



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

**iSchool Mission: Through innovative research, education and design, our mission is to enhance humanity's capacity to engage information in effective, creative and diverse ways.**

## **LIBR 582/ARST 556P: Digital Image and Text Collections – Course Syllabus (3)**

<b>Program:</b>	Master of Archival Studies; Master of Library and Information Studies
<b>Year:</b>	Winter Session 2021/22, Term 2
<b>Course Schedule:</b>	Monday, 9:00 a.m. – 11:50 a.m.
<b>Location:</b>	Terrace Lab, SLAIS
<b>Instructor:</b>	Richard Arias-Hernandez (He/Him/His)
<b>Office location:</b>	IBLC 484
<b>Office phone:</b>	604-822-1458
<b>Office hours:</b>	On Zoom by email appointment
<b>E-mail address:</b>	<a href="mailto:richard.arias@ubc.ca">richard.arias@ubc.ca</a>
<b>SLAIS Student Portal:</b>	<a href="https://canvas.ubc.ca/">https://canvas.ubc.ca/</a>

**Course Goal:** The course is designed to introduce students to the fundamental concepts, terminology, techniques and algorithms used for creating and managing digital collections of images and text. The student will acquire knowledge and skills necessary to design and create digital image and/or text collections, from the selection of materials and planning the project through design, implementation, maintenance and evaluation.

### **Learning Outcomes:**

#### **Upon completion of this course students will be able to:**

1. Solve issues related to selection of analogue material for digitization and creation of a digital collection [1.1, 1.2, 1.4, 3.2, 5.1]
2. Solve issues related to digital access to image and text collections [1.3, 1.4, 2.1]
3. Use digitization hardware & software systems for the production of digital image and text collections [1.2, 1.3]
4. Plan a digitization project to create a digital image and/or text collection [1.1, 1.2, 1.4, 3.2]
5. Create digital image and/or text collections in local/intranet as well as in web environments [1.1, 1.2, 1.3, 1.4, 3.1, 5.1]
6. Propose recommendations for the design, management, and evaluation of cultural heritage-related digitization projects [1.1, 1.3, 1.4, 2.1, 5.2]

(Course objectives are stated in terms of student learning outcomes and reference the iSchool Statement on Graduate Competencies: <http://slais.ubc.ca/programs/about-department/graduate-competencies/>)



## Course Topics:

- Images and Text: Characteristics and Formats
- Planning and Managing Digitization Projects
- The Digitization Process
- Metadata for Digital Objects
- Content Based Retrieval
- Digital Collections and Database Design
- Software to create and publish digital text and image collections
- User Interface Issues
- Intellectual Property Rights and other issues in Digital Asset Management

## Prerequisites:

MLIS students: Completion of MLIS Core or permission of SLAIS Graduate Advisor. Take LIBR582.

MAS students: Completion of MAS Core or permission of SLAIS Graduate Advisor. Take ARST556P.

Dual Students: Completion of MLIS or MAS Core or permission of SLAIS Graduate Advisor.

## Format of the course:

Design studio centered around a term-long, progressive, and collaborative digital collection project. Design activities are complemented with short lectures, technology tutorials/workshops, student-led presentations, field visits, and guest speakers.

## Required and Recommended Reading:

As general resources, the following texts will be helpful:

### *Textbook:*

- Mark Jordan (2006). *Putting Content Online: A Practical Guide for Libraries*. Oxford: Chandos. eBook is available for free online access through UBC Library/Summon and the whole eBook, or individual chapters, can be downloaded as a PDF from there. One physical copy is on reserve at IKBLC Library: ZA4080.J67 2006

### *Weekly Readings (articles, online resources, books):*

ALCTS – Association for Library Collections and Technical Services. Preservation and Reformatting Section. (2013) Minimum Digitization Capture Recommendations. American Library Association. Available at: <http://www.ala.org/alcts/resources/preserv/minimum-digitization-capture-recommendations>

