INLS 766: Audit and Certification of Trustworthy Digital Repositories

Spring 2022, January 10 – May 2

(Every other week)

ONLINE

The Instructor.

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Office Hours.

I am available almost anytime during the semester for a Zoom meeting or a phone call. Just send me an email to make an appointment. Also, feel free to call me at home in the evening before 9:00 PM.

Brief Course Description.

This course will address international standards for repository design and audit; risk assessment and mitigation; repository audit and certification tools and processes; criteria for trustworthiness; and the development of specific workflows to support trustworthy digital curation functions. It is also the first step in preparing for repository self-audits and the Trustworthy Digital Repository Auditor's credential to become an auditor of trustworthy digital repositories (ISO 16363).

Course Timeline.

Beginning: January 10, 2022

Ending: May 3, 2022

Final project due: May 3, 2022

NOTE: This is a "Tuesday course" for me. I am teaching three courses this semester, two of which are asynchronous. I need to space out the due dates, forums, etc. so I can tackle one class each day Tuesday, Wednesday, and Thursday. 😊 Also, this is a 1.5 credit course, so we meet every other week.

Goals and Objectives.

By the end of the course, the student should be able to:

1. Understand what a trustworthy digital repository is.

2. Explore the nature of trust as it relates to digital repositories.

3. Identify the key issues and challenges for assessing and maintaining trustworthiness.

4. Explore the history of repository audit and certification.

5. Understand the digital curation lifecycle from conceptualization through disposition and how this applies to repositories through the OAIS Reference Model.

6. Demonstrate familiarity with a variety of repository audit and certification tools.

7. Be able to map the OAIS Reference Model to ISO 16363.

8. Identify the evidence essential for a reliable repository audit.

9. Become familiar with how one can become a certified ISO 16363 auditor.

Assignments & Evaluation.

With the COVID surge upon us we will be facing lots of infections and absences from class. Even though this is an asynchronous class, I know some people will get behind when they are feeling ill. If nothing else, COVID makes you feel tired, even if you don't have more severe symptoms. I would like it if you could make small groups to support each other during the semester – checking in to see if everyone is OK; discussing readings; answering questions; and in general, supporting each other's mental, physical, and academic health. This will also let you get to know a small group of classmates rather well. I think 4 people would be a good group size.

Assignment	% of Grade	Due Date
Trusting data paper	15%	February 21
Trusting data presentation	15%	February 21
Analysis of repository published policies	10%	March 28
ISO #16363 audit tool	30%	May 3
ISO #16363 audit presentation	10%	May 3
Class Participation	20%	On-going, by Sunday at 11:55 PM

1. **Trusting Data Paper.**

   Each student will write a brief paper (3-5 pages) on a data set they locate in a digital repository such as the Odum Institute at UNC-CH or ICPSR at the University of Michigan. The data set can be from any field – physical science, health science, social sciences, or the humanities. See assignment for details.

2. **Trusting Data Presentation.**

   Each student will prepare a PowerPoint presentation with narration describing their experience with the data set and explaining to what extent they trust this data and why. Upload to Voice Thread so all students can see your presentation.

3. **Analysis of Repository Published Policies.**

   Each student will locate a data repository that has policies posted online (e.g., collection, ingest, and preservation policies) and analyze them for clarity and completeness. If there are multiple policies, please pick one for analysis.

4. **ISO #16363 Audit Tool & Workshop Question Creation.**

   Each student will be assigned several metrics from ISO #16363 for which they will:

   a. Create questions that could be asked in an audit that could arise from this metric;

   b. Create questions a workshop on training auditors might ask about this metric

   c. Discuss in a few sentences what you think are the most important aspects of the answers to the questions you pose.

   d. Post a presentation to the class via VoiceThread.

