LIBR 559S/ ARST 556K- RESEARCH DATA MANAGEMENT FOR INFORMATION PROFESSIONALS

Version 7.4

November 3, 2018

Course Syllabus

Program: LIBR and ARST

Year: Winter 2019

Course Schedule: Each Friday, 9am – 12pm

Location: Terrace Lab (UBC iSchool)

Instructor: Eugene Barsky

Office location: Koerner 219WS-3

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Office hours: As requested by students

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SLAIS Student Portal: https://students.canvas.ubc.ca/

We acknowledge that we are on the traditional, ancestral and unceded territory of the hən̓q̓əmin̓əm̓ speaking Musqueam people.

Course Goal:

This class will introduce students to issues in the management and curation of research data. It will cover the systems and metadata standards for curating and preserving research data and will develop the skills necessary to create data management plans.

Course Objectives:

After completing this class, the students will be able to:

§ Describe research data management challenges and opportunities in archives, academic and public libraries [1.1, 1.4, 5.2]

§ Differentiate between data management needs and practices in various academic communities (e.g. physical sciences, natural sciences, engineering, humanities, health sciences, and social sciences) [1.1, 5.2, 4.1]

§ Understand research data lifecycle, data curation profiles and data needs assessment tools for research projects [1.3, 1.2, 4.1]

§ Develop data management plans for humanities, social sciences, health and science data [2.2, 1.4]

Course Topics:

§ Overview of research data management – history, challenges, trends and obstacles to data curation;

§ Types, formats, and stages of data – best practices for file and folder structuring, data types and stages for data;

§ Metadata standards and details needed to make data meaningful to others – metadata schemes and controlled vocabularies;

§ Data storage and backup – different systems for storage, management and public access for data (REDCap, Dataverse, Archivematica, DSpace);

§ Data sharing and reuse policies – data management plans and Canadian developments in this area;

§ Archiving and preservation of data – systems and connections to data management systems.

§ The class will also feature a variety of invited speakers – librarians, archivists, researchers and graduate students that directly deal with various aspects of data management.

Prerequisites: completion of the MLIS core courses for MLIS students. Completion of the MAS core courses for MAS students. Dual students must meet the prerequisites for the section in which they register

Required and Recommended Reading:

Course text:

Ray, J. M. (2014). *Research data management: Practical strategies for information professionals.* West Lafayette, Ind: Purdue University Press (Available online via UBC Library, multiple users allowed) - http://resolve.library.ubc.ca/cgi-bin/catsearch?bid=7398786. There will also be additional readings to supplement this text. This is an older text but a classic!

Course Assignments:

Assignment	Due Date	Weight
Lightning talk #1 – Working individually, select, write and present about one of the metadata schemes used in the sciences, health, social sciences or humanities to describe data	Friday, 8 February 2019	15%
Lightning talk #2 - Working in pairs, select and present about one of the data systems (digital repository systems, e.g. ePrints or DSpace or data management tools, e.g. Dataverse or REDCap) used in the sciences, health, social sciences or humanities to work with data	Friday, 8 March 2019	25%
Major issues in data management - Working in teams, select and present about one of the key issues in today's data management and curation in libraries	Friday, 29 March 2019	45%
Participation mark - Students are expected to attend and participate in class discussions		10%
Student-led class discussion – Students will lead one class discussion about home reading		5%

Course Schedule [week-by-week]:

	Topics	In class activities / Assignments	Readings
Week 1 Jan 4	Welcome & introductions. Review syllabus, assignments, and timelines.	Sign in for student-led class discussions	Read and review the syllabus, please
	What is data? Define data and various types of data.	Class experiment with data recording sheets	
Week 2 Jan 11	Data in libraries. Let's create research data. Data mining exercise for collection management (from Web of Science and/or WorldCat databases)	Web of Science exercise, please bring your laptops	Textbook, chapter 1 and chapter 3
	Data in libraries – visualizing it. (Guest speaker – Jeremy Buhler, UBC Assessment Librarian, and a data maven)	Brainstorm questions for guest speakers	

