

INLS 520-3 Organization of Information

Fall 2013

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Description

“Introduction to the problems and methods of organizing information, including information structures, knowledge schemas, data structures, terminological control, index language functions, and implications for searching.” <http://sils.unc.edu/courses#102>

This course will introduce you to concepts that you will build upon in future classes and will help you to better understand the field of Library and Information Science. Specifically, you will learn about the development and application of organizations systems for information, as well as critical terms, concepts and the skills needed to work with organization systems and their users.

Objectives

- Understand and apply the critical terms, main concepts, and specific challenges of information representation and organization.
- Analyze and evaluate principles and practices of information organization, including metadata functions as well as classification theory and schemes.
- Identify and implement standards for classification systems as well as data structure, content, and value.
- Compare aspects and create examples of controlled vocabularies, thesauri, taxonomies, and ontologies.
- Develop skills relating to the creation and use of organization systems.

Communication

Sakai is the central source of information for the class. Announcements or important updates will be posted there, but I will also send email to the group. You can reach me most readily through email. I will try to answer you within 24 hours (note: I never look at email in the middle of the night!)

Topics and Readings

Please see the "Syllabus" section on the left side of this page. The textbook for this class is Glushko, Robert J. ed. *The Discipline of Organizing*. Cambridge: The MIT Press, 2013. It is

available as a .pdf file in the "Resources" section. All readings from this class are either from the Glushko book, linked to the syllabus or available in the "Resources" section.

Assignments

Please see the "Assignments" section in Sakai

Evaluation

For graduate students, points will be converted to letter grades as follows:

100-95: H, 94-80: P, 79-70: L, < 70: F</p>

For undergraduate students, points will be converted to letter grades as follows:

100-95: A, 94-91: A-, 90-88: B+, 87-85: B, 84-81: B-, 80-78: C+, 77-75: C, 74-71: C-,
70-68: D+, 67-60: D, < 60: F</p>

See the [undergraduate bulletin](#) for definitions of these letter grades.

SCHEDULE OF TOPICS AND READINGS

WEEK 1

Tuesday August 20th

What are Organizing Systems?

Readings:

Glushko, Robert J. "Foundations for Organizing Systems." Chapter 1 in *The Discipline of Organizing*, edited by Robert J Glushko, 2012.

Glushko, Robert J. "The Organizing System Roadmap." Chapter 10 in *The Discipline of Organizing*, edited by Robert J Glushko, 2012.

Concepts: information, knowledge, data, understanding; standards; relationships; introduce PIM, archives, libraries

Thursday August 22nd

Activities in Organizing Systems

Readings:

Glushko, Robert J., Erik Wilde, and Jess Hemerly. "Activities in Organizing Systems." Chapter 2 in *The Discipline of Organizing*, edited by Robert J. Glushko, 2012.

Morville, Peter and Rosenfeld, Louis. "User Needs and Behaviors" Chapter 3 in *Information Architecture for the World Wide Web*," Third Edition. ***This is an e-book available through the UNC library.***

Craig, Barbara. Introduction and Chapter 1 in *Archival Appraisal: Theory and Practice* (Munche: K. G. Saur, 2004). **See Resources Section in Sakai**

Jones, W. (2004). Finders, keepers? The present and future perfect in support of personal information management. *First Monday*, 9(3). Available at: <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1123/1043>

Hearst, Marti. 2009. Chapter 4: "Query Specifications" in *Search User Interfaces*, http://searchuserinterfaces.com/book/sui_ch4_query_specification.html

WEEK 2

Tuesday August 27th

Resources in Organizing Systems

Assignment #1 due (Organization System Evaluation)

Readings:

Glushko, Robert J., Daniel D. Turner, Kimra McPherson, and Jess Hemerly. "Resources in Organizing Systems." Chapter 3 in *The Discipline of Organizing*, edited by Robert J Glushko, 2012. **Sections 3.1 and 3.2 only.**

Buckland, Michael K. "Information as Thing" *Journal of the American Society for Information Science* (1986-1998); Jun 1991; 42, 5

