Syllabus: Digital and Data Curation

School of Information Sciences (SIS)
College of Communication and Information (CCI)
University of Tennessee, Knoxville

COURSE INFORMATION

INSC 495 Special Topics: Digital and Data Curation (3.0 Credit Hours)
Spring 2021
Class Meetings: TR, 7:50pm - 9:05pm (ET)
Course Mode: Online, partially synchronous
ZOOM Course ID/Link: 999-9114-1181

Instructor: Amy Forrester
email: aforres4@utk.edu
Office Location: virtual
Office Hours: By appointment
Cell/Text: 202-288-8504
Office Phone (message): 865-974-7909

SIS Office Information
450 Communications Bldg.
1345 Circle Park Drive
Knoxville, TN 37996-0341
SIS Office: 865.974.2148
Fax (SIS): 865.974.4667

COURSE INFORMATION

Catalog Description
Detailed study of a specialized area of information studies or information technology.

Additional Information
Digital and data curation is a timely and useful topic in the information sciences, and can be applicable regardless of which concentration you’re pursuing. Digital and data curation is all about the life cycle management of digital information and data. The course will provide an understanding of essential digital and data curation concepts, standards, and good practices and strategies for research data management and project management.

Student Learning Outcomes
Upon completion of this, course students will be able to:
• Define and distinguish digital curation, data curation and related terminology.
• Understand actions necessary for effective curation of digital content.
• Identify standards for managing and maintaining digital content.
• Assess and contrast digital and data repositories.
• Describe research data management principles and best practices.
• Evaluate a data management plan.
• Identify essential responsibilities and skills for effective project management.

Last updated: {date}
**Course Design**
The course adopts an active learning approach. Students are required to complete all required readings, attend all synchronous class sessions via Zoom, participate in all asynchronous activities, and complete all graded assignments. Required readings for the synchronous session and instructions for asynchronous session activities are posted in the Modules section on Canvas.

**Required Text(s)**
There is no required text for this course. Suggested resources that may be useful to you will be shared throughout the semester via the Canvas Discussion board. Any resources shared there are optional.

Scholarly and professional readings will be assigned, along with other required resources, such as video recordings. These required resources are available on the Canvas site. Each student will be responsible for preparing for each class session by completing these resources in order to contribute to class discussions and activities.

**COMMUNICATION**

**Email**
I am required to communicate with you through your UTK email address. If you prefer to use another address, consult the OIT Helpdesk to obtain directions for forwarding your UTK email to your preferred address if you do not wish to check both accounts.

**Instructor Availability**
Please feel free to email me at any time with updates, questions, or concerns. I try to respond as quickly as possible, and I’ll typically respond within 24 hours during the week and 48 hours on the weekend. I’ll notify you if I will be out of reach for any length of time.

If more immediate response is needed, simply indicate that in your subject line (e.g., URGENT, ASAP, ETC.) or text/call my cell.

**COMPUTING REQUIREMENTS AND RESOURCES**

**Requirements**
You must have adequate computing skills, including but not limited to use of word processing, Web browsers, e-mail, listservs, Canvas, and Zoom software. You must learn how to submit your assignments using Canvas. In addition, you must have software installed on your computer to download and open the (pptx format) lecture notes from Canvas.

There are campus resources to support your use of technology (see below), but ultimately it is your responsibility to make sure you have the necessary technical equipment and knowledge needed.
Course Resources
- SIS Technology Introduction website for help getting started with the tools you’ll need in the program: https://sis.utk.edu/techintro/
- The Office of Information Technology (OIT) provides training classes in using varied technologies for students at no charge (advance registration is required).
- UT Libraries: http://lib.utk.edu

Technical Support
For assistance with technical and computing issues, contact the OIT HelpDesk by phone at (865) 974-9900, using the Contact Form, or at the Walk-in HelpDesk,

COURSE ATTENDANCE AND PARTICIPATION POLICIES

Learner Expectations
- Be prepared for all classes.
- Read the assigned materials.
- Be on time for classes.
- Actively contribute to the learning activities in class.
- Be respectful of others.
- Be respectful in communicating with the instructor.
- Abide by the UT Student Code of Conduct.
- Check your email and Canvas on a regular basis for announcements.
- Use technology and software such as Zoom and Canvas, among others, and associated features responsibly and ensure safety and security.

