



**THE CATHOLIC UNIVERSITY OF AMERICA
SCHOOL OF LIBRARY AND INFORMATION SCIENCE**

LSC 615 Metadata
Spring, 2012

Credit Hours: 3 credits

Prerequisites: LSC 551

Classroom: Pangborn 302

Class meetings: Thursday 7:30 PM - 10:00 PM

Instructor contact information:

Youngok Choi, Assistant Professor

Office: #245 Marist Hall

Phone: (202)319-6275

E-mail: choiy@cua.edu

Office Hours: Tuesday 12 - 2 pm, and by appointment

Course Description

Applies principles of information organization to organize digitized and born-digital resources for access. Discusses strengths and limitations of current access tools such as subject guides and directories, search engines, OPACs, databases, and digital libraries. Compares selected metadata standards and examines how libraries, archives, government agencies, and museums apply metadata schemas and manage projects to make digital resources available to users.

Required Text:

- Required textbook: Steven J. Miller. Metadata for digital collections: A How-To-Do-It Manual. Neal-Schuman Publishers, Inc. 2011. ISBN: 978-1-55570-746-0
- Additional required readings and bibliography are available below in the course schedule.

Course Goals

The purposes or goals of the course are to

- introduce concepts and challenges specific to organization of Internet resources,
- expose student to the varieties of metadata schemas for networked resources.
- promote reasoned thinking and problem solving skills related to information organization, and
- acquaint the student with current trends in metadata management and control.

Goals for Student Learning

At the conclusion of the course, the student will be able to:

- understand the complex characteristics of online digital resources and the major issues involved in organizing, describing, and providing access to them,
- articulate ways in which diverse metadata schemas and standards are used to organize different kinds of online resources in different communities and contexts,
- become familiar with current metadata terminology and encoding schemas, and
- create metadata for digital resources.

Technological requirements

- Skills with MS office suite
- Basic understanding of HTML

Expectations and policies

Academic honesty: Academic honesty is expected of all CUA students. Faculty are required to initiate the imposition of sanctions when they find violations of academic honesty, such as plagiarism, improper use of a student's own work, cheating, and fabrication.

The following sanctions are presented in the University procedures related to Student Academic Dishonesty (from

<http://policies.cua.edu/academicundergrad/integrityprocedures.cfm>): "The presumed sanction for undergraduate students for academic dishonesty will be failure for the course. There may be circumstances, however, where, perhaps because of an undergraduate student's past record, a more serious sanction, such as suspension or expulsion, would be appropriate. In the context of graduate studies, the expectations for academic honesty are greater, and therefore the presumed sanction for dishonesty is likely to be more severe, e.g., expulsion. ...In the more unusual case, mitigating circumstances may exist that would warrant a lesser sanction than the presumed sanction."

Please review the complete texts of the University policy and procedures regarding Student Academic Dishonesty, including requirements for appeals, at

<http://policies.cua.edu/academicundergrad/integrity.cfm> and <http://policies.cua.edu/academicundergrad/integrity.cfm>.

Accommodations for students with disabilities: Any student who feels s/he may need an accommodation based on the impact of a disability should contact the instructor privately to discuss specific needs. Please contact Disability Support Services (at 202 319-5211, room 207 Pryzbyla Center) to coordinate reasonable accommodations for students with documented disabilities. To read about the services and policies, please visit the website: <http://disabilitysupport.cua.edu>.

Assessment

Grades for this course will be based upon the following:

Requirement	Contribution to Grade
Metadata encoding exercises	30%
Presentation on a chosen metadata standard (group work)	10%
Reading summaries & online activities during online class	30%
Metadata schema development (group work)	30%
F2f Class attendance (one class miss will deduct 2 points from your final weighted grade points.)	
Total	100%

Notes:

1. A detailed description of requirements will be distributed in class or posted on Course BlackBoard (<https://blackboard.cua.edu>).

2. All assignments must be submitted in the course Blackboard site by 7 pm on a stated due date.
3. Please consult below in the “Participation & conduct” section for late work policy and others.

