

## **LIS 653: Seminar in Archival Studies – Archives and Technology**

Program: MLISc

Year: 2013 Spring

Course Schedule: Tuesdays 9 – 11:40am

Location: TBD

Instructor: Mr. Adam Jansen

Office location: N/A

Office phone: N/A

Office hours: By Appt.

E-mail address: adam\_jansen@outlook.com

**Course Description:** LIS 653 Seminar in Archival Studies -- As listed in the catalog, this class will cover the theory of archival studies from historical and contemporary perspectives. Includes public administration, legislation, and relationship to other repositories. Includes field component.

**NOTE:** As the UH LIS program does not offer a course on digital archiving, the goal of this course is to provide students with knowledge on the role of technology in archival work, at the theoretical and pragmatic level, through lectures, guest speaker presentations, educational visits, lab and in-class activities, and class discussions. The students will gain insight into relevant technology raised issues and will learn what kind of technology is applied in archives.

### **Student Learning Outcomes (SLO) Addressed:**

SLO 1. Understand, apply, and articulate the history, philosophy, principles and ethics of library and information science and the related professions.

- 1a) Apply LIS theory and principles to diverse information contexts
- 1b) Demonstrate understanding of the historical context of information services and systems
- 1c) Develop and apply critical thinking skills in preparation for professional practice
- 1d) Craft and articulate a professional identity

SLO 2. Develop, administrate, assess, and advocate for information services by exercising principled communication, teamwork, and leadership skills.

- 2b) Work effectively in teams
- 2c) Develop, manage, and assess information services for specific users and communities

SLO 3. Organize, create, archive, preserve, retrieve, manage, evaluate, and disseminate information resources in a variety of formats

- 3a) Demonstrate understanding of the processes by which information is created, evaluated, and disseminated
- 3b) Organize, create, archive and manage collections of information resources following professional standards
- 3d) Demonstrate understanding of issues and techniques of preservation of physical and digital objects

SLO 4. Evalutate and use the latest information technologies, research findings and methods.

- 4c) Apply current research findings to professional practice.

SLO 5. Engage in projects and assignments dealing with multicultural communities and representing diverse points of view

5b) Demonstrate understanding of the social and cultural context of information services and systems

5c) Apply LIS principles to meet the needs of Native Hawaiian and Asia-Pacific communities and to promote cultural sustainability

**Professional Expectations:** All students in this course are expected to become familiar with and adhere to the Professional Expectations posted at <http://www.hawaii.edu/slis/students/profexp.html>

### **Course Objectives:**

Upon completion of this course, students will be able to:

- Discuss the role of technology in archival work.
- Differentiate among and evaluate the most commonly used types of applications in archival work
- Design and develop a relational database using Microsoft Office Access 2010
- Create a simple websites using HTML and/or Dreamweaver CS6.
- Discuss and demonstrate an understanding of the course topics below:

#### Course Topics:

- Technology & the Changing Landscape of Archival Work
- Archival Functions & Technology: Digital Preservation; Acquisition; Appraisal; Disposition; Accessioning; Arrangement & Description; Online Access; Databases
- Web and Database design for Archival Users
- Reference Services; Everyday Practice in Archival Work
- Electronic Finding Aids
- Archival Trusted Digital Repositories and Certification
- Records Management and Archival Management Software

### **Teaching Method:**

Learning should be a rewarding and, dare I say, fun experience; but you will only get out of it what you are willing to put into it. My philosophy is to provide a firm foundation in information technology principles and then demonstrate how they are applied to real world archival situations. I take a pragmatic approach towards teaching technology issues, and understand that most students do not come from a technological background. The reading assignments are designed to assist students in developing skills and understanding in information technology in order to analyze problems related to the preservation of digital material and then to apply archival principles in a technological setting. As graduate students, I expect you to be informed on class topics and bring new perspectives to discussions.

### **Research Method:**

This course focuses on learning about the theory and implementation of information technology within an archival framework so that the student will be able to apply that knowledge to the preservation of digital materials. Knowledge will be gained through action research, case studies, heuristic evaluation, needs assessment, and usability study based on the lectures, assignments, and readings.