Tillett, B. (2004). What is FRBR? - Library of Congress:
<http://www.loc.gov/cds/downloads/FRBR.PDF>

Functional Requirements for Bibliographic Records: Final Report. Approved by the Standing Committee of the IFLA Section on Cataloguing. (1997, amended & corrected through Feb. 2009):
http://www.ifla.org/files/cataloguing/frbr/frbr_2008.pdf

Skim the following:

Smith, Abby. "Authenticity in Perspective." In *Authenticity in a Digital Environment*. Council on Library and Information Resources, 2000.
<http://www.clir.org/pubs/reports/pub92/smith.html>

Brisbane, Arthur S. "On NYTimes.com, Now You See It, Now You Don't." *The New York Times*, June 25, 2011, sec. Opinion / Sunday Review.
<http://www.nytimes.com/2011/06/26/opinion/sunday/26pubed.html>.

Baron, Richard J., Elizabeth L. Fabens, Melissa Schiffman, and Erica Wolf. "Electronic Health Records: Just Around the Corner? Or over the Cliff?" *Annals of Internal Medicine* 143, no. 3 (August 2, 2005): 222–226. <http://annals.org/article.aspx?volume=143&page=222>.

Qvenild, Marte. "Svalbard Global Seed Vault: A 'Noah's Ark' for the World's Seeds." *Development in Practice* 18, no. 1 (February 1, 2008): 110–116.
<http://www.jstor.org/stable/27751880>.

Wright, Alex. "Managing Scientific Inquiry in a Laboratory the Size of the Web." *The New York Times*, December 27, 2010, sec. Science.
<http://www.nytimes.com/2010/12/28/science/28citizen.html>.

Thursday August 29th

Describing Resources I: Identifying and Naming

Readings:

Glushko, Robert J., Daniel D. Turner, Kimra McPherson, and Jess Hemerly. "Resources in Organizing Systems." Chapter 3 in *The Discipline of Organizing*, edited by Robert J Glushko, 2012. **Sections 3.3-3.5**

Coyle, Karen. "Identifiers: Unique, Persistent, Global." *The Journal of Academic Librarianship* 32, no. 4 (2006): 428–431. <http://kcoyle.net/jal-32-4.html>

Berners-Lee, Tim. *Cool URIs Don't Change*. W3C Style. W3C, 1998.
<http://www.w3.org/Provider/Style/URI.html>

The Echo Nest. "Announcing Echoprint." *The Echo Nest Blog*, June 23, 2011.
<http://blog.echonest.com/post/6824753703/announcing-echoprint>

Whitman, Brian. "Why Music ID Resolution Matters to Every Music Fan on Facebook." *Variogr.am*, 2011.
<http://notes.variogr.am/post/10733372290/music-resolving-facebook>

Leach, Paul J., Michael Mealling, and Rich Salz. "A Universally Unique Identifier (UUID) URN Namespace." Request for Comments 4122. Internet Society, 2005.
<http://www.ietf.org/rfc/rfc4122.txt>

Riecks, David. "Recommendations for Limitations on Image Filenaming."
http://www.controlledvocabulary.com/imagetdatabases/filename_limits.html

Scherle, Ryan. "Filename Requirements for Digital Objects."
<http://wiki.dlib.indiana.edu/confluence/display/INF/Filename+Requirement>

WEEK 3

Tuesday September 3

Describing Resources II: Content standards

Readings:

Glushko, Robert J., Kimra McPherson, Ryan Greenberg, and Matthew Mayernik. "Resource Description and Metadata." Chapter 4 in *The Discipline of Organizing*, 2012. **Up to BUT NOT INCLUDING section 4.3.4 Designing the Description Vocabulary (and you can ignore section 4.2.2.4 for now)**

Elings, Mary W. and Günter Waibel. "Metadata for All: Descriptive Standards and Metadata Sharing across Libraries, Archives and Museums." *First Monday*, volume 12, number 3 (March 2007).