5. **Class Participation (Forum Posts) 20% of Grade.**
   - You are expected to participate in the class forum every week. Posts are due according to the course calendar by **11:55 pm** on the due date **at the latest** to allow your classmates and me to read all the posts before the end of the lesson period.
   - You may create a new discussion topic, but please try to advance the discussion of an existing topic.
   - Posts may address the readings, lectures, and the other materials that are part of that week's assignments as well as any other source relevant to a given week's content.
   - Grades will be assigned based on the quality of the posts not the length of each post.
   - Posts will be assessed based on the following criteria:
     - Relevance of the post to the question/conversation, i.e. the degree to which a post advances the discussion (hint – this is easier if you post early before others have made the most obvious points!)
     - Depth of understanding of the material, i.e. the level of preparation shown in the post.
     - Level of insight displayed by the post - does the post reflect the nuances of the question or situation posed?
     - Inclusion of relevant materials outside the assigned readings.

   The purpose of the forum discussions is to help students to think critically about issues and challenges related to repository trustworthiness, and to address ways that the literature may affect practice. It is helpful, when preparing each lesson's work, to consider how that session's theme and readings may apply to your area of professional interest. You are also encouraged to share current news and events you find informative to issues of data curation through the class listserv.

   Please work to stay on top of the forum posts. This is the primary way we will share with each other and act as a class during the semester. Be prepared to give your most thoughtful comments and learn for others' posts.

Assignment Nomenclature

For all assignments or any other items that are emailed to the instructor or added to the dropbox in Sakai, please save your file as "lastname_assignment_766.docx". All assignments should be turned in as word documents, pdf documents or text documents. Please put your name on the first page of your assignments as well.

Graduate Grading Scale. (Pluses and minuses not given for semester grades thus a semester P is 80-94 inclusive)

In an effort to support everyone and reduce stress, semester grades will be P/F. Don't worry, no one is going to fail! The following in the traditional grading scale at SILS for graduate students and I have left it in here for reference only. You can see from this that a P will go from 70-100 points for the semester.

- H (95-100): "Clear excellence," superior work: complete command of subject, unusual depth, great creativity or originality; above and beyond what is required

- P+ (90-94): Above average performance: solid work somewhat beyond what was required and good command of the material

- P (85-89): Satisfactory performance that meets course requirements (expected to be the median grade of all students in the course)

- P- (80-84): Acceptable work in need of improvement

- L (70-79): Unacceptable graduate performance: substandard in significant ways

- F (< 70): Performance that is seriously deficient and unworthy of graduate credit

- IN: Work incomplete (only given under extreme circumstances, such as serious illness)

Academic Policies.

By enrolling as a student in this course, you agree to abide by the University of North Carolina at Chapel Hill policies related to the acceptable use of online resources. Please consult the Acceptable Use Policy on topics such as copyright, net-etiquette, and privacy protection.

As part of this course, you may be asked to participate in online discussions or other online activities that may include personal information about you or other students in the course. Please be respectful of the rights and protection of other participants under the UNC-Chapel Hill Information Security Policies when participating in online classes.

When using online resources offered by organizations not affiliated with UNC-Chapel Hill, such as Google or YouTube, please note that the terms and conditions of these companies and not the University's Terms and Conditions apply. These third parties may offer different degrees of privacy protection and access rights to online content. You should be well aware of this when posting content to sites not managed by UNC-Chapel Hill.

When links to sites outside of the unc.edu domain are inserted in class discussions, please be mindful that clicking on sites not affiliated with UNC-Chapel Hill may pose a risk for your computer due to the possible presence of malware on such sites.

Honor Code & Class Conduct.

