used to evaluate whether students understand correctly what have been taught and discussed in the class.

**Assignments:**
There will be 2 assignments.
Assignment 1: OCLC WorldCat and LibraryThing
This assignment involves searching using the public interface to OCLC WorldCat and the social bookmarking tool LibraryThing. The purpose of the assignment is to explore different methods for providing metadata about an item.

Assignment 2: Controlled Vocabularies and Natural Languages
Compare ERIC's thesaurus and bookmarks in del.icio.us. on a topic
The purpose of this assignment is to directly compare controlled vocabularies and user search terms or user assigned tags in order to explore the differences between the two types of indexing.

**Course portfolio**
Students will create a course portfolio that shows what have been learned, discussed, and understood from reading assignments, class discussions, in-class activities, and other projects and papers. This will consist of learning logs with summaries of readings and class works after each class and all class materials for projects and papers. The purpose of this requirement is to provide evidence of the whole course activities in the end and proof of what students have learned. The course portfolio is due the last week of the course (4/29).

**Midterm examination**
There will be a take-home examination for short essays and definitions of terms.

**Final literature review paper**
Students will be required to write a 15-20 page literature review paper. In this paper, students will examine some problems of the knowledge and information organization systems based on theories and concepts learned in class. Papers should be in a format of a research paper. Student should turn in a one page description of what they intend to look at and write about in this paper by the sixth class (2/25). Student should also prepare a

preliminary bibliography for this paper by the eleventh class (4/1).  Papers are to be submitted in electronic form as attachments by 11:59 pm on May 6$^{th}$. Attachment files must be labeled clearly in a fashion of "602_final_Surname." (e.g. 602_final_Sinn.doc)

**Late assignments and incompletes:**
Late assignment will be marked down, unless prior permission has been given by the instructor, in instances of medial or family emergencies. **Please notify the instructor in writing of any circumstance (such as severe illness or family emergencies) that will result in a late assignment.** Assignments must be submitted by no later than the beginning of the class in which they are due.
An incomplete grade due to severe illness or other emergencies may be arranged. A request for an incomplete must be accompanied by appropriate documents (e.g. doctor's letter) in which show unavoidable reasons for this request.

**Instruction for Assignments**
All written assignments must be prepared using word processing software (MS word preferred). Recommended format is 12 point font size, Time New Roman font style, and double -spaced. All assignments should be printed out in paper and turned in class.

**Department of Information Studies Statement on Academic Dishonesty:**
The Department of Information Studies takes academic dishonesty very seriously. Before taking classes within the Department of Information Studies, you should familiarize yourself with the department's Academic Dishonesty Policy, available in both the department's Graduate Handbook and online at
http://www.albany.edu/dis/students/Academic_Dishonesty.pdf
Plagiarism will result in a zero for the assignment in which the plagiarism occurred, a zero for the course.

**Text**
Taylor, Arlene G. (2004). *The Organization of Information*. 2$^{nd}$ ed. Colorado: Libraries Unlimited.(Available at Mary Jane bookstore)

**Course Design and Teaching Methodologies**
The class sessions will consist of lectures by the instructor, class discussions, in-class exercises, and student presentations. Students are required to come to class having read the assigned readings for the week. Supplemental readings may be added.

<u>**Course Schedule**</u>

**Week 1. 1/21 Introduction to the course;**
Overview of Organizing Information: why and how
Student Survey
# In-class exercise 1: Understanding basics of information organization (Self-introduction statement and extracting keywords)

Required Reading:

Taylor, Chapter 1 (pp. 1-7)

**Week 2. 1/28 Information Representation and Retrieval (Organization and Retrieval of Information)**
Concepts of Data, Information, Knowledge
Information Cycle, Information Environment and libraries

Required Readings:

How Much Information? Available at
http://www2.sims.berkeley.edu/research/projects/how-much-info-2003/execsum.htm.

Buckland, M. (1991) Information as thing. Available at
http://people.ischool.berkeley.edu/~buckland/thing.html.

Capurro, R. and B. Hjorland, "the Concept of Information," Available at
http://www.capurro.de/infoconcept.html.

Bates (2005). Information and knowledge: an evolutionary framework for information
science. *Information Research,* 10 (4). Available at http://informationr.net/ir/10-4/paper239.html.

**Week 3. 2/4 Searching and Access**
Tools and Systems for Organizing and Retrieving Information
History of the Organization of Information
General Principles of the Organization of Information

# In-class exercise 2: Understanding primary information systems

Required Readings:

Taylor, Chapter 2 (29-48) & 3 (49-68)

Buckland (1997). What is a document? *Journal of the American Society for Information
Science*, 48(9): 804-809.

