## INLS 728 Seminar in Knowledge Organization—Syllabus

**General information** 

Instructor: Jane Greenberg, Professor

Office: 205 Manning Hall, Email: <a href="mailto:janeg@email.unc.edu">janeg@email.unc.edu</a>
Office hours: Please see my website appointment

Class time: Thursdays, 2:00 PM-4:45 PM

Place: Manning, 304

Class documentation: Sakai for syllabus, assignments, and logistical updates; Blog:

http://know.web.unc.edu/, for sharing news, interesting links, etc.

## 1. Course Description

Fundamental questions for knowledge organization include the following: What is knowledge? Why and how do we develop knowledge organization systems? What are the implications of knowledge organization systems and approaches?

This class explores theoretical foundations, historical approaches, and current practices for organizing knowledge. The class will encompass a wide-range knowledge organization systems, from general terminological and classificatory schemes to domain specific semantic systems, including thesauri, taxonomies, and ontologies. An emphasis will be on research advancing our philosophical understanding of knowledge organization and theoretical and practical implications for this topic in the digital world.

Several selected topics covered include Aristotle--reality and knowledge; Baconian classification; Linnaean taxonomy; Dewey--whole world approach for KO; Ranganathan--analytico-synthetic classification and facet analysis; the Semantic Web; and metadata.

#### 2. Communication

I will mainly use the Sakai announcement board for important updates. Please make a commitment to checking the announcement. I may post reading updates, news about guests, exciting talks, publications, and so forth. A class listserv has been set up with the address: <a href="mailto:ko2013@sakai.unc.edu">ko2013@sakai.unc.edu</a>. I will use the listserv sparingly, but it is useful to have. Please use the list to share news.

## 3. Assignments and Evaluation

Course grades are determined as follows:

Class participation: 30 points

Assignments: 30 points

■ Final paper, annotated bibliography, or propose something: 40 points

#### 3.1 Class Participation [30 points]

Knowledge Organization (KO) is a critical component in the development, implementation, and function of any information system. The topic of knowledge organization has become increasingly important as information professionals and other diverse communities put forth efforts to organize and facilitate access to a variety of materials. Our class sessions will provide opportunities for class

discussion. As members of the class, you are encouraged to ask questions and initiate and participate in discussions. My philosophy is that discussion is integral the learning process, can lead to an exciting session (perhaps more exciting than the one planned!), and can enrich our time together.

### 3.2 Assignments [30 points]

- Ancient philosophers (group report/discussion and a handout) [5 points]
- Renaissance and Enlightenment philosophers (group report/discussion and an individual reflective essay) [10 points]
- Foundational scholars in knowledge organization (group report/discussion and a collaborative two-page summary of related KO research) [15 points]

## 3.3 Final Project (to be discussed) [40 points]

## 4. Attendance and Preparedness

I will come to class prepared, and I expect the same of you. I understand that that you may need to miss class due to certain circumstances. If you are absent, I expect you to coordinate with a class colleague to review the session and collect handouts; and please contact me to review material covered in class if you have any questions.

## 5. Readings

Please complete all readings prior to the class meeting for which they are assigned. Most readings are available on the web and accessible via a direct link on the course syllabus. If a link is broken, please let me know immediately. Several readings are accessible via UNC's E-journals:

http://eresources.lib.unc.edu/ejournal/. Readings that include a call number are available from the SILS library's reserve service. Finally, as we progress this term, new photocopied articles may be made available in the Pam box for the course.

≈ A resource list is found below the course schedule.

#### 6. Honor Code

Collaboration, discussion, and seeking assistance from other students are encouraged in this class and are not inconsistent with the Honor Code. In the case of written work, all words drawn from others must be attributed appropriately.

#### 7. Grading

H 100-95%, P+ 94-90%, P 89-85%, P- 84-80%, L 79-70%, F < 69%

#### 8. Late Work

The final assignment must be turned in on time to avoid an incomplete in the course. Extensions on other assignments will be given only for truly compelling reasons.