		Student-led discussions spreadsheet - complete	
Week 3 Jan 18	History of data management in libraries. In the US, in Canada. Data lifecycle. Where do libraries fit in? Data privacy and security, focus on Canada	Student-led class discussion Please think about groups for the final assignment (#3)	Barsky, E., Laliberté L., Leahey, A., and Trimble, L. (2017, January). Collaborative Research Data Curation Services: A View from Canada. In Curating Research Data, Volume One: Practical Strategies for Your Digital Repository. (Edited by Lisa R. Johnston). Association of College and Research Libraries, Chicago, Illinois, 2017. Available at https://dx.doi.org/10.14288/1.0340778 (recommended for Canadian RDM history) Krebs, B. (2018, April). Don't Give Away Historic Details About Yourself. Blog post- https://krebsonsecurity.com/2018/04/dont-give-away-historic-details-about-yourself/ (required) Koenig, B. A. (2014). Have we asked too much of consent? *Hastings Center Report, 44*(4), 33-34. doi:10.1002/hast.329 (required)
	Guest speakers: - Scott Baker, Project Manager, Health Research Data, Advanced Research Computing, UBC	Sign up for metadata standards Lightning Talk #1 – spreadsheet online	

	- Dr. Holly Longstaff, Provincial Health Services Authority (PHSA)		
Week 4 Jan 25	Scholarly Communication and Research Data The instructor is away for the National Research Data Services Summit in Ottawa, we will have a remote class with a guest speaker Guest Speaker - Devin Soper, Scholarly Communications Librarian at the Florida State University Libraries (via Skype/Vidyo)	Student-led class discussion Form your group for the final assignment due	Textbook, Chapter 6
Week 5 Feb 1	Metadata, metadata standards, controlled vocabularies, and best practices	Student-led class discussion	Textbook, chapter 7
	Non-traditional Metadata work. Working with GIS metadata		

	Guest speaker - Stefan Khan-Kernahan, Librarian and Software Developer Guest Speaker - Evan Thornberry, UBC GIS Librarian		
Week 6 Feb 8	Lightning Talk #1 – metadata standards	Presentations for Lightning talk and one-page handout are due	
	Using metadata - Hands-on session on APIs, Guest Speaker - Schuyler Lindberg, UBC Library IT	Sign up for Lightning Talk #2 – spreadsheet online Finalize your topics for the Assignment #3 Please bring your laptops	
Week 7 Feb 15	Software and hardware for data management – OAIS model, differences	Student-led class discussion	Textbook, chapter 10 and chapter 11

	between data managing, data preservation, and data access		
	Data preservation from the archivists' point of view – Guest Speaker – Sara Allain, Systems Archivist, Artefactual Systems Digital Humanists working with data - Guest Speaker - Dr. Megan Lobay-Meredith, UBC		
Week 8 Mar 1	Software and hardware for data management – What systems libraries use for data management and access	Student-led class discussion	Ball, A. (2014). 'How to License Research Data'. DCC How-to Guides. Edinburgh: Digital Curation Centre. Available online: http://www.dcc.ac.uk/resources/how-guides
	Dataverse software for data management		
	National Federated Research Data Infrastructure project with Compute Canada (https://beta.frdr.ca/repo) and also SFU approach (Islandora repository) – Guest Speaker - Alex Garnett, RDM and Systems Librarian, SFU	Submit a one-page outline for Assignment #3 for your team	

Week 9 Mar 8	Lightning Talk #2 – software systems for data management, data access, data preservation and more…	Presentations for lightning talk and one pager overview are due	
Week 10 Mar 15	Data Management Plans, history, content, requirements, software, DMP tools, Canadian TC3+ requirements	Case Studies - Create Data Management Plans in small groups: sciences, health, and humanities	Portage Website, How to Manage Your Data - https://portagenetwork.ca/planning-managing-data/
Week 11 Mar 22	Final Presentations.		
	Research Data in Canadian Libraries, a broad view of the future. Guest speaker - Jeff Moon, Director of the Canadian Portage Network (via Skype/Vidyo)		
Week 12 Mar 29	Final Presentations.		

