



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 2022/23 Term 2
<b>Course Schedule:</b>	Monday, 9:00 a.m. – 11:50 a.m.
<b>Location:</b>	Terrace Lab, UBC iSchool
<b>Instructor:</b>	Dr. 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
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<b>UBC 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 <https://ischool.ubc.ca/graduate/>)



## 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 iSchool's Graduate Advisor. Take LIBR582.  
MAS students: Completion of MAS Core or permission of iSchool's Graduate Advisor. Take ARST556P.  
Dual Students: Completion of MLIS or MAS Core or permission of iSchool's 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:

### *Textbooks:*

- Mark Jordan (2006). *Putting Content Online: A Practical Guide for Libraries*. Oxford: Chandos. eBook is available for free online access through UBC Library or LOCR/Canvas. Physical copies available at IKBLC Library and outside of the instructor's office.
- Xie, I. and Matusiak, K. (2016). *Discover Digital Libraries: Theory and Practice*. New York: Elsevier. eBook available online from UBC Library or LOCR/Canvas. Physical copies available at IKBLC Library and outside of the instructor's office.
- Witten, I.H., D. Bainbridge and D.M. Nichols (2010). *How to Build a Digital Library*. 2<sup>nd</sup> ed. Morgan Kaufmann. eBook available online from UBC Library or LOCR/Canvas. Physical copies available at IKBLC Library and outside of the instructor's office.

### *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 (2022). *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. (2016). *Introduction to Metadata*. 3<sup>rd</sup> Edition. J. Paul Getty Trust. Available at:

<http://www.getty.edu/publications/intrometadata/>

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)

CHIN – Canada Heritage Information Network (2013). *Capture Your Collections: A Guide for Managers Planning and Implementing Digitization Projects*. 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 – Digital Public Library of America (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. Available for free online access through UBC Library or LOCR/Canvas.

Enser, P. (2008). The evolution of visual information retrieval. *Journal of Information Science* 34(4): 531-546. Available for free online access through UBC Library or LOCR/Canvas.

FADGI - Still Image Working Group (2022). *Technical Guidelines for Digitizing Cultural Heritage Materials, Draft 3.5*. 3<sup>rd</sup> Edition. 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>

NARA (2004). *Technical Guidelines for Digitizing Archival Materials for Electronic Access*. U.S. National Archives and Records Administration. Available at:

<https://www.archives.gov/preservation/technical/guidelines.html>

Shatford Layne, S. (1994). Some issues in the indexing of images. *Journal of the American Society for Information Science* 45 (8): 583-588. Available for free online access through UBC Library or LOCR/Canvas.

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



**Course Assignments:**

Assignment	Date Due	Weight	Learning Outcomes	Graduate Competencies
Collection Assessment	January 30 <sup>th</sup>	10%	LO6	1.4, 2.1
Project Plan	February 27 <sup>th</sup>	15%	LO4	1.1, 1.2, 1.4, 3.2
Sample Scans	March 6 <sup>th</sup>	10%	LO1, LO3	1.3, 2.1
Image Processing	March 20 <sup>th</sup>	10%	LO1, LO3	1.3, 2.1
Term Project: Digital Processing	April 3 <sup>rd</sup>	20%	LO1, LO3	1.1, 1.3, 3.1, 5.1
Term Project: Cataloguing & Access	April 3 <sup>rd</sup>	20%	LO2, LO5	1.1, 1.2, 1.4, 3.1, 5.1
Term Project: Interface/UX	April 3 <sup>rd</sup>	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 0 Jan. 9 <sup>th</sup>	Class cancelled due to iSchool Orientation to new students			
Session 1 Jan. 16 <sup>th</sup>	Introduction to Course, Characteristics of Digital Collections, Term Project	Lab: Introduction to CONTENTdm	Jordan, Ch. 1	
Session 2 Jan. 23 <sup>rd</sup>	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	Cervone (2007) Jordan, Ch. 2 & 8 Browse: DPLA (2015), CHIN (2013)	
Session 3 Jan. 30 <sup>th</sup>	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 Collection by Stephanie Savage, UBC Copyright Librarian	Jordan, Ch. 3 Jordan, Ch. 11 Browse: Anderson (2006), Ch. 6, 8 & 9	<b>Collection Assessment Due</b>
Session 4 Feb. 6 <sup>th</sup>	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 Browse: FADGI (2022), ALCTS (2013), NARA (2004), BCR's CDP (2008)	
Session 5 Feb. 13 <sup>th</sup>	Design Studio: In-class teamwork project plan	Optional Lab: Scanning		