#### 9. Syllabus Status

While the syllabus provides the framework for this course, it's likely that some restructuring will take place throughout the term. Knowledge organization is a dynamic and growing topic, and a guest

lecturer, a news worthy development, or other events related to this class may side track us from the intended schedule.

# Schedule

Session No.	Date	Topics	Reading Assignment  = Reading available via black board	
Introduction / What is Knowledge? / Foundations				
1	Jan. 10	Introduction	<ul> <li>Abend, L. (2008, July 18). In Spain, Human Rights for Apes.         Time. Retrieved from:         <a href="http://www.time.com/time/world/article/0,8599,1824206,00.html">http://www.time.com/time/world/article/0,8599,1824206,00.html</a>         In Spain, Human Rights for Apes.         Time. Retrieved from:</li></ul>	
			<ul> <li>Group 1: Plato: Plato (199?) Theaetetus. Champaign, IL:         Project Gutenberg. http://www.gutenberg.org/etext/1726         or http://classics.mit.edu/Plato/theatu.html</li> <li>Group 2: Aristotle: Metaphysics, chapter IV:         http://classics.mit.edu/Aristotle/metaphysics.4.iv.html</li> <li>Group 3: Aristotle: Metaphysics, Chapter VIII:         http://classics.mit.edu/Aristotle/metaphysics.8.viii.html; and         EXPLORE Chapter IX:         http://classics.mit.edu/Aristotle/metaphysics.9.ix.html</li> <li>Group 4: Pliny: EXPLORE Pliny, Natural History:         http://www.perseus.tufts.edu/cgibin/ptext?lookup=Plin.+Nat.+toc</li> <li>Purchase/or find a way to have access to:         <ul> <li>Yoon, C.K. (2009). Naming Nature: The Clash Between Instinct</li> </ul> </li> </ul>	
			<ul> <li>and Science. W.W. Norton &amp; Co. (see author's page:         <ul> <li><a href="http://www.carolyoon.com/page1/page1.html">http://www.carolyoon.com/page1/page1.html</a>).</li> </ul> </li> <li>See, L. (2009, or other editions) Snow Flower and the Secret Fan:         <ul> <li>Random House.</li> </ul> </li> </ul>	
2	Jan. 17	Introduction to concepts in Knowledge Organization	<ul> <li>Hjørland, B. (2008). What is Knowledge Organization (KO)? Knowledge Organization. International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation 35(2/3):pp. 86-101.</li> <li>Hjørland, B. (2007, last updated). What is Knowledge Organization (KO)? <a href="http://www.iva.dk/bh/lifeboat_ko/CONCEPTS/knowledge_organization.htm">http://www.iva.dk/bh/lifeboat_ko/CONCEPTS/knowledge_organization.htm</a>.</li> <li>Svenonius, E. (2001). Chapter 1: Information Organization. The</li> </ul>	
			Intellectual Foundation of Information Organization. Cambridge,	