<http://firstmonday.org/article/view/1628/1543>

SKIM: Joint Steering Committee/RDA: Resource Description and Access site:

<http://www.rda-jsc.org/rda.html>; RDA objectives and principles:

<http://www.rda-jsc.org/docs/5rda-objectivesrev3.pdf>

Kiorgaard, Deirdre and Ebe Kartus: A rose by any other Name? from AACR2 to Resource Description and Access

<http://www.nla.gov.au/openpublish/index.php/nlasp/article/viewFile/1169/143>

[Z](#)

Basics of APA style tutorial <http://www.apastyle.org/learn/tutorials/basics-tutorial.aspx>

Thursday September 5th

Describing Resources III: Controlled Vocabularies

Readings:

Glushko, Robert J., Kimra McPherson, Ryan Greenberg, and Matthew Mayernik. "Resource Description and Metadata." Chapter 4 in *The Discipline of Organizing*, 2012. **Section 4.3.4 Designing the Description Vocabulary to end.**

Glushko, Robert J., Matthew Mayernik, and Alberto Pepe. "Describing Relationships and Structures." In *The Discipline of Organizing*, edited by Robert J. Glushko, 2012. **JUST SECTION 5.4.1 RELATIONSHIPS BETWEEN WORD MEANING**

Wheatly, Malcolm. "Operation Clean Data." *CIO*, September 10, 2005

http://www.cio.com.au/article/166533/operation_clean_data/

***Important note.** You are only required to read the *articles* by Fast, Leise, and Steckel, not the blog readings, although, you should certainly feel free to skim/read the blog postings too.

Fast, K., & Leise, F (2002). What is a controlled vocabulary?
<http://boxesandarrows.com/what-is-a-controlled-vocabulary/>

Fast, K., & Leise, F (2003). Creating a controlled vocabulary:
<http://boxesandarrows.com/creating-a-controlled-vocabulary/>

Fast, K., & Leise, F (2003). Synonym rings and authority files:
<http://boxesandarrows.com/synonym-rings-and-authority-files/>

Fast, K., & Leise, F (2003). Controlled vocabularies: A Glosso-Thesaurus:
<http://boxesandarrows.com/controlled-vocabularies-a-glosso-thesaurus/>.

WEEK 4

Tuesday September 10

Resource Description IV: Thesauri

Readings:

Lambe, P. (2007). Taxonomies can take many forms. In *Organising Knowledge: Taxonomies, Knowledge and Organisational Effectiveness*, 4-48. Oxford: Chandos.

Thesaurus principles and practice. (2008, rev. from 1992 doc.). Willpower Information Management Consultants:
<http://www.willpowerinfo.co.uk/thesprin.htm>.

Thursday September 12

Categories and Categorization

Readings:

Glushko, Robert J., Rachelle Annechino, Jess Hemerly, and Longhao Wang. Describing Resource Classes and Types." In *The Discipline of Organizing*, edited by Robert J. Glushko, 2012.

Glushko, Robert J, Paul P Maglio, Teenie Matlock, and Lawrence W Barsalou. "Categorization in the Wild." *Trends in Cognitive Sciences* 12, no. 4 (April 2008): 129– 35. <http://www.sciencedirect.com/science/article/pii/S1364661308000557>

Lakeoff, George. Women, Fire and Dangerous Things. Preface and Chapter 1 (Chapter 2 is optional) See Resources Section in Sakaii.

WEEK 5

Tuesday September 17

Classification I: Assigning Resources to Categories

Readings:

Glushko, Robert J, ed. "Classification: Assigning Resources to Categories."
Chapter 7 in *The Discipline of Organizing*, 2012. **Sections 7.1 and 7.2 only.**

The Man Who Wanted to Classify the World, directed by Levie, Francoise,
produced by Sofidoc Productions (Filmmakers Library, 2004), 61 minutes.
Streaming video available via the UNC-Chapel Hill Libraries: (You need to use
your onyen to login to:

<http://flon.alexanderstreet.com.libproxy.lib.unc.edu/View/1641522>)

Bush, A. (1945). As We May Think. The Atlantic:

<http://www.theatlantic.com/magazine/archive/1945/07/as-we-may-think/303881/>. (even if you have read this in another class, it is a good time to revisit it)

FYI:

Paul Otlet: http://en.wikipedia.org/wiki/Paul_Otlet.