Anderson, S. et al. (2006). *Digital Images Archiving Study*. Arts and Humanities Data Service. Available on Canvas > Modules > Session 3

Baca, M. and P. Harding (2014). *Categories for the Description of Works of Art*. Available at: [http://www.getty.edu/research/publications/electronic\\_publications/cdwa/index.html](http://www.getty.edu/research/publications/electronic_publications/cdwa/index.html)

Baca, M. Ed. (2002). *Introduction to Art Image Access: Issues, Tools, Standards, Strategies*. J. Paul Getty Trust. Available at: [http://www.getty.edu/research/publications/electronic\\_publications/intro\\_aia/index.html](http://www.getty.edu/research/publications/electronic_publications/intro_aia/index.html)



Baca, M. Ed. (2008). *Introduction to Metadata, Version 3.0*. J. Paul Getty Trust. Available at: [http://www.getty.edu/research/publications/electronic\\_publications/intrometadata/index.html](http://www.getty.edu/research/publications/electronic_publications/intrometadata/index.html)

BCR's CDP Digital Imaging Best Practices Version 2.0. June 2008. [http://mwdl.org/docs/digital-imaging-bp\\_2.0.pdf](http://mwdl.org/docs/digital-imaging-bp_2.0.pdf)

*Capture Your Collections: A Guide for Managers Planning and Implementing Digitization Projects*. (2013). Ministry of Public Works and Government Services Canada. [online tutorial]. Available at: <https://www.canada.ca/en/heritage-information-network/services/digitization/capture-collections-guide-managers.html>

DPLA (2015). Curriculum for Digitization. Available at <http://dp.la/info/2015/10/07/new-self-guided-curriculum-for-digitization/>

Cervone, H.F. (2007). Standard methodology in digital library project management. *OCLC Systems and Services* 23(1); 30-34.

Enser, P. (2008). The evolution of visual information retrieval. *Journal of Information Science* 34(4): 531-546.

FADGI - Still Image Working Group (2016). *Technical Guidelines for Digitizing Cultural Heritage Materials*. US Federal Agencies Digitization Initiative. Available at: <http://www.digitizationguidelines.gov/guidelines/digitize-technical.html>

Harping, P. (2010). *Introduction to Controlled Vocabularies: Terminology for Art, Architecture, and Other Cultural Works*. J. Paul Getty Trust. Available at: [http://www.getty.edu/research/publications/electronic\\_publications/intro\\_controlled\\_vocab/index.html](http://www.getty.edu/research/publications/electronic_publications/intro_controlled_vocab/index.html)

Hearst, M. (2009). *Search User Interfaces*. Cambridge University Press. (Especially Chapter 1, The Design of Search user Interfaces). <http://searchuserinterfaces.com/>

National Information Standards Organization (NISO). (2007). A Framework of Guidance for Building Good Digital Collections. 3rd ed. Available at: <https://www.niso.org/sites/default/files/2017-08/framework3.pdf>

Shatford Layne, S. (1994). Some issues in the indexing of images. *Journal of the American Society for Information Science* 45 (8): 583-588.

Web Content Accessibility Guidelines (WCAG) 2.0 (2008). <https://www.w3.org/WAI/standards-guidelines/wcag/>

Witten, I.H., D. Bainbridge and D.M. Nichols (2010). *How to Build a Digital Library*. 2nd ed. Morgan Kaufmann [eBook available online from UBC Library, one physical copy on reserve at IKBLC library, another physical copy also available outside Instructor's office]

Xie, I. and Matusiak, K. (2016). *Discover Digital Libraries: Theory and Practice*. New York: Elsevier. [eBook available online from UBC Library, one reserved copy at IKBLC library, selected readings also available as hard copies outside Instructor's office]