Instructor Expectations
- Be prepared for all classes.
- Evaluate all work fairly and equitably.
- Be respectful of all students.
- Create and facilitate a meaningful learning environment.
- Behave according to University codes of conduct

Attendance and Participation

**Synchronous Classes:** Attendance is required and necessary. Contact me ASAP if you cannot attend class. If you miss a class, you must review any materials posted to Canvas and view the session recording. You should also contact classmates to receive additional guidance on the missed content.

Examples of acceptable reasons for absence from a synchronous class include: (1) illness; (2) serious family emergencies; (3) special curricular activities or job requirements; 4) participation in official university activities such as music performances, athletic competitions or debate; (5) military obligation, (6) religious holidays; and (7) obligations for court imposed legal obligations (i.e., jury duty, subpoena).
Asynchronous Classes: You are required to complete all Asynchronous class activities. Failure to do so may result in point and/or final letter grade reduction.

Class Participation: You are expected to actively participate in class discussions and activities. Class participation is a valued aspect of this course. Discussions on class-related materials and business, whether they take place in the class or outside of class (e.g., via the discussion board on Canvas), should be conducted in a respectful manner, in line with the University Civility Statement. Be considerate of your classmates by arriving to class on time; completing the required readings and viewings; and be an active participant in class-related activities and discussions.

Inclement Weather
Should it be necessary to cancel a class meeting, every effort will be taken to do so in advance. Look for e-mail announcements sent by me via Canvas.

The chancellor (or appointed representative) may officially close or suspend selected activities of the university because of extreme weather conditions. When a decision to close is made, it applies to all classes (whether on-campus or online). The information is distributed to the campus community, shared with local media, and posted on the University homepage at http://utk.edu.

ADDITIONAL POLICIES AND POINTS OF INFORMATION

Disability Services
Any student who feels they may need an accommodation based on the impact of a disability should contact Student Disability Services in Dunford Hall at 865-974-6087, or by video relay at 865-622-6566, to coordinate reasonable academic accommodations.

University Civility Statement
Civility is genuine respect and regard for others: politeness, consideration, tact, good manners, graciousness, cordiality, affability, amiability and courteousness. Civility enhances academic freedom and integrity, and is a prerequisite to the free exchange of ideas and knowledge in the learning community. Our community consists of students, faculty, staff, alumni, and campus visitors. Community members affect each other’s well-being and have a shared interest in creating and sustaining an environment where all community members and their points of view are valued and respected. Affirming the value of each member of the university community, the campus asks that all its members adhere to the principles of civility and community adopted by the campus. For more information, see the UT Principles of Civility and Community.

CCI Diversity Statement
The College of Communication and Information recognizes that a college diverse in its people, curricula, scholarship, research, and creative activities expands opportunities for intellectual inquiry and engagement, helps students develop critical thinking skills, and prepares students for social and civic responsibilities. All members of the College benefit from diversity and the quality of learning, research, scholarship and creative activities is enhanced by a climate of inclusion, understanding and appreciation of differences and the full range of human experience. As a result, the College is committed to diversity and equal opportunity and it recognizes that it must represent the diversity inherent in American society. The College is acutely aware that diversity
and fairness are foundations that unite the College’s faculty, staff, students, and the larger communication and information community.

**Instructor Status as a Title IX Mandatory Reporter**

University of Tennessee faculty are committed to supporting our students and upholding gender equity laws as outlined by Title IX. Please be aware that if you choose to confide in a faculty member regarding an issue of sexual misconduct, dating violence, or stalking, we are obligated to inform the University’s Title IX Coordinator, who can assist you in connecting with all possible resources both on- and off-campus. If you would like to speak with someone confidentially, the Student Counseling Center (865-974-2196) and the Student Health Center (865-974-3135) are both confidential resources. For additional resources and information, visit [titleix.utk.edu](http://titleix.utk.edu).

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**ASSIGNMENTS, ASSESSMENTS, AND EVALUATIONS**

**Academic Integrity**

Students should be familiar with the [Hilltopics Student Handbook](http://www.utk.edu/hilltopics), and comply with all academic policies. This includes the University of Tennessee Honor Statement and the Academic Integrity Policy.

The Honor Statement reads: “An essential feature of the University of Tennessee, Knoxville is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. ‘As a student of the university, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.’” For more information, see the Honor Statement on the Academic Policies and Procedures page of the current [catalog](http://www.utk.edu) for student and faculty responsibilities.