Rowley, Jennifer and Richard Hartley, *Organizing Knowledge: An Introduction to
Managing Access to Information*. (Ashgate, 2008) Chapter 1: 3-20.

Smiraglia, R. (2003). The history of "The Work" in the modern catalog. *Cataloging &
Classification Quarterly*. 35(3/4): 553-567.

**Week 4. 2/11 No Class (iConference attending)**
Assignment 1 Due

Required Readings:

Taylor, Chapter 5 (103-138)

**Week 5. 2/18 No Class (Winter Break)**

**Week 6. 2/25 Systematic Organization 1:** Subject Analysis, Aboutness, Indexing, Abstracting
# In-class exercise 3: Subject Analysis Exercise (Interpreting index and abstract)

Required Readings:

Taylor, Chapter 9 (241-259)

Bruza, P.D., Song, D.W., & Wong, K.F. (2000). Aboutness from a commensense perspective. *Journal of the American Society for Information Science, 51*(12): 1090-1105.

Hutchings, W. J. (1978). The Concept of 'aboutness' in subject indexing, *Aslib Proceedings* 30: 172-181

Taylor. A. (1995). On the subject of subjects. *The Journal of Academic Librarianship*. 21(6): 484-491.

Clara M. Chu , Ann O'Brien (1993), Subject analysis: the critical first stage in indexing, *Journal of Information Science: Principles and Practice*, v.19 n.6: 439-454

Recommended Reading:

Hjørland, B. (1992). The Concept of "Subject" in Information Science. *Journal of Documentation, 48*(2), 172-200.

**Week 7. 3/4 Systematic Organization 2:** Controlled Vocabulary, Library Subject Headings, Thesaurus
# In-class exercise 4: searching & interpreting controlled vocabulary

Required Readings:

Taylor, Chapter 10 (261-296)

Buckland, M. (1999). "Vocabulary as a central concept in library and information science," available at http://www.sims.berkeley.edu/~buckland/colisvoc.htm.

Fast, Karl, Fred Liese, and Mike Stekel (2002) "What is a controlled vocabulary?" http://www.boxesandarrows.com/view/what_is_a_controlled_vocabulary_.

Bates, Marcia J. (1988) "How to use controlled vocabulary more effectively in online searching" *Online* 11/1/1988.

Aitchison, J. & Clake, S. D. (2004). The thesaurus: A historical viewpoint, with a look to the future. *Cataloging & Classification Quarterly*, 37(3/4): 5- 21.
Rowley, Jennifer, "The Controlled Versus Natural Indexing Languages Debate Revisited: A Perspective on Information Retrieval Practice and Research." *Journal of Documentation*, 1994: 108-118.

Recommended Reading:

Thomas, A. R. (2004). Teach yourself thesaurus: Exercises, readings, resources.
    *Cataloging & Classification Quarterly*, 37(3/4): 23-34.

**Week 8. 3/11 Systematic organization 3:** Classificatory structures
Categorization and Classification
# In-class exercise 5: Understanding LCC and DDC

Required Readings:

Taylor, Chapter 11 (297-329)

Barite (2000). "The notion of category: Its implications in subject analysis and in the
    construction and evaluation of indexing languages," *Knowledge Organization*
    27(1/2): 4-10.

Jacob, E. K. (2004). Classification and categorization: A difference that makes a
    difference. *Library trends*, 52(3): 515-540. Also available at
    http://findarticles.com/p/articles/mi_m1387/is_3_52/ai_n6080402.

Rafferty, P. (2001). The representation of Knowledge in library classification schemes.
    *Knowledge organization* 28(4): 180-191

Jones, K. S. (2005). Some thoughts on classification for retrieval. *Journal of
    Documentation*, Vol. 61, No. 5. (May 2005): 571-581.


Recommended Readings:

Kwasnik, Barbara (1999). The role of classification in knowledge representation and
    discovery. *Library Trends,* 48(1): 22-47.

Shirky, C. (2005). *Ontology is overrated: Categories, links, and tags*. Available from
    http://www.shirky.com/writings/ontology_overrated.html.
Spiteri, Louise F. (2007). The role of causality and conceptual coherence in assessments
    of similarity. *Libres*,17(2) Available from
    http://libres.curtin.edu.au/libres17n2/index.htm.


**Week 9. 3/18 Information Representation**
Surrogates of Information, Access to Surrogates: Cataloging, Bibliographic Description,
Authority Control
Assignment 2 Due

Required Readings:

Taylor, Chapter 4 (69-101) & 8 (220-238)

Lubetzky, Seymour, "The Objectives of the Catalog," in *Foundations of Cataloging: A
    Sourcebook*. (Littleton, CO: Libraries Unlimited, 1985): 186-191.

Tillett, B.B. (2004). Authority Control: State of the Art and New Perspectives. *Cataloging & Classification Quarterly*. 38(3/4): 23-41.