**Course Assignments:**

Assignment	Date Due	Weight	Learning Outcomes	Graduate Competencies
Collection Assessment	January 31	10%	LO6	1.4, 2.1
Project Plan	February 28	15%	LO4	1.1, 1.2, 1.4, 3.2
Sample Scans	March 7	10%	LO1, LO3	1.3, 2.1
Image Processing	March 21	10%	LO1, LO3	1.3, 2.1
Term Project: Digital Processing	April 4	20%	LO1, LO3	1.1, 1.3, 3.1, 5.1
Term Project: Cataloguing & Access	April 4	20%	LO2, LO5	1.1, 1.2, 1.4, 3.1, 5.1
Term Project: Interface/UX	April 4	5%	LO5	1.1, 1.2, 1.3, 3.1, 5.1
Participation	Overall	10%	LO6	1.4, 3.1, 4.1, 5.1

**Course Schedule [week-by-week]:**

Date	Topics	Lab/Tour/Talk	Readings	Assignments
Session 1 Jan-10	Class cancelled due to iSchool Orientation to new students			
Session 2 Jan-17	Introduction to Course, Characteristics of Digital Collections, Term Project	Lab: Introduction to CONTENTdm	Jordan, Ch. 1	
Session 3 Jan-24	Managing Digital Collections <ul style="list-style-type: none"> <li>• Project Planning</li> <li>• Technical Issues</li> </ul> Case Studies	Lab: Introduction to Islandora/ARCA	DPLA (2015) Capture Your Collections (2013) Cervone (2007) Jordan, Ch. 2 & 8	
Session 4 Jan-31	Issues in Digital Asset Management <ul style="list-style-type: none"> <li>• Preservation</li> <li>• Licensing and Use</li> </ul> Copyright	Talk: Copyright and digital collections (TBD)	Anderson (2006), Ch. 6, 8 & 9 Jordan, Ch. 3 Jordan, Ch. 11	<b>Collection Assessment Due</b>
Session 5 Feb-07	The Digitization Process <ul style="list-style-type: none"> <li>• Digitizing Images and Text</li> <li>• Quality Standards</li> </ul> Basic Processing	Lab: CONTENTdm (II)	Xie & Matusiak, Ch 3 FADGI (2016) ALCTS (2013) BCR's CDP (2008)	
Session 6 Feb-14	Design Studio: In-class team work project plan	Optional Lab: Scanning		



Date	Topics	Lab/Tour/Talk	Readings	Assignments
	Midterm Break: Feb. 21-25			
Session 7 Feb-28	Digital Collections: Images (I) <ul style="list-style-type: none"> <li>• What we know of image use</li> <li>• Describing the physical image</li> <li>• Metadata</li> </ul>	Lab: Islandora/ARCA (II)	Baca (Ed.) (2008) Anderson (2006), Ch. 7 Baca (Ed.) (2002) Baca and Harding (2014)	<b>Project Plan Due</b>
Session 8 Mar-07	Digital Collections: Images (II) <ul style="list-style-type: none"> <li>• Concept-based indexing</li> <li>• Content-based info retrieval</li> </ul>	Lab: Adobe Photoshop	Enser (2008) Harping (2010) Shatford Layne (1994)	<b>Sample Scans Due</b>
Session 9 Mar-14	Digital Collections: Text <ul style="list-style-type: none"> <li>• The digital book</li> <li>• Metadata</li> </ul>	Lab: CONTENTdm (III)	Witten et al., Ch. 4 Jordan, Ch. 4	
Session 10 Mar-21	Designing the User Interface <ul style="list-style-type: none"> <li>• HCI Issues</li> <li>• Creating a User Interface</li> </ul>	Lab: CONTENTdm (IV)	Hearst, Ch. 1 Jordan, Ch. 6 Xie & Matusiak, Ch. 7, pp. 205-215	<b>Image Processing Due</b>
Session 11 Mar-28	Web-accessible Digital Collections. Design Studio	Arca talk (TBD)	Xie & Matusiak, Ch. 6 W3C's WACG (2008)	
Session 12 April 4	Presentations and demos of implemented digital collections			<b>Final Projects Due</b>