Point totals converted to letter grades:

A: 94 – 100 A-: 90 -93.99
 B+: 86-89.99 B: 82-85.99 B-: 78-81.99
 C: 70-77.99 F: Below 70

Course Schedule

(**Note:** This calendar is subject to change depending on class needs. Additional required readings may be added in class if necessary)

Date	Topic	Assignment
Week 1 (1/12) Online class	Introduction: Metadata Overview Readings: <ul style="list-style-type: none"> • Miller, Ch. 1 • Ch 7 & 8 from Chowdhury & Chowdhury, Organizing information from the shelf to the web. Facet Publishing 2007. pp. 131-155. (a pdf is available in a course BB site) • Mary W. Elings, Günter Waibel (2007). Metadata for all: Descriptive standards and metadata sharing across libraries, archives and museums. First Monday. 12(3). http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/issue/view/225 	Reading summaries and online discussion (due by 1/19) – An assignment instruction is available.
Week 2 (1/19) F2f Class meeting	Metadata Schemas <ul style="list-style-type: none"> • Chopey. 2005. Planning and Implementing a Metadata-Driven Digital Repository. Cataloging & Classification Quarterly 40 (3/4): 255-287. 	
Week 3 (1/26) Online class	Resource description and Dublin Core <ul style="list-style-type: none"> • Miller, Ch. 2, 3, and 4 	Reading and online discussion (due on 2/1)
Week 3 (2/2) F2f class	XML-encoded metadata Ch. 6 <ul style="list-style-type: none"> • 	Exercise #1
Week 4 (2/9) Online class	Controlled vocabulary for improved resource discovery	
Week 5 (2/16) F2f Class meeting	Metadata for general purposes –MARC family : MODS Archival Metadata – EAD <ul style="list-style-type: none"> • Ch. 7 	Presentation (1) Metadata Creation Exercise #2 (due on 2/16)
Week 6 (2/23) Online class	Metadata project planning and management ; Application profiles <ul style="list-style-type: none"> • Miller, Ch. 10 • Jin Ma (2006). Managing metadata for digital projects. <i>Library Collections, Acquisitions, and Technical Services</i>. 30 (1-2). 3-17. • Hicks, Perkins, and Maurer (2007). Application profile development for consortial digital libraries: an OhioLink Case study. <i>Library Resources & Technical Services</i>, 51(2). 116-131. 	Reading summaries and online discussion

	<ul style="list-style-type: none"> • Park and Tosaka (2010). Metadata creation practices in digital repositories and collections: Schemata, selection criteria, and interoperability. <i>Information Technology and Libraries</i>. September, 2010. 104-116 • Martin, Kristin E.(2011) 'Marrying Local Metadata Needs With Accepted Standards: The Creation of a Data Dictionary at the University of Illinois at Chicago', <i>Journal of Library Metadata</i>, 11: 1, 33-50 	
Week 7 (3/1) F2f Class meeting	<p>Metadata for cultural objects and visual resources: CDWA; VRA Core</p> <ul style="list-style-type: none"> • Baca, Murtha (2007). CCO and CDWA Lite: Complementary data content and data format standards for Art and material culture information. <i>VRA Bulletin</i>, Vol. 34, Number 1. 69-75 • Miller, Ch. 8 	Presentation (2) Exercise #4
Week 8 (3/8)	Spring Break	
Week 9 (3/15) Online Class	<p>Preservation metadata; Understanding PREMIS</p> <ul style="list-style-type: none"> • Introduction to PREMIS http://www.loc.gov/standards/premis/premis-Vienna-pt1.pdf • Caplan article "Understanding PREMIS" http://www.loc.gov/standards/premis/understanding-premis.pdf • http://www.loc.gov/standards/premis/FE_Dappert_Enders_MetadataStds_isqv22no2.pdf "Digital Preservation Metadata Standards" by Angela Dappert and Markus Enders, in <i>Information Standards Quarterly</i>, Spring 2010 • "Implementing PREMIS: A Case Study of the Florida Digital Archive", by Devan Ray Donaldson and Paul Conway, in <i>Library Hi-Tech</i>, 2010 • Library of Congress PREMIS information and examples http://www.loc.gov/standards/premis/ • PREMIS record example: http://www.loc.gov/standards/premis/louis-2-1.xml 	Reading summaries and online discussion
Week 10 (3/22) F2f class	<p>Structural and administrative metadata</p> <ul style="list-style-type: none"> • Using METS to keep data and metadata together for preservation http://www.dpconline.org/advice/case-notes • Using METS, PREMIS and MODS for Archiving eJournals, D-Lib Magazine, September/October 2008 http://www.dlib.org/dlib/september08/dappert/09dappert.html • Battle of the Buzzwords Flexibility vs. Interoperability When Implementing PREMIS in METS, D-Lib Magazine, July/August 2008 http://www.dlib.org/dlib/july08/guenther/07guenther.html • A Checklist and a Case for Documenting PREMIS-METS Decisions in a METS Profile D-Lib Magazine, Sept/Oct 2010 http://www.dlib.org/dlib/september10/vermaaten/09vermaaten.html 	Presentation (3) Instruction on metadata schema project
Week 11 (3/29) Online class	<p>Metadata Quality</p> <ul style="list-style-type: none"> • Beall, Jeffrey (2005) Metadata and Data Quality Problems in the Digital Library. <i>Journal of Digital Information</i>. 6(3). Available at http://journals.tdl.org/jodi/article/view/65/68 • Park (2009). Metadata Quality in Digital Repositories: A Survey 	Reading summaries and online discussion