Date	Topics	Lab/Tour/Talk	Readings	Assignments
	Midterm Break: Feb. 20 <sup>th</sup> – 24 <sup>th</sup>			
Session 6 Feb. 27 <sup>th</sup>	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.) (2016) Anderson (2006), Ch. 7 Baca (Ed.) (2002) Baca and Harding (2022)	<b>Project Plan Due</b>
Session 7 Mar. 6 <sup>th</sup>	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 8 Mar. 13 <sup>th</sup>	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 9 Mar. 20 <sup>th</sup>	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 10 Mar. 27 <sup>th</sup>	Web-accessible Digital Collections. Design Studio	Tour to UBC Digital Initiatives	Xie & Matusiak, Ch. 6 W3C's WACG (2008)	
Session 11 April 3 <sup>rd</sup>	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 30<sup>th</sup>*
2. In project teams: Prepare a project plan for creating and managing the digital collection you will prototype for this course. (15%) *Due February 27<sup>th</sup>*
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 6<sup>th</sup>*
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 20<sup>th</sup>*
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 3<sup>rd</sup>*
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 3<sup>rd</sup>*

7. In project teams: Create an appropriate interface for the collection of your image collection in CONTENTdm and ARCA/Islandora (15%). *Due April 3<sup>rd</sup>*

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

**COVID-19 Safety:** Per the August 25<sup>th</sup>, 2022 [UBC Broadcast](#), you are no longer required to wear a mask, yet UBC recommends that you do in indoor public spaces. Daily health checks and frequent hand-washing are advisable. Whether you choose to wear a mask or not, please be mindful and accepting of each other's choices and comfort levels as we navigate the new academic year. Please maintain a respectful environment. See: [UBC Respectful Environment Statement](#).

**If you are sick, it is important that you stay home.** Complete a self-assessment for COVID-19 symptoms here: <https://bc.thrive.health/covid19/en>. In this class, the marking scheme is intended to provide flexibility so that you can prioritize your health and still succeed. If you miss class because of illness:

- Make a connection early in the term to another student or a group of students in the class. You can help each other by sharing notes. If you don't yet know anyone in the class, post on the discussion forum to connect with other students.
- Consult the class resources on Canvas.
- Use the discussion forum for help.
- Request a 1-1 meeting with the instructor for office hours.
- If you are concerned that you will miss a key activity due to illness, contact the instructor

If you are feeling ill and cannot attend class for a midterm or in-class assessment, please email the instructor right away. If you arrive for a test and you are clearly ill, we will make alternate arrangements with you. It is better to email ahead of time and not attend.

**If I (the instructor) am feeling ill:** If I am unwell or need to self-isolate, I will not come to class. I will make every reasonable attempt to communicate plans for class as soon as possible (by email, on Canvas, etc.). Our classroom will still be available for you to sit in and attend an online session. In this instance:

- If I am well enough to teach online, we will hold the class online (Zoom). If this happens, you will receive an announcement in Canvas informing you how to join the class.
- If I am not well enough to teach online, I will assign videos and class exercises to be completed on your own.

**Attendance:** Regular attendance is important in this class. That being said, you must not come to class if you are feeling ill, you are self-isolating, or you have any other health related issues. *If for some reason you cannot attend a face-to-face class, arrangements can be made with the instructor so that you can complete class work and participation requirements online. Please check directly with the instructor. Happy to make it work for you. Any request for academic concession must be clearly expressed to the instructor (see Academic Concession below).*

**Evaluation:** All assignments will be marked using the evaluative criteria given on the [iSchool web site](#). Extensions to assignment deadlines will be considered in accordance to [UBC Academic Concession Policy](#) and to individually-arranged provisions with Access and Diversity. If you miss a mandatory assignment or if you know beforehand you are going to miss a deadline, please communicate as soon as





possible by email with the instructor to arrange for an extension. By default, you can take an extension of 1-2 days to complete individual assignments. If you need more than that you need to communicate with the instructor to arrange for an extension

**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/>

**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.