Honor Code:

The University of North Carolina at Chapel Hill has had a student-administered honor system and judicial system for over 100 years. The system is the responsibility of students and is regulated and governed by them, but faculty share the responsibility. If you have questions about your responsibility under the honor code, please bring them to your instructor or consult with the office of the Dean of Students or the Instrument of Student Judicial Governance. This document, adopted by the Chancellor, the Faculty Council, and the Student Congress, contains all policies and procedures pertaining to the student honor system. **Your full participation and observance of the honor code is expected.**

This class follows the UNC Honor System. Information on the Honor Code can be found at: http://honor.unc.edu/. Please read through The Honor System's Module at: http://studentconduct.unc.edu/students/honor-system-module to become familiar with the UNC Honor Code and to understand the rights and responsibilities defined therein.

The Instrument of Student Judicial Governance, (http://instrument.unc.edu/) which contains the provisions of the Honor Code, states that students have four general responsibilities under the Code:

1. Obey and support the enforcement of the Honor Code;

2. Refrain from lying, cheating, or stealing;

3. Conduct themselves so as not to impair significantly the welfare or the educational opportunities of others in the University community; and

4. Refrain from conduct that impairs or may impair the capacity of University and associated personnel to perform their duties, manage resources, protect the safety and welfare of members of the University community, and maintain the integrity of the University.

   The Instrument (http://instrument.unc.edu/) prohibits giving or receiving unauthorized aid on examinations or in the completion of assignments. **The Honor Code defines plagiarism as "deliberate or reckless representation of another's words, thoughts, or ideas as one's own without attribution in connection with submission of academic work, whether graded or otherwise."** *Whenever you use the words or ideas of others, this should be properly quoted and cited.* You should adopt a style guide – e.g., American Psychological Association, Chicago Manual of Style, MLA, or Turabian – and use it consistently. (I do not care which one you select!) Students who are discovered attempting to take credit for work performed by others will be referred to the Honor Court for resolution.

Please include the following pledge on all submitted work: "On my honor, I have neither given nor received unauthorized aid on this assignment."

Accommodations or Special Needs

If you feel that you may need an accommodation for a disability or have any other special need, please contact me. I will best be able to address special circumstances if I know about them early in the semester.

Diversity Statement

"In support of the University's diversity goals and the mission of the School of Information and Library Science, SILS embraces diversity as an ethical and societal value. We broadly define diversity to include race, gender, national origin, ethnicity, religion, social class, age, sexual orientation, and physical and learning ability. As an academic community committed to preparing our graduates to be leaders in an increasingly multicultural and global society we strive to:

- Ensure inclusive leadership, policies and practices;

- Integrate diversity into the curriculum and research;

- Foster a mutually respectful intellectual environment in which diverse opinions are valued;

- Recruit traditionally underrepresented groups of students, faculty and staff; and

- Participate in outreach to underserved groups in the State.

The statement represents a commitment of resources to the development and maintenance of an academic environment that is open, representative, reflective and committed to the concepts of equity and fairness."~*The faculty of the School of Information and Library Science*

Class Policies:

- Be prepared for each week's lessons by completing the assigned reading and exercises, enabling you to ask questions and participate in class discussion online.

- Be an active and positive participant in online discussions, characterized as:

  o Having a clear command of the readings for the week;

  o Sharing analyses and opinions based on the readings;

  o Respecting other students' views and opinions; and

  o Freely agreeing and disagreeing with others when warranted.

- Follow the netiquette guidelines below.

- Please note: An intellectual exchange of ideas is the cornerstone of education, but any criticism should be limited to an idea and not the person specifically.

- Turn in assignments by the due date unless you make previous arrangements with the instructor. Unexcused late assignments are unfair to your classmates.

Penalty for Late Assignments.

I expect you to pass in assignments on time. This is important for at least two reasons: 1) the need to meet deadlines is a reality of professional life, and 2) giving some people more time for an assignment than others in the class is not equitable. However, life happens to all of us at one time or another. If you cannot meet an assignment deadline, please tell me why PRIOR to the due date. I will negotiate a new deadline with anyone who has a valid reason for needing this (i.e., NOT "I just didn't get it done."). Otherwise, late assignments will drop 2 points for each day late.

Online Etiquette Guidelines.