			Mass.: MIT Press. pp. 1-14. (Item also available via UNC's catalog as an e-book.)
			<ul> <li>Langridge, D.W. (1992). Classification: Its kinds, Elements,</li> <li>Systems, and Applications. London: Bowker Saur, p. 2-23. (SILS Reserve.)</li> </ul>
			Be prepared to talk about what constitute knowledge in your life; and share your thoughts and perceptions (briefly) on knowledge/ organization in LIS or any discipline in which you have some experience.
		Вог	undaries, Concepts, Naming
3	Jan 24	Boundaries, concepts (works, etc.)  Reporting for assignment 1	<ul> <li>Smiraglia, R. P. (2001). READ Chapter 1: What is the Nature of a Work; GLANCE AT Chapter 2: The Concept of the Work in Anglo-American Cataloging; DEFINITELY LOOK AT p. 41-42, Taxonomy of Derivation. The nature of "a work": Implications for the organization of knowledge. Lanham, MD: Scarecrow Press. (SILS RESERVE Z666.5 .S47 2001, also</li> <li>READ Smiraglia, R.P. (2008) A Meta-Analysis of Instantiation as a Phenomenon of Information Objects, in «Culture del testo e del documento», 9., 2008, n° 25, gennaio-aprile, p. 5-25.</li> <li>READ IF YOU HAVE NEVER READ: Buckland, M. A. (1998). What</li> </ul>
			<ul> <li>is a "Document"? JASIST, 48 (9): 804 – 809.</li> <li>EXPLORE/SKIM Functional Requirements for Bibliographic Records (FRBR).         <ul> <li>http://www.ifla.org/files/cataloguing/frbr/frbr.pdf.</li> </ul> </li> <li>Tillett, B. (2004). What is FRBR:         <ul> <li>http://www.loc.gov/cds/downloads/FRBR.PDF.</li> </ul> </li> <li>Assignment 1 Due: Report on Ancient philosophers</li> </ul>
4	Jan. 31	Naming, truth	Guest: Assistant Professor, Ryan Shawn SILS (to-be-confirmed)
		<i>J.</i>	<ul> <li>Zerubavel, E. (1993). Introduction (p. 1-4), and Chapter 1 (p. 5-20): Islands of Meaning. The Fine Line: Making Distinctions in Everyday Life. Chicago: University of Chicago Press.</li> </ul>
			<ul> <li>Olson, H. (H. A. (2002). The Power to Name: Locating the limits of subject representation in libraries. Dordrecht, Netherlands: Kluwer Academic. Read Chapter 1, skim/read chapter 2, time permitting.</li> <li>BLOG post: Stefano Mazzocchi's The Epistemology of Truth: <a href="http://www.betaversion.org/~stefano/linotype/news/431/">http://www.betaversion.org/~stefano/linotype/news/431/</a>. (or</li> <li>Shaw, R. (2010). From Facts to Judgments: Theorizing History</li> </ul>
			for Information Science. ASIST Bulletin, 36 (2): <a href="http://www.asis.org/Bulletin/Dec-09/DecJan10">http://www.asis.org/Bulletin/Dec-09/DecJan10</a> Shaw.pdf.
			Dousa, M. (2010). Facts and Frameworks in Paul Otlet's and

Julius Otto Kaiser's Theories of Knowledge Organization. ASIST Bulletin, 36 (2): http://www.asis.org/Bulletin/Dec-09/DecJan10 Dousa.pdf. ■ Letter to the editor: Hjørland, B. (2010). Concepts: Classes and colligation, and Shaw. R. (2010) Authors Response. ASIST Bulletin, 36 (3) http://www.asis.org/Bulletin/Feb-10/FebMar10 LettertoEditor.pdf; and Authors response. Give out Assignment 2--Renaissance and Enlightenment philosophers **Group 1:** Hume: An Enquiry Concerning Human Understanding: http://www.gutenberg.org/etext/9662 **Group 2:** Descartes: Meditations: http://www.wright.edu/cola/descartes/mede.html **Group 3:** Locke: An Essay Concerning Human Understanding Vol 1: http://www.gutenberg.org/etext/10615 Vol 2: <a href="http://www.gutenberg.org/etext/10616">http://www.gutenberg.org/etext/10616</a> **Group 4:** Leibnez: New essays On Human Understanding: http://www.earlymoderntexts.com/leibne.html. Research contemplations; LIS foundations and applications 5 Feb. 7 KO, special issue **Everyone read** and Charaf, I. (2004). Conceptualisation and Organization of Knowledge Between the 10th and 14th Centuries in Arabic Culture. Knowledge Organization, 31(4): 213-221. Try to get through 4 to 5 chapters of "your" selected book/s ~ Naming Nature and/or Snow Flower and the Secret Fan. Preface to the Special Issue of Knowledge Organization. McIlwaine, I. C. and Mitchell, J. S. (2008). What is Knowledge Organization? Knowledge Organization, 34 (2/3): 79-81. Also available @: http://nkos.slis.kent.edu/KO 35 2-3 ToC Preface.pdf. Read your selected piece listed below from the special issue of KO, 2008, vol. 34 (2/3) (abstract for all of these pieces @: http://www.ergon-verlag.de/tocs/ko/35 2008 2-3.pdf ): Tennis, J. Epistemology, Theory, and Methodology in Knowledge Organization: Toward a Classification, Metatheory, and Research Framework 102-112. López-Huertas, M. J. Some Current Research Questions in the Field of Knowledge Organization, 113-136. Gnoli, C. Long-Term Research Questions in Knowledge Organization, 137-149.