The Academic Integrity policy reads: “Study, preparation and presentation should involve at all times the student’s own work, unless it has been clearly specified that work is to be a team effort. Academic honesty requires that the student present his or her own work in all academic projects, including tests, papers, homework, and class presentation. When incorporating the work of other scholars and writers into a project, the student must accurately cite the source of that work.” For additional information, see the [Student Code of Conduct](http://www.utk.edu).

**Plagiarism**

Plagiarism in any of its forms is intolerable, and attention to matters of documentation in all written work is expected and required. Inadveritence, alleged lack of understanding, or avowed ignorance of the various types of plagiarism are not acceptable excuses. **Specific examples of plagiarism are:**

1. Copying without proper documentation (quotation marks and a citation) written or spoken words, phrases, or sentences from any source.
2. Summarizing without proper documentation (usually a citation) ideas from another source (unless such information is recognized as common knowledge).
3. Borrowing facts, statistics, graphs, pictorial representations, or phrases without acknowledging the source (unless such information is recognized as common knowledge).
4. Collaborating on a graded assignment without the instructor’s approval.
5. Submitting work, either in whole or in part, created by a professional service and used without attribution (e.g., paper, speech, bibliography, or photograph).
Students who may be unsure of the nature of plagiarism should consult the instructor or a guide for writing research reports. Resources are available through the University Libraries, including a Citing Sources Guide.

Infractions of academic integrity are penalized according to the severity of the infraction but may include a course grade of "F."

**Assignments**

This table lists each assignment by name, due date, point value and percentage of final grade. This includes three quizzes, designed to test your knowledge of the concepts, principles, and/or models presented in the course. Each quiz will count for 15% of your final grade and include multiple choice, matching, true/false, and/or fill in the blank questions. Detailed instructions for all other assignments are provided in the Assignments section of Canvas.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Point Value</th>
<th>Percentage of Final Grade</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Obsolescence Museum</td>
<td>5</td>
<td>5%</td>
<td>01/28/21 (Thursday)</td>
</tr>
<tr>
<td>Digital Curation in the News</td>
<td>5</td>
<td>5%</td>
<td>02/04/21 (Tuesday)</td>
</tr>
<tr>
<td>Quiz 1: Terminology (administered in class)</td>
<td>15</td>
<td>15%</td>
<td>02/16/21 (Tuesday)</td>
</tr>
<tr>
<td>Digital and Data Repository Review</td>
<td>10</td>
<td>10%</td>
<td>02/25/21 (Thursday)</td>
</tr>
<tr>
<td>Twitter Archive Case Study</td>
<td>15</td>
<td>15%</td>
<td>03/09/21 (Tuesday)</td>
</tr>
<tr>
<td>File Format and Storage Media Profiles</td>
<td>10</td>
<td>10%</td>
<td>03/16/21 (Tuesday)</td>
</tr>
<tr>
<td>Quiz 2: Metadata (administered in class)</td>
<td>15</td>
<td>15%</td>
<td>03/23/21 (Tuesday)</td>
</tr>
<tr>
<td>Quiz 3: Research Data Management (administered in class)</td>
<td>15</td>
<td>15%</td>
<td>04/13/21 (Tuesday)</td>
</tr>
<tr>
<td>Elevator Pitch</td>
<td>10</td>
<td>10%</td>
<td>04/27/21 (Tuesday)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Preparing Assignments other than Quizzes**

The words or ideas of others must be properly cited. For in-text citations and reference lists for submitted work, students should adopt the style conventions of the Publication Manual of the American Psychological Association (APA), 6th Edition or 7th Edition (published October 2019). You may request to use a style with which you are more familiar (e.g., Chicago, MLA). Contact me with your request via email before, not on, the assignment due date. Requests will be granted on a case-by-case basis. Be aware: making a request does not guarantee it will be honored.

**Submitting Assignments**

Submit assignments on time as directed in assignment instructions. There are limited exceptions when I may agree to receive a late assignment; this is determined on a case-by-case basis, and is not a given. If you will be late submitting an assignment, it is your responsibility to contact me ASAP, in advance of the date the assignment is due (when possible). I reserve the right to dock points for any late assignments.
Assigning Grades
Some assignment instructions come with a scoring rubric. Be sure to review the rubric in addition to the detailed assignment instructions. After receiving your assignments, I make every effort to return your marked assignments within two weeks, though this is not a guarantee. Any questions concerning any specific grade you receive should be discussed first with me. If you remain dissatisfied, then you may refer to the Grade Appeal Procedures in the Undergraduate Catalog.