Text Books:

Bantin, Philip. *Building Trustworthy Digital Repositories: Theory and Implementation.*

Marks, Steve and Bruce Ambacher. *Becoming a Trusted Digital Repository.* Module 8. Chicago: Society of American Archivists, 2015.

In addition to the texts above, other required readings will be available online. Note: Accessing these materials requires you either to use a computer with a UNC IP address or visit the associated sites through a UNC proxy server. See Off-Campus Access for more information. If you're off campus and want to enter a given page through a UNC proxy server, you can use the following bookmarklet: http://libproxy.lib.unc.edu/login?url=

Weekly Course Calendar

January 11-24: Module 1: Introduction, OAIS, Repository Functions, Brief History of Audit and Certification.

Objectives:

- ❖ Students will be able to identify goals of the course and understand requirements, readings, assignments, and expectations.
- ❖ Students will begin to consider what a trustworthy digital repository is.
- ❖ Students will be able to discuss the history of audit and certification of trustworthy digital repositories.

Forum Questions:

1. Please introduce yourselves on the forum.
2. What is a "trustworthy repository"? Discuss three key characteristics/components.
3. Why did the CPA report call for a system of trusted repositories in 1996?
4. What is an ISO "reference model"? How is it different from an implementation plan?
5. Many curators and archivists say they have no intention to have their repository audited. What are three reasons all repositories should conduct some level of audit even if they have not yet suffered data loss?

Readings:

What Is a Trustworthy Digital Repository?

- Bantin, Philip C. Evaluating and Selecting a Trustworthy Repository." In Philip C. Bantin, ed. *Building Trustworthy Digital Repositories: Theory and Implementation*. (Lanham, MD: Rowman & Littlefield, 2016): 1-5.

- Corridan, James and Tibaut Houzanme. "Selecting an Integrated Records and Preservation Management System for the Indiana Archives and Records Administration." In Philip C. Bantin, ed. *Building Trustworthy Digital Repositories: Theory and Implementation*. (Lanham, MD: Rowman & Littlefield, 2016): 5-32.

How It All Began:

- Ambacher, Bruce. "Introduction." In Steven Marks, *Becoming a Trusted Digital Repository*. Society of American Archivists, 2015): xi-xxv.

- Commission on Preservation and Access and the Research Libraries Group. *Preserving Digital Information: Report of the Task Force on Archiving Digital Information*. 1996. https://www.clir.org/pubs/reports/pub63/ First vision of the need for audit and certification of digital repositories.

OAIS. The Foundational Standard.

- CCSDS 650.0-M-2: Reference Model for an Open Archival Information System (OAIS). Magenta Book. June 2012. Adopted as ISO #14721:2012) http://public.ccsds.org/publications/archive/650x0m2.pdf. Browse.

- Lee, Christopher A. "Open Archival Information System (OAIS) Reference Model." Encyclopedia of Library and Information Sciences, 3rd ed. (2010): 4020-4030. http://www.ils.unc.edu/callee/p4020-lee.pdf

TRAC & ISO 16363 & 16919. Audit and Certification Standards.

- CCSDS. *Audit and Certification of Trustworthy Digital Repositories*. Magenta Book. Recommended Practice. September 2011. (Adopted as ISO #16363:2012) http://public.ccsds.org/publications/archive/652x0m1.pdf

- Center for Research Libraries. *Trustworthy Repositories Audit and Certification: Criteria and Checklist*. Version 1.0. February 2007. http://catalog.crl.edu/search~S1?/Xtrusted+repositories&searchscope=1&SORT=R/Xtrusted+repositories&searchscope=1&SORT=R&SUBKEY=trusted%20repositories/1,15,15,B/l856~b2212602&FF=Xtrusted+repositories&searchscope=1&SORT=R&6,6,,1,0.

