

UNIVERSITY OF TORONTO  
FACULTY OF INFORMATION

**INF 2186S**  
**Metadata Schemas and Applications**  
**Winter 2017**

Course Outline and Required Weekly Reading(s)  
[LP = Blackboard Learning Portal]

<u>Date</u>	<u>No.</u>	<u>Topic</u>
January 10/11	1	<p>Introduction to the course: Metadata basics. <i>Practice:</i> Creating a repository of course participants. Thinking through an Application Profile. Reading:</p> <ul style="list-style-type: none"> <li>• Pomerantz, Jeffrey. 2015. <i>Metadata</i>. Cambridge, MA: MIT Press. Chapters 1 and 2 (pp. 1-64)</li> </ul>
January 17/18	2	<p>Introduction to metadata: origins, definition, types, quality, sources; overview of prominent standards and encoding schemas. Readings:</p> <ul style="list-style-type: none"> <li>• Pomerantz, Jeffrey. 2015. <i>Metadata</i>. Cambridge, MA: MIT Press. Chapters 3 and 4 (pp. 65-116)</li> <li>• <i>Understanding Metadata</i>. C2004. Bethesda, MD: NISO Press. Available at URL: <a href="http://www.niso.org/publications/press/UnderstandingMetadata.pdf">http://www.niso.org/publications/press/UnderstandingMetadata.pdf</a></li> </ul>
January 24/25	3	<p>Dublin Core applications and implementations; DC as <i>de facto</i> metadata standard; DC Application profiles Readings:</p> <ul style="list-style-type: none"> <li>• Pomerantz, Jeffrey. 2015. <i>Metadata</i>. Cambridge, MA: MIT Press. Chapter 6 (pp. 133-151)</li> <li>• Dublin Core User Guide, Available at: <a href="http://wiki.dublincore.org/index.php/User_Guide">http://wiki.dublincore.org/index.php/User_Guide</a></li> <li>• Coyle and Baker, 2009. <i>Guidelines for Dublin Core Application Profiles</i>. Available at URL: <a href="http://dublincore.org/documents/profile-guidelines/">http://dublincore.org/documents/profile-guidelines/</a></li> </ul>
January 31/ February 1	4	<p>Meaningful metadata: citizen science and other crowdsourcing applications Readings:</p>

- Good and Su. 2013. *Crowdsourcing for Bioinformatics*. (LP)  
<http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=2&cad=rja&uact=8&ved=0CC8QFjAB&url=http%3A%2F%2Farxiv.org%2Fpdf%2F1302.6667&ei=A0CPVKqEI4iHyASA54GYDA&usg=AFQjCNHe4t3FMVB3Q3tISYiJtZaY1H6qtQ&bvm=bv.81828268,d.aWw>
- Citizen Science. *Scientific American*. 2014-  
<http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=7&cad=rja&uact=8&ved=0CEsQFjAG&url=http%3A%2F%2Fwww.scientificamerican.com%2Fcitizen-science%2F&ei=QUGPVJDmCZKyyQSKhYHwCw&usg=AFQjCNEFsCdn7xiVAujYjxE7kVY2AV2IOA&bvm=bv.81828268,d.aWw>

February 7/  
February 8

- 5 Enterprise-wide metadata standards (examples from public domain, i.e., government)  
Readings:
- Wood, David, ed. 2010. *Linking Enterprise Data*. New York, NY: Springer. Chapters 1 and 2 for background.  
<http://books1.scholarsportal.info.myaccess.library.utoronto.ca/viewdoc.html?id=/ebooks/ebooks2/springer/2011-02-17/2/9781441976659>
  - Government of Alberta Core Content Standard Metadata Application Profile (CORMAP)  
[http://www.imtdocs.alberta.ca/Metadata\\_CORMAP.pdf](http://www.imtdocs.alberta.ca/Metadata_CORMAP.pdf)
  - Government of Ontario. 2014/2005. *Common Metadata Element Standard (CMES)*  
<https://dr6j45jk9xcmk.cloudfront.net/documents/1888/g-o-its-46-common-metadata-elements-standard-cmes.pdf>
  - National Archives of Australia. 2010. *AGLS Metadata Standard. Part 2: Usage Guide. Version 2.0. July 2010*.  
<http://www.agls.gov.au/pdf/AGLS%20Metadata%20Standard%20Part%202%20Usage%20Guide.PDF>