	<p>of the Current State of the art. Cataloging & Classification Quarterly. 47:3,213 — 228</p> <ul style="list-style-type: none"> • Jackson, et al (2008). Dublin Core metadata harvested through OAI-PMH. Journal of Library Metadata. 8(1). 5-21 https://www.ideals.uiuc.edu/bitstream/handle/2142/9091/JLM.pdf?sequence=2 • Robertson, John (2005). Metadata quality: Implications for library and information science professionals. <i>Library Review</i>, 54(5). 295-300. Preprint available at http://strathprints.strath.ac.uk/795/ 	
Week 12 (4/5)	No class (Easter)	
Week 13 (4/12) F2f Class meeting	<p>Metadata interoperability, crosswalks, metadata integration</p> <ul style="list-style-type: none"> • Miller, Ch. 9 • Metadata Interoperability and Standardization – A Study of Methodology Part I + Part II: Achieving Interoperability at the Record and Repository Levels D-Lib Magazine June 2006 Volume 12 Number 6 http://www.dlib.org/dlib/june06/chan/06chan.html http://www.dlib.org/dlib/june06/zeng/06zeng.html • Han and Cho (2009). Metadata for special collections in CONTENTdm: How to improve interoperability of unique fields through OAI-PMH. Journal of Library Metadata, 9: 213-238 • Moving towards Interoperability: Experiences of the Archives Hub" by Jane Stevenson and Bethan Ruddock, 30-April-2010, Ariadne Issue 63,http://www.ariadne.ac.uk/issue63/stevenson-ruddock/ • Metadata: Mapping between metadata formats / by Michael Day, UKOLN http://www.ukoln.ac.uk/metadata/interoperability/ 	
Week 14 (4/19) Online class	<p>Metadata, Linked Data and the Semantic Web</p> <ul style="list-style-type: none"> • Miller, Ch. 11 • Zarro and Allen (2010). User-contributed descriptive metadata for libraries and cultural institutions. RESEARCH AND ADVANCED TECHNOLOGY FOR DIGITAL LIBRARIES Lecture Notes in Computer Science, 2010, Volume 6273/2010, 46-54, DOI: 10.1007/978-3-642-15464-5_7 (full-text available at http://www.mikezarro.com/docs/Zarro%20(2010)%20User-ContributedDescriptiveMetadata.pdf • Malmsten (2008). Making a Library Catalogue Part of the Semantic Web. DCMI 2008 Proceedings of the 2008 International Conference on Dublin Core and Metadata Applications. P. 146 http://dcpapers.dublincore.org/ojs/pubs/article/view/927/923 	Reading summary & online discussion
Week 15 (4/26) F2f Class meeting	<p>Group presentation on metadata schema development Course summary</p>	
Week 16 (5/3)	Group project paper submission	Assignment Due