Hagler, Ronald, Chap. 3 "Access Points," in *The Bibliographic Record and Information Technology*, 3rd ed. (Chicago: ALA, 1997): 95-121.


Recommended Reading:

Gorman, M. (2004). Authority Control in the Context of Bibliographic Control in the Electronic Environment. *Cataloging & Classification Quarterly*. 38(3/4): 11 – 22


**Week 10. 3/25 Midterm: Take-home exam**

**Week 11. 4/1 Metadata**
# In-class exercise 6: metadata for a web site (elements for representing a web site, subjects)  (http://lcweb2.loc.gov/diglib/lcwa/html/lcwa-home.html)
Freud Museum at http://www.freud.org.uk.
Milton Rogovin: Social Documentary Photographer's web site at
    http://www.miltonrogovin.com/.

Required Readings:

Taylor, Chapters 6 (139-158) & 7 (159-199)

National Information Standards Organization (2004). Understanding Metadata. Available at http://www.niso.org/standards/resources/UnderstandingMetadata.pdf.

Hodge, G. (2001) Metadata Made Simpler.
    http://www.niso.org/news/Metadata_simpler.pdf.

Schottlaender, B. E. C. (2003). "Why metadata? Why Me? Why Now?" *Cataloging & Classification Quarterly*, 36(3/4): 19-29


**Week 12. 4/8 Classes Suspended, Spring Break**

**Week 13. 4/15 Organization in Archives, Museum, other types of information providing institutions**
# In-class exercise 7: Understanding finding aids


Required Readings:

Yakel, Elizabeth, "Archival Representation," *Archival Science* 3(2003): 1-25.
Fox and Wilkerson (1998). Introduction to Archival Description (available online at
    http://www.getty.edu/research/conducting_research/standards/introarchives/).

*Describing Archives: A Content Standard.* (2004) Chicago: SAA. "Statement of Principles" and "Overview of Archival Description." (pp.xi-xxi)

**Week 14. 4/22 Organization of Images and information in multi-media formats; Uses' aspects in information representation and retrieval**

Required Readings:

McRae, Linda. (2000). Indexing images for subject access: controlled vocabularies in the VISION Project. *Art Documentation*, 19: 4-9.

Shatford Layne, Sara. (1994). Some issues in indexing of images. *Journal of the American Society for Information Science,* 45(8): 583-588.

Berinstein, P. (1999). "The Big Picture – do you see what I see? Image indexing principles for the rest of us," *Online* 23(2): 85-86, 99.

Grund, A.(1993). ICONCLASS: On subject analysis of iconographic representations of works of art. *Knowledge Organization*, 20: 20-29.

Kuhlthau, Carol Collier. (1999). Accommodating the user's information search process: challenges for information retrieval designers. *Bulletin of the American Society for Information Science*, February/March: 1-7.

Connaway, Johnson, and Searing (1997). Online catalogs from the users perspective: The use of focus group interviews. *College & Research Libraries*. 58(5): 403-420

Antelman, K. (2000). Web lists and the decline of the library catalog. *Library Computing*. 18: 189-195.

Rosenfeld, Louis, and Peter Morville, (2002) "User needs and behaviors," in *Information Architecture for the World Wide Web: Designing Large-Scale Web Sites:* 28-35.

Recommended Readings:

Griffiths and Brophy (2005). Student searching behavior and the Web: Use of academic resources and Google. *Library Trends*. 53(4): 539-554.

**Week 15. 4/29 Organization of Internet Resources, Social Classification**

Morville, Peter (2005), *Ambient Findability*, O'Reily Media.

Peterson, E. (2006). "Beneath the metadata: some philosophical problems with folksonomy," *D-lib Magazine*, 12(11). Available at http://www.dlib.org/dlib/november06/peterson/11peterson.html.

Vander Wal, T. (2007). "Folksonomy coinage and definition," Vanderwal.net. Available at http://www.vanderwal.net/folksonomy.html.

Marcume, D. (2006). "The future of cataloging," *Library Resources & Technical Services*. 50(1): 5-9.

Weitz, Jay "Cataloging Electronic Resources: OCLC-MARC Coding Guidelines," (2006) http://www.oclc.org/support/documentation/worldcat/cataloging/electronicresources/default.htm.

Zins, C. (2002). Models for classifying Internet resources. *Knowledge Organization*, 29 (1): 20-28

Golder, S. A. & Huberman, B. A. (2005). The structure of collaborative tagging systems. Available at http://www.hpl.hp.com/research/idl/papers/tags/tags.pdf.

Recommended Reading:

Spiteri, Louise F. (2006). The use of folksonomies in public library catalogues. *The Serials Librarian*, 51(2): 75-89.