			- <b>Green, R.</b> Relationships in Knowledge Organization, 150-159.	
6	Feb. 14	Applications in information and library sciences; Class tript.b.c. (Campus Herbarium, or)	<ul> <li>Zeng, M. Knowledge Organization Systems (KOS), 160-182.</li> <li>SKIM: Hodges, G. (2000). Systems of Knowledge Organization for Digital Libraries: Beyond Traditional Authority Files: <a href="http://www.clir.org/pubs/reports/pub91/contents.html">http://www.clir.org/pubs/reports/pub91/contents.html</a>.</li> <li>SKIM: Furner, J. (2012). FRSAD and the Ontology of Subjects of Works. Cataloging and Classification Quarterly, 50 (5-7): 494-516.</li> <li>SKIM: Chan, L. (2005). Chapter 1 and 2: Library of Congress Subject Headings: Principles and Application. 4th edition. Westport, CT: Libraries Unlimited, pp. 3-41. (SILS Reserve).</li> <li>Cutters, C. A. (1904). Rules for a Dictionary Catalog. (4<sup>th</sup> ed. Rewritten): <a href="http://digital.library.unt.edu/permalink/meta-dc-1048">http://digital.library.unt.edu/permalink/meta-dc-1048</a>. [Select right-hand icon "All Pages" and look at specifically at p. 66-80.]</li> </ul>	
7	Feb. 21	Assignment 2:	Assign Foundational Readings in Information Science:	
		report during this session; essay due (electronically via Sakai by Monday, Feb. 25, 2013) Skylanders—tobe-confirmed @ 4:00 P.M.	<ul> <li>Group 1: Bliss, H. (1939). Chapter II: The Principles of Classification for Libraries, and Chapter IV: Systemizing and Schedulizing. The Organization of Knowledge in Libraries. New York: H.W. Wilson. (SILS Reserve)</li> <li>Group 2: Miska, F. (1998). Parts II and III. The DDC, The Universe of Knowledge and the Post-Modern Library. Albany, NY: Forest Press. (SILS Reserve)</li> <li>Group 3: Introduction to the Dewey Decimal Classification. Dewey Decimal Classification and Relative Index. Vol. 1. Dublin, Ohio: OCLC. p. xxxvii-lxiii. (SILS Reference—cataloging alcove).</li> <li>Group 4: Ranganathan, S.R. (1924). Genesis of Colon Classification: <a href="http://www.isibang.ac.in/library/portal/Pages/chp1.pdf">http://www.isibang.ac.in/library/portal/Pages/chp1.pdf</a>. Also, read: <a href="http://en.wikipedia.org/wiki/S.R. Ranganathan">http://en.wikipedia.org/wiki/S. R. Ranganathan</a>, and explore information about the <i>Prolegomena to Library Classification</i> (time permitting). We will look at the real-deal later this term.</li> </ul>	
	Memex			
8	Feb. 28	Memex Losee visit, readings t.b.a.	<ul> <li>View: Wrigth, A. (2007). The Web That Wasn't:         http://whatdoestheinternetthink.net/index.php?s=metadata&amp;st =google.     </li> <li>View: Paul Otlet, visioning a web in 1934:         http://www.youtube.com/watch?v=hSyfZkVgasI&amp;feature=relate d.     </li> </ul>	