Bibliography: Reading materials, supplementary readings, references

Required readings

- *Understanding Metadata*. National Information Standards Organization, 2004. ISBN: 1-880124-62-9. PDF online: <http://www.niso.org/standards/resources/UnderstandingMetadata.pdf> [NISO]
- Coyle, Karen. Understanding Metadata and its Purpose. *Journal of Academic Librarianship* 31:2 (March 2005) 160-163. Preprint available online: http://www.kcoyle.net/jal2_Metadata.html
- Baca, Murtha, editor. *Introduction to Metadata: Pathways to Digital Information*. Online Version 3.0 Getty Research Institute, [2008]. Online: http://www.getty.edu/research/conducting_research/standards/intrometadata/index.html
PDF version http://www.getty.edu/research/conducting_research/standards/intrometadata/pdf.html
- Duval, et al (2002). Metadata principles and practicalities. D-Lib Magazine <http://www.dlib.org/dlib/april02/weibel/04weibel.html>
- Metadata Basics by LC cataloging workshop <http://www.loc.gov/catworkshop/readings/metadatabasics/overview.html>

Supplementary Readings (Additional readings will be added.)

- *CDP Dublin Core Metadata Best Practices*. Version 2.1, September 2005. PDF online: <http://www.cdpheritage.org/cdp/documents/CDPDCMBP.pdf> [CDP]
- Crystal, Abe and Jane Greenberg (2005). Usability of a metadata creation application for resource authors. *Library and Information Science Research* 27(2) Spring 2005, Pages 177-189
- Dempsey, Lorcan (2003). The recombinant library: Portals and people. *Journal of Library Administration*. 39 (4). 103-136. Available online at http://www.oclc.org/research/staff/Dempsey/recombinant_library
- Dushay, N. & Hillman, D. (2003). Analyzing Metadata for. Effective Use and Re-use. The International DCMI Metadata Conference and Workshop. Available at http://www.siderean.com/dc2003/501_Paper24.pdf
- Elings, M. W. & Waibel, Gunter (2007). Metadata for All: Descriptive Standards and Metadata Sharing across Libraries, Archives and Museums. *First Monday*, 12 (3), URL: http://firstmonday.org/issues/issue12_3/elings/index.html
- Godby et al (2004). A Repository of Metadata Crosswalks. D-Lib Magazine. 10(12). <http://www.dlib.org/dlib/december04/godby/12godby.html>
- Jiang, Y. & Mann, M. (2001). Using metadata within the library: Relevancy and practical applications. *The Serials Librarian*. 40(3/4). 253-259.
- Organizing intellectual access to digital information: From cataloging to metadata. in *A Digital Strategy for the Library of Congress*. Washington D. C. National Academy Press. 2000. Available at <http://www.nap.edu/html/lc21/ch5.html>
- Palmer et al (2007). Trends in metadata practices: a longitudinal study of collection federation. *Proceedings of the 2007 Joint Conference on Digital libraries*, Fulltext available via ACM Digital Library
- Thomas, Sarah E. (2000) The Catalog as Portal to the Internet. In *Proceedings Conference on Bibliographic Control for the New Millennium*, Washington http://dlist.sir.arizona.edu/569/01/thomas_paper.html or http://www.loc.gov/catdir/bibcontrol/thomas_paper.html

- Ward, Jewel (2004). "Unqualified Dublin Core usage in OAI-PMH data providers," OCLC Systems & Services. Vol. 20. No.1 pp. 40-47.

Special Issues of Journals

- *Metadata: A Cataloger's Primer*. Special issue of *Cataloging & Classification Quarterly* 40:3/4 (2005).
- *Organizing the Internet*. Special Issue of *Library Trends*. V. 52 (2), Fall 2003. Edited by Andrew G. Torok.
- DCMI Conference papers <http://dcpapers.dublincore.org/ojs/pubs/issue/archive> (The official Web site of proceedings of International Conference on Dublin Core and Metadata applications, from 2001- current)