**REQUIRED Pre-requisites:** LIS 652 – Introduction to Archival Management

**Requirements:**

**Course Assignments, Due dates and Weight in relation to final course marks (subject to change):**

ASSIGNMENT/Report	DUE DATE	WEIGHTING
Individual Assignment: Evaluation of Digital Archives portals	Feb 5th	10%
Group Assignment: SDL Functional Requirements Capture and Analysis	Feb 19th	10%
Individual Assignment: Design and development of a Microsoft Office Access Database	Mar 19th	30%
Group Assignment: Creation & Presentation of a Web-site	Apr 16th	30%
Individual Assignment: Analysis of database design	Apr 23rd	10%
Class Participation: Class attendance, including attendance of lectures and guest lectures and participation in in-class activities	Ongoing	10%

**Format of the course:**

Class sessions will be a combination of lectures, discussions, lab activities, software demonstrations, student and guest speaker presentations.

**Required and Recommended Reading:** Required and recommended readings from selected web sites, the journal literature and other sources are as follows:

*NOTE: Additional readings may be provided in class.*

### **Introduction to Information Technology and Archival Work**

R Pearce-Moses, Richard. "Reconceptualizing and Reengineering the Archival Profession." *Archival Outlook* (January/February 2006): 3 and 23. Available at <http://www2.archivists.org/sites/all/files/AO-JanFeb2006.pdf>

R Pearce-Moses, Richard. "New Skills, New Knowledge, and New Attitudes for a Digital Era." *Archival Outlook* (July/August 2006): 3 and 24. Available at: <http://www2.archivists.org/sites/all/files/AO-JulAug2006.pdf>

R The Society of American Archivists. *Guidelines for a Graduate Program in Archival Studies*. Chicago, Ill.: The Society of American Archivists, 2002. Section II. Curriculum- B.1 "Interdisciplinary Knowledge-Information Technology."

Available at:

<http://www2.archivists.org/gpas>

R Stevenson, Jane. "The Online Archivist: A Positive Approach to the Digital Information Age" in *What are Archives? Cultural and Theoretical Perspectives: A Reader*. Ed., Louise Craven. Ashgate Publishing Ltd., 2008. (89-106). Note: This reading will be made available through Course Reserve at Koerner Library.

### **Web Design, Accessibility and Usability for Archival Users**

Weisen, Marcus, Petrie, Helen, King, Neil and Fraser Hamilton. "Web Accessibility Revealed: The Museums, Libraries and Archives Council Audit." *Ariadne* 44 (July 2005). Available at:

<http://www.ariadne.ac.uk/issue44/petrie-weisen/>

### **Digital Preservation**

R Beagrie, Neil, Maggie Jones, and the Digital Preservation Coalition. *The Handbook*. Heslington, York, United Kingdom: The Digital Preservation Coalition, 2007. Available at:

<http://www.dpconline.org/graphics/handbook/>.

1. Introduction," in particular:

Background; 1.2 How to Use the Handbook;  
Definitions and Concepts; 1.4 Acronyms and Initials.

2. Digital Preservation," in particular: 2.1 Strategic Overview.

4. Organisational Activities," in particular: 4.3 Storage and Preservation; 4.4 Metadata and Documentation; 4.5 Access.

### **Trusted Digital Repositories and Certification**

R Jantz, Ronald and Michael J.Giarlo. "Digital Preservation: Architecture and Technology for Trusted

Digital Repositories." D-Lib Magazine 11, no. 6 (June 2005). Available at:  
<http://www.dlib.org/dlib/june05/jantz/06jantz.html>

Marini, Francesca. "Trusted Digital Repositories: Overview and Key Issues." Archivi & Computer XVI, no.1 (gennaio 2006): 76-94.

Research Libraries Group (RLG)-Online Computer Library Centre (OCLC). Trusted Digital Repositories: Attributes and Responsibilities. An RLG-OCLC Report. Mountain View, Calif.: RLG, May 2002. Available at:  
<http://www.oclc.org/programs/ourwork/past/trustedrep/repositories.pdf>.