- ISO 16919:2014 also known as CCSDS 652.1-M-2 (Requirements for Bodies Providing Audit and Certification of Candidate Trustworthy Digital Repositories – specifies the competencies and requirements on auditing bodies) https://public.ccsds.org/Pubs/652x1m2.pdf

- Klump, Jens. "Criteria for the Trustworthiness of Data Centres."*D-Lib Magazine* Volume 17, Number 1-2 (January/February 2011). http://www.dlib.org/dlib/january11/klump/01klump.html

January 25 – February 7: Module 2: What is Trustworthiness?

Objectives:

- ❖ Students will review definitions of trust from a number of field.

- ❖ Students will read about how trust is used in information science and data curation.

- ❖ Student will review studies of user trust in repositories and in data.

Forum Questions:

1. What does "trustworthiness" mean to you? Please provide one or more examples.

2. What does it mean that a repository is "trustworthy"?

3. Must a repository be certified in order to be "trustworthy"?

Readings:

- Donaldson, Devon R., & Paul Conway. "User Conceptions of Trustworthiness for Digital Archival Documents." *Journal of the Association for Information Science and Technology* 66(12). (2015): 2427–2444. http://web.a.ebscohost.com.libproxy.lib.unc.edu/ehost/pdfviewer/pdfviewer?vid=1&sid=ad8ce925-9ba1-4b38-b3f6-574c371cb31f%40sessionmgr4006

- Faniel, Ixchel M., Adam Kriesberg, & Elizabeth Yakel. "Social Scientists' Satisfaction with Data Reuse." *Journal of the Association for Information Science and Technology* 67/6 (June 2016): 1404-1416. https://search-proquest-com.libproxy.lib.unc.edu/docview/1790676134?pq-origsite=summon

- Ross, Seamus and Andrew McHugh. "The Role of Evidence in Establishing Trust in Repositories." *D-Lib Magazine* 12 7/8 (July/August 2006). http://www.dlib.org/dlib/july06/ross/07ross.html.

- Yakel Elizabeth, Ixchel Faniel, Adam Kriesberg, & Ayoung Yoon. "Trust in Digital Repositories*." International Journal of Digital Curation.* 8(1) (2013): 143–156. https://doaj-org.libproxy.lib.unc.edu/article/23ea888dffec41a1b40788acc7d7041e

- Yoon, Ayoung, "Data Reusers' Trust Development." *Journal of the Association for Information Science and Technology* 68/4 (April 2017): 946-956. https://search-proquest-com.libproxy.lib.unc.edu/docview/1877803879?pq-origsite=summon

- Yoon, Ayoung. "End Users' Trust in Data Repositories: Definition and Influences on Trust Development." *Archival Science* 14/1 (March 2014):17–34. https://link-springer-com.libproxy.lib.unc.edu/article/10.1007/s10502-013-9207-8

February 8-21: Module 3: A Variety of Schemes & Certifications: DRAMBORA, Data Seal of Approval, NESTOR Seal for Trustworthy Digital Archives, & the Core TrustSeal.

Objectives:

- ❖ Students will learn about the Data Asset Framework.

- ❖ Students will learn about DRAMBORA.

- ❖ Students will learn about the Data Seal of Approval.

- ❖ Students will learn about the NESTOR Seal for Trustworthy Digital Archives.

- ❖ Students will learn about the Core TrustSeal.

- ❖ Students will work through an exercise that illustrates how repository staff can prepare for an audit.

Forum Questions:

1. What can you see in common among all these schemes and attempts to ensure the trustworthiness of repositories?
2. How is DRAMBORA different from the other approaches?
3. Why is the CoreTrustSeal popular?