Henri La Fontaine: http://en.wikipedia.org/wiki/Henri_La_Fontaine.

Thursday September 19

Thesaurus Assignment Due!

Bibliographic Classification

Readings:

Glushko, Robert J, ed. "Classification: Assigning Resources to Categories."
Chapter 7 in *The Discipline of Organizing*, 2012. **Section 7.3 only**
Taylor and Joudry, *The Organization of Information*. Chapter 11, p. 383 – end: in
Sakai Resources

Useful links to explore:

ASIS&T SIG/CR (ASIS&T Special Interest Group / Classification Research):
<http://www.asis.org/SIG/cr.html>.

International Society for Knowledge Organization: <http://www.isko.org/>.

International Federation of Classification Societies: <http://www.classification-society.org/>.

Classification Society of North America homepage: <http://www.classification-society.org/csna/csna.html>.

WEEK 6

Tuesday September 24

Faceted Classification

Readings:

Glushko, Robert J, ed. "Classification: Assigning Resources to Categories."
Chapter 7 in *The Discipline of Organizing*, 2012. **Section 7.3 only**

Hearst, Marti. "UIs for Faceted Navigation: Recent Advances and Remaining
Open Problems." In *Proceedings of the Workshop on Computer Interaction and
Information Retrieval (HCIR 2008)*. Redmond, Washington, 2008.
<http://flamenco.berkeley.edu/papers/hcir08.pdf>.

Ranganathan for IAs by Mike Steckel on 2002/10/07:
<http://boxesandarrows.com/ranganathan-for-ias/>

SKIM and explore links: Ranganathan @ Wikipedia:
http://en.wikipedia.org/wiki/S._R._Ranganathan.

Denton, W. (2009). How to Make a Faceted Classification and Put It On the Web. Miskatonic University Press: <http://www.miskatonic.org/library/facet-web-howto.html>.

Additional reading, not required

jistap.org Journal of Information Science Theory and Practice.
<http://dx.doi.org/10.1633/JISTaP.2013.1.1.5> A faceted data model for bibliographic integration between MARC and FRBR

Thursday September 26

Automating Classification

Readings:

Hedden, Heather. "Taxonomies for Automated Indexing." In *The Accidental Taxonomist*, 199–230. Medford, New Jersey: Information Today, 2010.

Graham, Paul. "A Plan for Spam", August 2002.
<http://www.paulgraham.com/spam.html>.

Li, Jiexun, Rong Zheng, and Hsinchun Chen. "From Fingerprint to Writeprint." *Commun. ACM* 49, no. 4 (April 2006): 76–82.
<http://doi.acm.org/10.1145/1121949.1121951>.

WEEK 7

Tuesday October 1

Bibliographic Description

Readings:

Weih, Jean R. (2009) Chapters 1, 2, and 3 in *Beginning Cataloging*.

Exercises: Please review the exercises at the end of Chapter 3 before class.

Thursday October 3

Understanding MARC

Readings:

Understanding MARC: <http://www.loc.gov/marc/umb/um01to06.html> "What is a MARC Record and Why is it Important?" I-VI

Another reference: <http://www.oclc.org/bibformats/en.html>

Please go to <http://people.oregonstate.edu/~reaset/marcredit/html/index.php> and download and install MARCEdit (unfortunately it is only Windows software).