### **Required Textbooks:**

#### **Microsoft Office Access 2010**

MacDonald, Matthew. Access 2010: The Missing Manual. Sebastopol, Calif.:Pogue Press-O'Reilly, June 2010. [Chapter 1, pp. 23-50; Chapter 2, pp.51-88; Chapter 3, pp.89-118; Chapter 5, pp.149-186; Chapter 6, pp.187-216; Chapter 10, pp.297-330; Chapter 12, pp.367-400]  
Note: This book is available for purchase as an electronic download from O'Reilly Website  
<http://oreilly.com/catalog/9781449382377/> Or from Amazon.com

#### **Adobe Dreamweaver CS6**

McFarland, David. Dreamweaver CS6: The Missing Manual. Sebastopol, Calif.:Pogue Press-O'Reilly, June 2010.  
Note: This book is available for purchase as an electronic download from O'Reilly Website  
<http://shop.oreilly.com/product/0636920022732.do> Or from Amazon.com

### **Recommended Readings:**

#### Database Design

CompuMentor's Database Planning Guide, CompuMentor, SF (February 2001). Available at  
<http://www.techsoup.org/learningcenter/databases/archives/page10161.cfm>

Manovich, Lev. "Database as a Genre of New Media," The Journal of Human-Centred and Machine Intelligence (1998) Available at:  
[http://vv.arts.ucla.edu/AI\\_Society/manovich.html](http://vv.arts.ucla.edu/AI_Society/manovich.html)

#### HTML and Online Tutorials

Anderson, Ian. "Necessary but Not Sufficient: Modelling Online Archive Development in the UK." D-Lib Magazine 14 (January/February 2008). Available at:  
<http://www.dlib.org/dlib/january08/anderson/01anderson.html>

W3Schools. HTML Tutorial. Available at:  
<http://www.w3schools.com/html/default.asp>.

Sections: "HTML Basic" (all lessons); "HTML Advanced" (first seven lessons, including HTML URLs)

W3Schools. CSS Tutorial. Available at:  
[http://www.w3schools.com/css/css\\_intro.asp](http://www.w3schools.com/css/css_intro.asp). Sections: "CSS Basic" (all lessons).

A45. MINERVA (MInisterial NEtWoRk for Valorising Activities in digitization)  
-- Digitising Content Together. 2003

-- Quality Principles for Cultural Websites: a Handbook. 2005

-- Good Practices Handbook. 2004

-- Technical Guidelines for Digital Cultural Creation Programmes. 2008

-- Handbook on Cost Reduction in Digitisation. 2006

All resources are available on MINERVA website at

<http://www.minervaeurope.org/>

#### Everyday Practice in Archival Work

Samouelian, Mary. "Embracing Web 2.0: Archives and the Newest Generation of Web Applications." *The American Archivist* 72 (Spring/Summer 2009) pp.42-70.

National Information Standards Organization (NISO). *Understanding Metadata*. Bethesda, MD: National Information Standards Organization, 2004. Available at:

[www.niso.org/publications/press/UnderstandingMetadata.pdf](http://www.niso.org/publications/press/UnderstandingMetadata.pdf)

#### Archival Management Software

Lake, David, Loïselle, Russell F., and Debra Steidel Wall. *Market Survey of Commercially Available Off-the-Shelf Archival Management Software (ICA Study 12)*. Paris: International Council on Archives (ICA), 2003: 1-9. Available at:

<http://www.ica.org/en/node/30064>

#### Introduction to Information Technology and Archival Work

Pearce-Moses, Richard, and Randall C. Jimerson. "Facing the Future: SAA's 2006-2007 Strategic Priorities." *Archival Outlook* (July/August 2006): 8-9. Available at:

<http://www.archivists.org/periodicals/ao.asp>

Smith, Abby. *New Model Scholarship: How Will It Survive?* Washington, D.C.: Council on Library and Information Resources, 2003. Available at:

<http://www.clir.org/PUBS/reports/pub114/pub114.pdf>.