Readings:

- https://www.coretrustseal.org/

- DRAMBORA. http://www.repositoryaudit.eu/

- Donnelly, Martin, Perla Innocenti, Andrew McHugh, and Raivo Ruusalepp. *DRAMBORA Interactive User Guide.* (Glasgow: HATII, 2009). http://www.dcc.ac.uk/sites/default/files/DRAMBORA_Interactive_Manual%5B1%5D.pdf

- Johnson, Rob, Tom Parsons, and Andrea Chiarelli. See discussions, stats, and author profiles Jisc Data Asset Framework Toolkit 2016. file:///C:/Users/tibbo/AppData/Local/Temp/DAFtoolkit2016.pdf

- Lyle, Jared. "ICPSR and CoreTrustSeal: Repository Certification Experiences and Opportunities." (May 2019) Zenodo. http://doi.org/10.5281/zenodo.3612435

- Macdonald, Stuart, Ingrid Dillo, Sophia Lafferty-Hess, Lynn Woolfrey, and Mary Vardigan. "Demonstrating Repository Trustworthiness through the Data Seal of Approval." IASSIST Conference 2016 - https://iassistquarterly.com/public/pdfs/vol_40-3_6_13.pdf

- Maemura, Emily; Nathan Moles, and Christoph Becker. Organizational Assessment Frameworks for Digital Preservation: A Literature Review and Mapping." *Journal of the Association for Information Science and Technology* 68/7 (July 2017): 1619-1637. https://search-proquest-com.libproxy.lib.unc.edu/docview/1911354231?pq-origsite=summon

- Nestor. "Nestor Criteria. Catalogue of Criteria for Trusted Digital Repositories." Version 2. https://www.yumpu.com/en/document/read/36608129/nestor-criteria-catalogue-of-criteria-for-trusted-digital-repositories
- RDA/WDS Certification of Digital Repositories Interest Group (https://www.rd-alliance.org/groups/rdawds-certification-digital-repositories-ig.html)

February 22 – March 7: Module 4: TRAC and ISO 16363: Audit and Certification of Trustworthy Digital Repositories & Self-Audit.

Objectives:

- ❖ Students will become review the history of ISO 16363 and the overall nature of a trustworthy digital repository.
- ❖ Students will learn about third-party, two-stage audits.
- ❖ Students will read about how to become an ISO 16363 auditor and what such an auditor needs to know.
- ❖ Students will read about ISO 16363 self-audits and the components involved.

Forum Questions:

1. Why should a repository conduct a self-audit?
2. How can a repository best conduct a self-audit?
3. Is ISO 16363 too complicated or not explicit enough?
4. How does one become and ISO 16363 auditor?

Readings:

- CCSDS. *Audit and Certification of Trustworthy Digital Repositories.* Magenta Book. Recommended Practice. September 2011. (Adopted as ISO #16363:2012) http://public.ccsds.org/publications/archive/652x0m1.pdf Read sections 1.1-2.3.
- ISO 16919:2014 also known as CCSDS 652.1-M-2 (Requirements for bodies providing audit and certification of candidate trustworthy digital repositories – specifies the competencies and requirements on auditing bodies) https://public.ccsds.org/Pubs/652x1m2.pdf
- Marks, Steven. *Becoming a Trusted Digital Repository,"* 2-9.
- McGovern, Nancy and Luciana Duranti. Trustworthy Systems: Current and Future Directions." In Philip C. Bantin, ed. *Building Trustworthy Digital Repositories: Theory and Implementation.* (Lanham, MD: Rowman & Littlefield, 2016): 325-350.

March 8-21: Module 5: Theory and Practice: Organizational Infrastructure.

Objectives:

- Students will become familiar with ISO 16363's section 3: Organizational Infrastructure.

- Students will explore how curators manage repositories through policies.

- Students will explore how ISO 16363's "Organizational Infrastructure" section is translated into practice.

Forum Questions:

1. Select 3 points in ISO 16363 section 3 that you think are the most important and explain why.

2. Pretend you are a repository manager who wants to conduct an ISO 16363 self-audit. With which staff members (or points of responsibility, e.g., finance officer) must you work to gather what specific data and evidence?