February 14/15

- 6 Linked data  
Readings:
- Pomerantz, Jeffrey. 2015. *Metadata*. Cambridge, MA: MIT Press. Chapter 7 (pp. 153-186)
  - *Topic: Linked Data in Libraries, Archives, and Museums*. 2012. *Information Standards Quarterly* 24 (2/3)

[http://www.niso.org/apps/group\\_public/download.php/9422/isqv24no2-3.pdf](http://www.niso.org/apps/group_public/download.php/9422/isqv24no2-3.pdf)

- Hyland, B. and Wood, D. 2011. *The Joy of Data - A Cookbook for Publishing Linked Government Data on the Web*. 24 pp. <http://go.utlib.ca/cat/8330539> [note: this is not required reading, but may be of interest to read selectively]
- Allemang, D., and Hendler, J. 2011. *Semantic Web for the working ontologist: effective modeling in RDFS and OWL*. Waltham, MA: Morgan Kaufmann/Elsevier, c2011. Read selectively, though Chapters 1-5; 7; and 10 are highly recommended.  
<http://go.utlib.ca/cat/8060612>

February 21/22

STUDY BREAK (no classes)

February 28/  
March 1

7

Domain-specific metadata standards, schemas and applications: cultural heritage institutions (Europeana; DPLA; Trove)

Readings:

- Pomerantz, Jeffrey. 2015. *Metadata*. Cambridge, MA: MIT Press. Chapter 8 (pp. 187-207)
- Godby, Carol Jean, Wang, Shenghui, and Mixer, Jeffrey K. 2015. *Library Linked Data in the Cloud*. San Rafael, CA: Morgan & Claypool. Read selectively for background.  
<http://go.utlib.ca/cat/10511800>
- Europeana (example)  
[http://pro.europeana.eu/files/Europeana\\_Professional/Share\\_your\\_data/Technical\\_requirements/EDM\\_Documentation/EDM\\_Primer\\_130714.pdf](http://pro.europeana.eu/files/Europeana_Professional/Share_your_data/Technical_requirements/EDM_Documentation/EDM_Primer_130714.pdf)
- Digital Public Library of America (DPLA) (Example)  
<https://dp.la/info/>
- DPLA Metadata Application Profile 4.0 (2015)  
<http://dp.la/info/map> (click on Version 4.0)

March 7/8

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Domain-specific metadata standards, schemas and applications: publishing

***Due in Class 8 Assignment 1: Repository design and Application profile (worth 40%)***

March 14/15

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Domain-specific metadata standards, schemas and applications: life sciences; natural and environmental sciences

Reading:

- Qin, J., Li, K. 2013. How Portable are Metadata Standards for Scientific Data? 2013  
<http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&cad=rja&uact=8&ved=0CB8QFjAA&url=http%3A%2F%2Fjianqin.metadataetc.org%2Fwp-content%2Fuploads%2F2013%2F08%2FDC2013-metadataad-portability.pdf&ei=7EOPVIygNoiHyASA54GYDA&usq=AFQjCNGbUul9idp85NUvRRIs1rZCpcpTRw&bv=m=bv.81828268,d.aWw>
- Willis, C. Greenberg, J. White, H. 2013. Analysis and synthesis of metadata goals for scientific data. *JASIST* 63(8): 1505-1520.  
[http://resolver.scholarsportal.info.myaccess.library.utoronto.ca/resolve/15322882/v63i0008/1505\\_aasomgfsd.xml](http://resolver.scholarsportal.info.myaccess.library.utoronto.ca/resolve/15322882/v63i0008/1505_aasomgfsd.xml)

March 21/22	10	Metadata – issues around surveillance, privacy, and ethics Readings: <ul style="list-style-type: none"> <li>• The Guardian. <i>The NSA files decoded</i>.  <a href="http://www.theguardian.com/us-news/the-nsa-files">http://www.theguardian.com/us-news/the-nsa-files</a></li> <li>• Privacy International. <i>Metadata</i>.  <a href="https://www.privacyinternational.org/node/53">https://www.privacyinternational.org/node/53</a></li> <li>• Pomerantz, Jeffrey. 2015. <i>Metadata</i>. Cambridge, MA: MIT Press. Chapter 5 (pp. 117-131)</li> </ul>
March 28/29	11	Presentation of projects
April 4/5	12	Presentation of projects; Summary and wrap-up