*The Information Management Journal*, issue on managing electronic records, vol. 39, no. 1 (January-February 2005). Available in electronic format through the UBC Library.

McFedries, Paul. *Computers Simplified*, 7th Edition. Hoboken, NJ: Wiley, 2007.

White, Ron. *How Computers Work*, 9th Edition. Indianapolis, IN: QUE, 2007.

W3Schools. HTML Tutorial. Available at:

<http://www.w3schools.com/html/default.asp>. Sections: "HTML Examples/Quiz" (HTML Examples); "References" (HTML Tag List; HTML Colornames; HTML Entities).

W3Schools. XHTML Tutorial. Available at:

<http://www.w3schools.com/xhtml/default.asp>. Last accessed: August 12, 2009 Sections: First six lessons, including XHTML How To.

W3Schools. CSS Tutorial. Available at:

[http://www.w3schools.com/css/css\\_intro.asp](http://www.w3schools.com/css/css_intro.asp). Sections: "CSS Examples."

#### Web Design, Accessibility and Usability for Archival Users

Bates, Marcia J. "Toward an Integrated Model of Information Seeking and Searching." Keynote address, The Fourth International Conference on Information Needs, Seeking and Use in Different Contexts, Lisbon, Portugal, September 11-13, 2002.

[http://www.gseis.ucla.edu/faculty/bates/articles/info\\_SeekSearch-i-030329.html](http://www.gseis.ucla.edu/faculty/bates/articles/info_SeekSearch-i-030329.html).

Carey, Kevin. "Accessibility: The Current Situation and New Directions." *Ariadne* 44 (July 2005).

Available at:

<http://www.ariadne.ac.uk/issue44/carey/>.

Duff, Wendy., Barbara Craig and Joan Cherry. "Historians' Use of Archival Sources: Promises and Pitfalls of the Digital Age," *The Public Historian* 22, no.2 (Spring 2004):pp.7-22. Available at:

<http://caliber.ucpress.net/doi/pdf/10.1525/tph.2004.26.2.7>.

Nielsen, J, "Usability 101: Fundamentals and Definition - What, Why, How". Available at:

<http://www.useit.com/alertbox/20030825.html>.

UKOLN, Good Practice Guide for Developers of Cultural Heritage Web Services. Available at:

<http://www.ukoln.ac.uk/interop-focus/gpg/print-all/>.

U.S. Department of Health & Human Services. "Usability.gov: Your Guide for Developing Usable and Useful Web Sites." Available at:

<http://www.usability.gov/>.

World Wide Web Consortium (W3C), Web Accessibility Initiative (WAI). Available at:

<http://www.w3.org/WAI/>.

#### Everyday Practice in Archival Work

Bell, Mary Margaret. "Managing Reference E-mail in an Archival Setting: Tools for the Increasing Number of Reference Queries." *C&RL News* 63, no. 2 (February 2002). Available at:

<http://www.ala.org/ala/acrl/acrlpubs/crlnews/backissues2002/february/managingreference.htm>.

Brown, Thomas E. "Towards the Appraisal of Web Records." *Archival Outlook* (July/August 2006): 6 and 25. Available at:

<http://www.archivists.org/periodicals/ao.asp>

Dale, Robin L., and Günter Waibel. "Capturing Technical Metadata for Digital Still Images." *RLG DigiNews* 8, no. 5 (October 15, 2004). Available at:

[http://www.rlg.org/en/page.php?Page\\_ID=20462#article1](http://www.rlg.org/en/page.php?Page_ID=20462#article1).