3. What are the hardest two points in ISO 16363 section 3 to document completely and accurately and why?

Readings:

- Bantin, Philip C. et al. "Resources, Policies, and Management Structures." In Philip C. Bantin, ed. *Building Trustworthy Digital Repositories: Theory and Implementation.* (Lanham, MD: Rowman & Littlefield, 2016): 33-75.

- CCSDS. *Audit and Certification of Trustworthy Digital Repositories.* Magenta Book. Recommended Practice. September 2011. (Adopted as ISO #16363:2012) http://public.ccsds.org/publications/archive/652x0m1.pdf Read all of section 3: Organizational Infrastructure.

- Marks, Steven. *Becoming a Trusted Digital Repository,"* 9-27.

March 22 – April 4: Module 6: Theory and Practice: Digital Object Management.

Objectives:

- ❖ Students will become familiar with ISO 16363's section 4: Digital Object Management.

- ❖ Students will explore how curators manage repositories through ingest, metadata, and preservation strategies and actions.

- ❖ Students will explore how ISO 16363's section 4, "Digital Object Management," is translated into practice.

Forum Questions:

1. You are the ingest manager of a digital repository. What are the 10 most important questions to ask content creators about their data before you start the ingest process?

2. Given ample staff resources (which is almost never the case), how does a curator determine the optimal amount of metadata for its materials/collections?

3. As a repository director of an amply funded repository, what would you implement for a preservation strategy and why?

Readings:

- Ashley, Lori J. et al. "Creating a Preservation Strategy." In Philip C. Bantin, ed. *Building Trustworthy Digital Repositories: Theory and Implementation.* (Lanham, MD: Rowman & Littlefield, 2016): 307-324.

- Bantin, Philip C. et al. "Creating and Capturing Metadata." In Philip C. Bantin, ed. *Building Trustworthy Digital Repositories: Theory and Implementation.* (Lanham, MD: Rowman & Littlefield, 2016): 119-168.

- CCSDS. *Audit and Certification of Trustworthy Digital Repositories.* Magenta Book. Recommended Practice. September 2011. (Adopted as ISO #16363:2012) http://public.ccsds.org/publications/archive/652x0m1.pdf Read all of section 4: Digital Object Management.

- Marks, Steven. *Becoming a Trusted Digital Repository,"* 27-45.

- Schmidt, Lisa et al. "Building a Trustworthy System: Ingest Process." In Philip C. Bantin, ed. *Building Trustworthy Digital Repositories: Theory and Implementation.* (Lanham, MD: Rowman & Littlefield, 2016): 77-118.

April 5-18: Module 7: Theory and Practice: Infrastructure and Security Risk Management.

Objectives:

- ❖ Students will become familiar with ISO 16363's section 5: Infrastructure and Security Risk Management.

- ❖ Students will explore how curators secure repositories and mitigate risk.

- ❖ Students will explore how ISO 16363's section 5, "Infrastructure and Security Risk Management," is translated into practice.

Forum Questions:

1. What are the three most important things a curator can do to create a secure system. Explain.

2. Why is audit trail data so important?

3. Explain what "Preservation as a Service for Trust" is.

Readings:

- Evans, Lois et al. "Creating a Secure System." In Philip C. Bantin, ed. *Building Trustworthy Digital Repositories: Theory and Implementation.* (Lanham, MD: Rowman & Littlefield, 2016): 271-306.

- Marks, Steven. *Becoming a Trusted Digital Repository,"* 45-68.

- Noonan, Daniel et al. "Capturing Audit Trail Data." In Philip C. Bantin, ed. *Building Trustworthy Digital Repositories: Theory and Implementation*. (Lanham, MD: Rowman & Littlefield, 2016): 169-198.

April 19 – May 2: Module 8: Student Presentations and Course Evaluation.

By May 2: Students will present their audit and workshop projects via Voice Thread and PowerPoint and fill out the online course evaluation form.