Recommended books

- Caplan, Priscilla. *Metadata Fundamentals for All Librarians*. Chicago, American Library Association. 2003. ISBN: 0-8389-0847-0
- Haynes, David. *Metadata for Information Management and Retrieval*. London: Facet, 2004. ISBN: 1-85604-489-0.
- Hillmann, Diane I., and Elaine L. Westbrooks. *Metadata in Practice*. Chicago: American Library Association, 2004. ISBN: 0-8389-0882-9.
- Hsieh-Yee, Ingrid. *Organizing Audiovisual and Electronic Resources for Access: A cataloging guide*. 2nd ed. Westport, Conn.: Libraries Unlimited, 2006.
- Zeng, M. L. & Qin, J. (2008). *Metadata*, New York: Neal-Schuman. ISBN: 9781555706357

Bibliography & online resources for metadata

6.1. Library issues: Cataloging, identifiers, linking, and metadata. By Charles W. Bailey, Jr. <http://www.digital-scholarship.org/sepb/lbcat.htm>

Cataloging and Metadata, Reference resources for Special Libraries <http://units.sla.org/committee/catalog1/catalog1.html>

Metadata standards, crosswalks, and standard organizations <http://staff.library.mun.ca/staff/toolbox/standards.htm>

Seeing Standards: A Visualization of the metadata universe <http://www.dlib.indiana.edu/~jenlrile/metadatamap/>

Metadata Standard Websites

- **CCO**: Cataloging Cultural Objects <http://www.vrafoundation.org/ccoweb/index.htm>
- **CDWA & CDWA Lite**: Categories for the Description of Works of Art http://www.getty.edu/research/conducting_research/standards/cdwa/index.html
- **DCMI**: Dublin Core Metadata Initiative: <http://dublincore.org/>
- **EAD**: Encoded Archival Description: <http://www.loc.gov/ead/>
- **FGDC CSDGM**: Federal Geospatial Data Committee's Content Standard for Digital Geospatial Metadata: <http://www.fgdc.gov/metadata/geospatial-metadata-standards>
- **IEEE LOM**: Learning Object Metadata: <http://ltsc.ieee.org/wg12/>
- **MARC**: Machine-Encoded Cataloging: <http://www.loc.gov/marc/>
- **MODS**: Metadata Object Description Schema: <http://www.loc.gov/standards/mods/>

- **METS:** Metadata Encoding and Transmission Standard: <http://www.loc.gov/standards/mets/>
- **ONIX:** Online Information Exchange: <http://www.editeur.org/onix.html>
- **PBCore:** Public Broadcasting Metadata Dictionary Project <http://www.pbcore.org/>
- **PREMIS:** Preservation Metadata Implementation Strategies <http://www.loc.gov/standards/premis/>
- **TEI:** Text Encoding Initiative: <http://www.tei-c.org/>
- **VRA:** Visual Resources Association Core Categories 4.0: <http://www.vraweb.org/projects/vracore4/index.html>

Course Polices and Procedures:

Formatting of your assignments.

- For hard copy work securely fasten together any papers that are more than 1 page.
- Place your name and the assignment number on the first page.
- Minimum margins are 1 ¼” left and 1” top, bottom, and 1 ¼” right.
- Use double-spaced line spacing, or space and a half, not single-spaced.
- Submitted work must have a professional appearance and not be handwritten.
- Any work submitted with numerous ungrammaticalities will be penalized.

Participation & Conduct:

- *Attendance is mandatory; Arrive on time.* Attendance is required.
- *Late work.* Each assignment has a stated due date. Assignments turned in after the due time without prior approval will be penalized 10% for each 24-hour period that it is late. Assignments that are over 3 days late will NOT be accepted unless arrangements have been made with me. I encourage you to consult with me any special circumstances that will affect your ability to perform your assignments or turn in your assignments on time.
- *Makeup work.* No makeup work given.
- *Behave respectfully.* Students are expected to behave respectfully while in class. Participation grades will reflect a student’s maturity level and professionalism, and whether the student actively participates in class discussions.
- *No phone calls during class.* Turn off or silence cell phones and pagers. Students leaving the room for calls are not allowed to return to that class session.
- *No grade discussions in class.* Instructors will not discuss grades in class. First consider why the instructors deducted points. If you still disagree, explain your disagreement in an e-mail to the instructors.