Encoded Archival Description Working Group of the Society of American Archivists and the Network Development and MARC Standards Office of the Library of Congress. Encoded Archival Description Tag Library. Version 2002. Chicago, Ill.: 2002. Available at:  
<http://www.loc.gov/ead/tglib/>

Gilliland-Swetland, Anne J. "Popularizing the Finding Aid: Exploiting EAD to Enhance Online Browsing and Retrieval in Archival Information Systems by Diverse User Groups." *Journal of Internet Cataloguing* 4, no. 3/4 (2001): 199-225. Reprinted in Daniel V. Pitti and Wendy M. Duff, eds. *Encoded Archival Description on the Internet*, (New York: Haworth Information Press, 2001)

JISC Digital Media "Project Management for a Digitisation Project." (Updated November 2008). Available at:  
<http://www.jiscdigitalmedia.ac.uk/crossmedia/advice/project-management-for-a-digitisation-project/>

The Library of Congress. Development of the Encoded Archival Description DTD (1995-2002). Available at:  
<http://www.loc.gov/ead/eaddev.html>.

Van Garderen, Peter. Archivemata: Digital Archives Research and Consulting. Blog. 2005-2008. Available at:  
<http://archivemati.ca/about/>

#### Digital Preservation

Clareson, Tom. "NEDCC Survey and Colloquium Explore Digitization and Digital Preservation Policies and Practices." *RLG DigiNews* 10, no.1 (February 15, 2006). Available at:  
<http://worldcat.org:80/arcviewer/1/OCC/2007/07/10/0000068991/viewer/file1.html#article1>.

Duranti, Luciana, Eastwood, Terry, and Heather MacNeil. "The Preservation of the Integrity of Electronic Records (UBC Project)." April 1994-March 1997. Available at:  
<http://www.interpares.org/UBCProject/Index.htm>.

Cornell University Library. Digital Preservation Management: Implementing Short-term Strategies for Long-term Problems (2003-2007). Online Tutorial. Available at:  
[http://www.icpsr.umich.edu/dpm/dpm-eng/eng\\_index.html](http://www.icpsr.umich.edu/dpm/dpm-eng/eng_index.html).

Gill, Tony, Gilliland, Anne J., Woodley, Mary S., and Murtha Baca. *Introduction to Metadata: Pathways to Digital Information*. Online Edition, Version 2.1. Los Angeles, Calif.: The J. Paul Getty Trust, 1998-2006. Available at:  
[http://www.getty.edu/research/conducting\\_research/standards/intrometadata/index.html](http://www.getty.edu/research/conducting_research/standards/intrometadata/index.html).

International Standard Organization (ISO). *Space Data and Information Transfer Systems: Open Archival Information System Reference Model-ISO 14721:2003*. Geneva: International Standard Organization, 2003.

Rothenberg, Jeff. *Avoiding Technological Quicksand: Finding a Viable Technical Foundation for Digital Preservation*. Washington, D.C.: Council on Library and Information Resources (CLIR), 1998. Available



at:

<http://www.clir.org/PUBS/reports/rothenberg/contents.html>.

Searle, Sam, and Dave Thompson. "Preservation Metadata: Pragmatic First Steps at the National Library of New Zealand." D-Lib Magazine 9, no. 4 (April 2003). Available at:  
<http://www.dlib.org/dlib/april03/thompson/04thompson.html>

Simpson, Duncan. Contracting Out for Digital Preservation Services: Information Leaflet and Checklist. Heslington, York, United Kingdom: The Digital Preservation Coalition, 2004. Available at:  
<http://www.dpconline.org/docs/guides/outsourcing.pdf>. Last accessed: August 12, 2009.

Thibodeau, Kenneth, et. alii. "Preservation Task Force Report." In InterPARES 1 Project. The Long-term Preservation of Authentic Electronic Records: Findings of the InterPARES Project. Vancouver, B.C.: University of British Columbia, 2001. Available at:  
[http://www.interpares.org/book/interpares\\_book\\_f\\_part3.pdf](http://www.interpares.org/book/interpares_book_f_part3.pdf).

#### Trusted Digital Repositories and Certification

##### Archival Management Software

Groot, Tamara, Horsman, Peter, and Rob Mildren. OSARIS: Functional Requirements for Archival Description and Retrieval Software. First Draft-November 2003. Paris: International Council on Archives, 2003. Available at:  
<http://www.archiefschool.nl/docs/Osaris%20Draft%20Requirements.pdf>

International Council on Archives (ICA). Principles and Functional Requirements for Records in Electronic Office Environments. Paris, France: International Council on Archives, 2008. Also available in electronic format at:  
[www.ica.org](http://www.ica.org).