WEEK 8

Tuesday October 8

Metadata

Readings:

Gilliland, Anne. (2008) "Setting the stage" chapter in Introduction to Metadata, Online edition, version 3.0

http://www.getty.edu/research/publications/electronic_publications/intrometadata/index.html

Gill, Tony. (2008) "Metadata and the Web" chapter in Introduction to Metadata, Online edition, version 3.0

http://www.getty.edu/research/publications/electronic_publications/intrometadata/index.html

Wolfe, Jen. "Playing fast and loose with the rules: metadata cataloging for digital library projects" Chapter in Radical Cataloging (See Readings folder in Resources section in Sakai)

Thursday October 10

Faceted Classification Assignment Due

Metadata Schemas: Dublin Core and others

Readings:

<http://dublincore.org/resources/faq/>

You are welcome to read the entire page, but it is only necessary for the purposes of our discussion to look at:

[What is the Dublin Core Metadata Initiative?](#)

[What is the Dublin Core?](#)

[What is the Dublin Core Metadata Element Set?](#)

[Who can benefit from using the Dublin Core Metadata Element Set?](#)

[What is the difference between "Simple" \("unqualified"\) and "Qualified" Dublin Core?](#)

[Should I use Simple or Qualified Dublin Core?](#)

[How do I begin implementing the Dublin Core Metadata Element Set?](#)

[What is the relationship between the DCMI and other Internet standards groups?](#)

[Was the Dublin Core intended to be used only for digital or Web-based resources?](#)

[How is Dublin Core metadata used?](#)

[How is Dublin Core metadata stored?](#)

[How can I embed Dublin Core metadata within my HTML documents?](#)
[What is the Dublin Core data model?](#)
[What search-engines support the Dublin Core?](#)
[How can I use existing controlled vocabularies for DC Subject metadata?](#)
[Can I use controlled vocabularies that are not approved by DCMI?](#)

Phelps, T. (2012). An Evaluation of Metadata and Dublin Core Use in Web-Based Resources. *Libri: International Journal Of Libraries & Information Services*, 62(4), 326-335. (See Readings folder in Resources section of Sakai.)

Pitti, Daniel (1997) Encoded Archival Description: The Development of an Encoding Standard for Archival Finding Aids. *The American Archivist*, 60, p. 268 - 283.

See also: EAD Element Names (In Readings folder in Resources section of Sakai.)

WEEK 9

Tuesday October 15

XML

Readings:

XML in 10 points. <http://www.w3.org/XML/1999/XML-in-10-points>

XML tutorial: http://www.w3schools.com/xml/xml_what.asp

If you don't know about XML, this is a good place to learn. Regardless, it will be good to review it before the class.

Birnbaum, David J. "What is XML and why should humanists care? An even gentler introduction to XML", January 5, 2012. <http://dh.obdurodon.org/what-is-xml.xhtml>. **Read up to The XML family of standards closely and skim the rest.**

Thursday October 17

NO CLASS FALL BREAK

WEEK 10

Tuesday October 22

Mid-semester Review

Thursday October

Mid-semester Review

WEEK 11

Tuesday October 29

Relationships and structures

Readings:

Glushko, Robert J., Matthew Mayernik, and Alberto Pepe. "Describing Relationships and Structures." In *The Discipline of Organizing*, edited by Robert J. Glushko, 2012. p. 167- 179 (Stop at section 5.4 – you can read it if you want, but it's all covered in the following article)

Fellbaum, Christiane. "WordNet." In *Theory and Applications of Ontology: Computer Applications*, edited by Roberto Poli, Michael Healy, and Achilles Kameas, 231–243. Springer Netherlands, 2010. (it's in the Resources section of Sakai under Readings)

View:

Introduction to Biomedical Ontologies #1:
<http://www.youtube.com/watch?v=3EUaurjK7u8>

Explore:

Gene Ontology <http://www.geneontology.org/>

WordNet wordnet.princeton.edu

Thursday October 31

Resource Description Framework

XML Namespaces: http://www.w3schools.com/xml/xml_namespaces.asp

RDF: http://www.w3schools.com/webservices/ws_rdf_intro.asp (Please review the 10 sections (Intro – Reference))

WEEK 12

Tuesday November 5

Linked Data and Libraries

Listen/View:

Riley, J. (2012). Linked Data and RDA: Looking at Next-Generation Cataloging. UNC Libraries, Digital Discussion Sessions. (The recording of the talk is available via iTunesU, and the slides are in Sakai Resources):
<http://digitaldiscussions.web.unc.edu/2012/08/17/recording-available-for-first-digital-discussions-session/>.