	Wrap-up, including library associations, listservs, further professional development.		
Week 13 Apr 5	No class - Instructor is away for a conference		

Attendance: The calendar states: "Regular attendance is expected of students in all their classes (including lectures, laboratories, tutorials, seminars, etc.). Students who neglect their academic work and assignments may be excluded from the final examinations. Students who are unavoidably absent because of illness or disability should report to their instructors on return to classes."

Evaluation: All assignments will be marked using the evaluative criteria given on the SLAIS web site.

Written & Spoken English Requirement: Written and spoken work may receive a lower mark if it is, in the opinion of the instructor, deficient in English.

Access & Diversity: Access & Diversity works with the University to create an inclusive living and learning environment in which all students can thrive. The University accommodates students with disabilities who have registered with the Access and Diversity unit: [https://students.ubc.ca/about-student-services/centre-for-accessibility]. You must register with the Disability Resource Centre to be granted special accommodations for any on-going conditions.

Religious Accommodation: The University accommodates students whose religious obligations conflict with attendance, submitting assignments, or completing scheduled tests and examinations. Please let your instructor know in advance, preferably in the first week of class, if you will require any accommodation on these grounds. Students who plan to be absent for varsity athletics, family obligations, or other similar commitments, cannot assume they will be accommodated, and should discuss their commitments with

the instructor before the course drop date. UBC policy on Religious Holidays: http://www.universitycounsel.ubc.ca/policies/policy65.pdf .

Academic Integrity

Plagiarism

The Faculty of Arts considers plagiarism to be the most serious academic offence that a student can commit. Regardless of whether or not it was committed intentionally, plagiarism has serious academic consequences and can result in expulsion from the university. Plagiarism involves the improper use of somebody else's words or ideas in one's work.

It is your responsibility to make sure you fully understand what plagiarism is. Many students who think they understand plagiarism do in fact commit what UBC calls "reckless plagiarism." Below is an excerpt on reckless plagiarism from UBC Faculty of Arts' leaflet, "Plagiarism Avoided: Taking Responsibility for Your Work," (http://www.arts.ubc.ca/arts-students/plagiarism-avoided.html).

"The bulk of plagiarism falls into this category. Reckless plagiarism is often the result of careless research, poor time management, and a lack of confidence in your own ability to think critically. Examples of reckless plagiarism include:

- Taking phrases, sentences, paragraphs, or statistical findings from a variety of sources and piecing them together into an essay (piecemeal plagiarism);
- Taking the words of another author and failing to note clearly that they are not your own. In other words, you have not put a direct quotation within quotation marks;
- Using statistical findings without acknowledging your source;
- Taking another author's idea, without your own critical analysis, and failing to acknowledge that this idea is not yours;
- Paraphrasing (i.e. rewording or rearranging words so that your work resembles, but does not copy, the original) without acknowledging your source;
- Using footnotes or material quoted in other sources as if they were the results of your own research; and
- Submitting a piece of work with inaccurate text references, sloppy footnotes, or incomplete source (bibliographic) information."

Bear in mind that this is only one example of the different forms of plagiarism. Before preparing for their written assignments, students are strongly encouraged to familiarize themselves with the following source on plagiarism: the Academic Integrity Resource Centre http://help.library.ubc.ca/researching/academic-integrity. Additional information is available on the Connect site: http://connect.ubc.ca.

If after reading these materials you still are unsure about how to properly use sources in your work, please ask me for clarification.

Students are held responsible for knowing and following all University regulations regarding academic dishonesty. If a student does not know how to properly cite a source or what constitutes proper use of a source it is the student's personal responsibility to obtain the needed information and to apply it within University guidelines and policies. If evidence of academic dishonesty is found in a course assignment, previously submitted work in this course may be reviewed for possible academic dishonesty and grades modified as appropriate. UBC policy requires that all suspected cases of academic dishonesty must be forwarded to the Dean for possible action.