Spiro, Lisa. Archival Management Software. A Report for the Council of Library and Information Resources." Council on Library and Information Resources (CLIR), January 2009. Available at:  
<http://www.clir.org/pubs/reports/spiro2009.html>.

#### **Technology Requirements:**

As this is a technology centric course, students must be comfortable working in an information technology environment, and learning new skills, techniques, and technologies. No prior programming, coding or database skills are assumed. Students must be fluent at functioning within a Microsoft Windows based environment for both the OS and Office product suite.

#### **Course Schedule [subject to change]:**

DATE	TOPICS	Assignments Due
Week 1 – Jan 8th	Introduction to Course: Archives in the 21 <sup>st</sup> Century	

Week 2 – Jan 15th	Geek Speak: IT concepts for the Archivist	
Week 3 – Jan 22nd	Archival Functions and Technology: Acquisition; Appraisal; Disposition	
Week 4 – Jan 30th	Archival Functions and Technology: Accessioning; Arrangement & Description; On-line Access	
Week 5 - Feb 5th	Software Development Lifecycle and the Archivist	Digital Archives portals evals due
Week 6 – Feb 12th	Introduction to SQL and Relational Database Management Systems	
Week 7 – Feb 19th	Database Design for Archival users	SDL assignments due. Students choose database topic
Week 8 – Feb 26th	Introduction to HTML	Students submit database plan
Week 9 – Mar 5th	Dreamweaver and Style Sheets	Students choose Web Site topic
Week 10 – Mar 12th	Accessibility and Usability for Archival Users	Students submit web site plan
Week 11 – Mar 19th	Digital Preservation; Archival Trusted Digital Repositories and Certification	Individual Assignment due on Microsoft Access Database
Week 12 – SPRING BREAK!	Rest and Relaxation	All Students will enjoy the week!
Week 13 – Apr 2nd	Digital Forensics and Analysis Tools	
Week 14 – Apr 9th	Legislation and the On-line Archival Environment; Records Management & Technology	
Week 15 – Apr 16th	Group Presentations of web-site projects; Discussion of User Experiences of Archival Websites and the Future of Heritage Resources Online	Website Assignment due
Week 16 – Apr 23 <sup>rd</sup>	Archival Management Software	Database analysis due
Week 17- Apr 30 <sup>th</sup>	Course wrap up	

Finals Week	Congratulations, you made it this far... With two large projects already under your belt, relax and bask in your efforts	
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**Guidelines:**

**Attendance:** Regular attendance is expected of students in all their classes (including lectures, laboratories, tutorials, seminars, etc.). Students who are unavoidably absent because of illness or disability should report to their instructors on return to classes.

**Written & Oral Assignments:** All written and oral presentations will be graded on both content and style.

For oral presentations, content and style relates to the organization, depth and accuracy of the material as well as the appropriate use of handouts and visual aids. Good grammar and clear pronunciation is important to the overall quality of the delivery.

With respect to written work, the grade will reflect the quality of the research, organization of the material, grammar, factual information, correct spelling, bibliographic citations and neat appearance. All written material should be typed using a 12 pt font and 1" margins with 1.5 spacing.

Late work: Assignments handed in late will have five points deducted each day (starting at 12:01 the day after the assignment is due) for up to four days. *Thereafter, no late papers will be accepted.*

Grades are assigned upon a full semester's completion of the coursework and will be determined by a combination of the points earned from assignments and activities listed above.

- 100-97 points = A+
- 96-93 points = A
- 92-89 points = A-
- 88-86 points = B+
- 85-82 points = B
- 81-79 points = B-
- 78-76 points = C+
- 75-72 points = C
- 71-69 points = C-
- 68-66 points = D+
- 65-62 points = D
- 61-59 points = D-
- <59 = you don't want to know...