What is Linked Data?: http://www.youtube.com/watch?v=4x_xzT5eF5Q.

VIEW: Europeana: Linked Open Data - What is it?:
<http://www.youtube.com/watch?v=uju4wT9uBIA>.

EXPLORE:

Linkeddata.org @ <http://linkeddata.org/>

Thursday November 7

Linked Data

View:

Introducing Google's Knowledge Graph:
<http://www.google.com/insidesearch/features/search/knowledge.html> (watch both of the videos on the page)

Google's Knowledge Graph: One Step Closer to the Semantic Web?
<http://econsultancy.com/us/blog/62241-google-s-knowledge-graph-one-step-closer-to-the-semantic-web>

Skim:

The age of the graph: <http://www.mkbergman.com/1020/the-age-of-the-graph/>

WEEK 13

Tuesday November 12

Dr. Jane Greenberg, Guest speaker.

Greenberg, Jane, Robert Losee, José Ramón Pérez Agüera, Ryan Scherle, Hollie White, and Craig Willis. "HIVE: Helping Interdisciplinary Vocabulary Engineering." *Bulletin of the American Society for Information Science and Technology* 37, no. 4 (2011): 23–26.

<http://onlinelibrary.wiley.com/doi/10.1002/bult.2011.1720370407/full>.

Thursday November 14

OAI and Z39.50

Note: all readings are in the Resources section

Shreeves, Sarah L.; Haning, Thomas G.; Hagedorn, Kat. *Library Trends*, Spring 2005, Vol. 53 Issue 4, p576-589, 14p

Yiotis, Kristen. *The open access initiative: a new paradigm for scholarly communications*. *Information Technology & Libraries*; December 2005, Vol. 24 Issue 4, p157-162, 6p

Ward, Maribeth. *Expanding access to information with Z39.50*. *American Libraries*, July/August 1994, Vol. 25, p639-641, 3p

Joteen Singh, R. K. *A Library Software Model in 21st Century Network Environment*. *DESIDOC Journal of Library & Information Technology*; May 2010, Vol. 30 Issue 3, p51-55, 5p

WEEK 14

Tuesday November 19

Standards

Standards in a time of change <http://www.kcoyle.net/jal-31-3.html>

Library standards <http://www.kcoyle.net/jal-31-4.html>

Overview of ANSI

history: http://www.ansi.org/about_ansi/introduction/history.aspx?menuid=1

Short video on ANSI history <http://www.youtube.com/watch?v=kVMd87XZakI>

Listing of US standards developing organizations:
http://www.standardsportal.org/usa_en/resources/sdo.aspx

NISO: <http://www.niso.org/about/>

W3C: <http://www.w3.org/Consortium/mission.html>

<http://www.loc.gov/library/> look at the Best Practices and Standards section

Thursday November 21

Problems with Standards

Readings:

Cargill, Carl F. "Why Standardization Efforts Fail." *Journal of Electronic Publishing* 14 (2011). <http://dx.doi.org/10.3998/3336451.0014.103>.

Mazzocchi, Stefano. "Interoperability by Friction." *Stefano's Linotype* (2008).
<http://www.betaversion.org/~stefano/linotype/news/143/>.

Morrisey, Sheila "More What You'd Call 'Guidelines' Than Actual Rules":
Variation in the Use of Standards the *Journal of electronic Publishing* Volume 14,
Issue 1, Summer 2011
<http://quod.lib.umich.edu/j/jep/3336451.0014.104?view=text;rgn=main>

WEEK 15

Tuesday November 26 – no class – professor out of town

Thursday November 28 - NO CLASS HAPPY THANKSGIVING

WEEK 16

Tuesday December 3

Final class; wrap up

Please review what you submitted for the first assignment on organizing systems and think about how you would answer the five questions. Does what you learned this semester change your answers in any way? If so, how?