**Assignments and Course Project:**

1. Individually: identify two professional digital collection projects and prepare a case study report on them, comparing issues such as their goals the scope, imaging standards and procedures, access and retrieval features, usability, and copyright. Be prepared to demo/discuss your collection (5%). *Due January 31*
2. In project teams: Prepare a project plan for creating and managing the digital collection you will prototype for this course. (15%) *Due February 28*
3. Individually: for 3 images or text pages (mixture of colour and black and white), provide files in the following resolutions: thumbnail, display/access, archival. Describe the formats and resolutions you have chosen and justify them according to an identified standard or best practice (identify the standard/best practice). (10%). *Due March 7*
4. Individually: Perform at least 5 image operations (e.g., enhancement/restoration, synthesis, analysis, etc.) on each of 2 images and save the results of each operation (5%). Briefly describe the processing you have done and why it was necessary. *Due March 21*



5. In project teams: Scan and process the collection of images and/or documents you have chosen for your project using current digitization standards (20%) *Due April 4*
6. In project teams: Generate a description of each digital object in your collection (including subject access) following an appropriate metadata format. Determine appropriate indexing and structure for search, browsing, and effective retrieval of item in your collection. Implement your digital collection using ARCA/Islandora and CONTENTdm and (20%). *Due April 4*
7. In project teams: Create an appropriate interface for the collection of your image collection in CONTENTdm and ARCA/Islandora (15%). *Due April 4*

*[Note that items 5, 6 and 7 comprise the Term Project assignment; this breakdown is simply to indicate how marks will be assigned]*

**Attendance:** The UBC calendar states: “Regular attendance is expected of students in all their classes (including lectures, laboratories, tutorials, seminars, etc.)”. Attendance is required in all class meetings. If you know you are going to be absent you must inform me beforehand if at all possible. Up to two excused absences are allowed with prior notification to me. Additional absences will require compliance with [UBC Academic Concession Policy](#). Failure to comply could result in a lower course mark.

**Evaluation:** All assignments will be marked using the evaluative criteria given on the [iSchool web site](#). Extensions to assignment deadlines will only be considered in accordance to [UBC Academic Concession Policy](#) and to individually-arranged provisions with Access and Diversity. In all other circumstances, points will be deducted, at the discretion of the instructor, to assignments that are handed in late as a late penalty.

**FNCC specialization:** the assignments in this course can serve the requirements of the First Nations Curriculum Concentration (FNCC). If students would like to take this course for FNCC credit, they are invited to contact the instructor to discuss this option.

**Policies and Resources to Support Student Success:** UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here (<https://senate.ubc.ca/policies-resources-support-student-success>)

**Centre for Accessibility:** Centre for Accessibility 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 Centre for Accessibility 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 family obligations, or other similar commitments, cannot assume they will be accommodated, and should discuss with the instructor before the course drop date. UBC policy on Religious Holidays: <https://equity.ubc.ca/resources/days-of-significance-calendar/>



THE UNIVERSITY OF BRITISH COLUMBIA

iSchool (Library, Archival & Information Studies)  
Faculty of Arts

## 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. The UBC policy on Academic Misconduct is available here: <http://www.calendar.ubc.ca/Vancouver/index.cfm?tree=3,54,111,959>.

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." The UBC Learning Commons has a resource page on how to avoid plagiarism, with policies on academic integrity and misconduct found here: <http://learningcommons.ubc.ca/resource-guides/avoid-plagiarism/>

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

**Canvas and FTP class account:** Canvas UBC's e-learning system (<https://canvas.ubc.ca/>) and a class FTP account will be used to organize class resources, manage/hand-in assignments and in-class exercises, provide grades & feedback, and centralize class announcements. Make sure that you check the course space in Canvas constantly for updates.