			■ IF you have never read this, *definitely read*—and even if you have, it's worth revisiting: Bush, V. (1945). As We May Think. The Atlantic. <a href="http://www.theatlantic.com/doc/194507/bush">http://www.theatlantic.com/doc/194507/bush</a> .
			Facets, protocols, potential
9	Mar 7	Facets, Data as knowledge	<ul> <li>READ/SKIM: Ranganathan:         <ul> <li>http://en.wikipedia.org/wiki/S. R. Ranganathan.</li> </ul> </li> <li>EXPLORE: Ranganathan's Prolegomena to Library Classification.</li></ul>
10	Mar 21	No Class meeting (Jane in Sweden)	Potential Virtual Activity
			Semantic Web, linked data
11	Mar 28	Ontology; Semantic Web; Linked-data continued	<ul> <li>Seaman, B. (2009). (Re)Thinking – the body, generative tools and computational articulation. Technoetic Arts: A Journal of Speculative Research, 7 (3): 209-230. [doi: 10.1386/tear.7.3.209/1]</li> <li>Berners-Lee, T. and Fischetti, M. (1999). Chapter 1: Enquire Within Upon Everything, and Chapter 10: Web of the People. Weaving the Web. The Original Design and Ultimate Destiny of the World Wide Web by its Inventor. San Francisco: Harper. p 1-6; p123-141. (whole book: SILS Reserve; chapters 1 8 10 10)</li> <li>READ/SKIM/JUST KNOW ABOUT THIS CLASSIC ARTICLE: Berners-Lee, T., Hendler, J., and Lassila, O. (2001). The Semantic Web. Scientific American. 10</li> <li>Semantic Web Activity Statement: http://www.w3.org/2001/sw/Activity</li> <li>VISIT: Dublin Core Metadata Initiative-Networked Knowledge Organization Systems (DCMI-NKOS) Task Group: EXPLORE both: http://dublincore.org/groups/nkos/, and http://www.metadataetc.org/wiki/dcmi-nkos/doku.php.</li> <li>VISIT/EXPLORE: ISO 25964 standard: http://www.niso.org/workrooms/iso25964.</li> <li>SKIM: Linked data: http://en.wikipedia.org/wiki/Linked Data.</li> <li>Berners-Lee: http://www.w3.org/DesignIssues/LinkedData.html.</li> </ul>

		Cı	<ul> <li>VISIT/EXPLORE: <a href="http://ontolog.cim3.net/cgi-bin/wiki.pl?OpenOntologyRepository">http://ontologyRepository</a>.</li> <li>VISIT: HIVE project (see: <a href="https://www.nescent.org/sites/hive/Main Page">https://www.nescent.org/sites/hive/Main Page</a>).</li> <li>Ilture, Society, and Values</li> </ul>
12	Apr 4	Culture; Society, etc.	Potental Trip to the North Carolina Museum of Art or NC State
		New Order and	d Disorder for Knowledge Organization
13	Apr 11	Folksonomy, Tagging and Beyond	<ul> <li>Mai, J-E. (2011). Folksonomies and the New Order: Authority in the Digital Disorder", <i>Knowledge Organization</i>, 38 (2): 114-122.</li> <li>PLEASE look at Mai's publications:         <ul> <li>http://individual.utoronto.ca/jemai/Publications.html.</li> </ul> </li> <li>SKIM: Quintarelli, E., Resmini, A., and Rosati, L. (2007). FaceTag: Integrating Bottom-up and Top-down Classification in a Social Tagging System. ASIST Bulletin (June/July): http://www.asis.org/Bulletin/Jun-07/quintarelli_et_al.html.</li> <li>ARTICLE MAY BE ADDED FOR A SKIM/HOT-OFF-THE-PRESS as a f.y.i.: Woolwine, et al.</li> <li>VISIT: Bot 2.0: Botany through Web 2.0, the Memex and Social Learninghttp://ils.unc.edu/mrc/bot-20/.</li> </ul>
14	Apr 18	t.b.a.	•
15	Apr 25	Communities of practice; new order	<ul> <li>SKIM/ EXPLORE, and look in particular at Chapter 7 and 8:         Bowker and Star. (1999). Chapter 7: What a Difference a Name Makes, and Chapter 8: Organizational Forgetting: Nursing Knowledge, and Classification. Sorting Things Out: Classifications and its Consequences. Cambridge, Mass: MIT Press. (Online access via NetLibrary/UNC Library Catalog, see: http://search.lib.unc.edu/search?R=UNCb4005639, select the link to "view this book" then click on III CLASSIFICATION AND WORK PRACTICE, and you will get chapters 7 &amp; 8).</li> <li>READ: Hur-Li Lee and Wen-Chin Lan. (2009). Purposes and Bibliographic Objectives of a Pioneer Library Catalog In China. Library Quarterly, 79 (2): 205–231.</li> <li>SKIM/look at diagram: Shatford, S. (1986). Analyzing the Subject of a Picture: A Theoretical Approach. Cataloging &amp; Classification Quarterly, 6 (3): 39-62. [DOI: 10.1300/J104v06n03_04]</li> <li>SKIM/EXPLORE and click on at least 2 chapter headings: Berman, S. (19xx) Prejudices and Antipathies: A Tract on the LC Subject Headings Concerning People.</li> </ul>

	http://www.sanfordberman.org/prejant.htm.
	<ul> <li>READ: Dupre, J. (2006). Scientific Classification. Theory, Culture &amp; Society, Vol. 23 (2/3). p.30-32.</li> </ul>

## Web resources

#### Journals

- Knowledge Organization: http://www.isko.org/ko.html.
- Cataloging & Classification Quarterly (CCQ): http://catalogingandclassificationquarterly.com/; http://www.informaworld.com/smpp/title~content=t792303976~db=jour.
- International Journal of Metadata, Semantics and Ontologies (IJMSO): http://www.inderscience.com/browse/index.php?journalID=152.
- Journal of the American Society for Information Science and Technology (JASIST): http://www.asis.org/jasist.html.

Keep in mind conference proceedings from ASIST, Dublin Core, NKOS, ISKO, etc. (see below for organizations)

## Societies/Organizations

- American Society for Information Science and Technology/Special Interest Group—Classification Research (SIG CR): <a href="http://www.asis.org/SIG/cr.html">http://www.asis.org/SIG/cr.html</a>.
- International Society for Knowledge Organization: <a href="http://www.isko.org/">http://www.isko.org/</a>.
- Networked Knowledge Organization Systems/Services (NKOS): <a href="http://nkos.slis.kent.edu">http://nkos.slis.kent.edu</a>.
- The Classification Society: http://thames.cs.rhul.ac.uk/~fionn/classification-society/.
- Dublin Core Metadata Initiative: <a href="http://dublincore.org/">http://dublincore.org/</a> (selected communities may be of interest; see: <a href="http://dublincore.org/groups/">http://dublincore.org/groups/</a>).

#### Other Philosopher readings

- Berkeley—A Treatise Concerning the Principles of Human Knowledge http://www.gutenberg.org/etext/4723.
- Bertrand Russell—Epistemology.
- Gettier—"Is Justified True Belief Knowledge?" Analysis 23 p121-23"
- http://www.ditext.com/gettier/gettier.html.

#### **Selected Resources**

- Stanford Encyclopedia of Philosophy: http://plato.stanford.edu/.
- Taxonomy of Knowledge Organization Sources/Systems: http://nkos.slis.kent.edu/KOS taxonomy.htm.