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Description</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100</td>
<td>Superior performance</td>
<td>4</td>
</tr>
<tr>
<td>B+</td>
<td>88-89.99</td>
<td>Very good performance</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>83-87.99</td>
<td>Good performance</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>80-82.99</td>
<td>Intermediate good performance</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>78-79.99</td>
<td>Fair performance</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>77-72.99</td>
<td>Satisfactory performance</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>70-72.99</td>
<td>Unsatisfactory performance</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>68-69.99</td>
<td>Unsatisfactory performance</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>63-67.99</td>
<td>Unsatisfactory performance</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>60-62.99</td>
<td>Unsatisfactory performance</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>0-59.99</td>
<td>Failure performance</td>
<td>0.0</td>
</tr>
<tr>
<td>S</td>
<td></td>
<td>Satisfactory; only assigned for C or better work when a course is taken on a S/NC grading basis. Carries no point value.</td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td></td>
<td>No Credit; indicates failure to complete a course satisfactorily, and is only assigned for C- or worse work when a course is taken on a S/NC grading basis. Carries no point value.</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td></td>
<td>Under extraordinary circumstances and at the discretion of the instructor, the grade of I (Incomplete) may be awarded to students who have satisfactorily completed a substantial portion of the course but cannot complete the course for reasons beyond their control. An I carries no quality points. If the I grade is not removed within one calendar year or upon graduation, it shall be changed to an F and count as a failure in the computation of the grade point average.</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td></td>
<td>Indicates student has officially withdrawn from the course or the university. Carries no point value.</td>
<td></td>
</tr>
</tbody>
</table>

Incompletes
Based on adopted University of Tennessee-Knoxville policy, a grade of I (Incomplete) is reserved for emergencies that prevent the student from completing the course on time. Incompletes are granted only under "the most unusual of circumstances" and solely at the discretion of the instructor. Plan your semester’s course of study carefully to insure sufficient time to complete the required work. For students who simply "disappear" without contacting the instructor and without completing the required form, an "F" is submitted.
**COURSE EVALUATION**

You will be invited by email to evaluate the course at the end of the term via TNVoice. Please participate in this valuable process. I also invite your comments throughout the course and read all comments, suggestions, and recommendations.

**DISCLAIMER**

Please be aware revisions may be made to this syllabus over the course of the semester, and as such, the content contained within may be subject to change.
## COURSE OUTLINE

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Mode</th>
<th>Topic</th>
<th>Class Activities / Assignment Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>01/21</td>
<td>Zoom (Synchronous)</td>
<td>Course Overview: Introductions; review course materials and expectations.</td>
<td>• No required readings assigned.</td>
</tr>
<tr>
<td>2</td>
<td>01/26</td>
<td>Zoom (Synchronous)</td>
<td>From Pages to Pixels: Distinguish between analogue and digital materials.</td>
<td>• See Canvas module for required class prep.</td>
</tr>
<tr>
<td></td>
<td>01/28</td>
<td>Zoom (Synchronous)</td>
<td>Catalysts and Risks: Identify personal, organizational and societal implications and challenges.</td>
<td>• See Canvas module for required class prep. • Technology Obsolescence Museum (5pts) due.</td>
</tr>
<tr>
<td>3</td>
<td>02/02</td>
<td>Asynchronous activity</td>
<td>From Past to Present: Identify key milestones and developments impacting and informing digital and data curation.</td>
<td>• See Canvas module for required class prep. • Technology Obsolescence Museum (5pts) due.</td>
</tr>
<tr>
<td></td>
<td>02/04</td>
<td>Zoom (Synchronous)</td>
<td>Bits &amp; Bytes: Identify characteristics of digital objects. Distinguish born digital from “reborn” digital objects. Distinguish simple and complex digital objects and databases.</td>
<td>• See Canvas Module for required class prep. • Digital Curation in the News (5pts) due.</td>
</tr>
<tr>
<td>4</td>
<td>02/09</td>
<td>Zoom (Synchronous)</td>
<td>Aligned Approaches: Define and distinguish digital curation from data curation, data management, digital archiving, digital preservation and digital stewardship.</td>
<td>• See Canvas Module for required class prep.</td>
</tr>
<tr>
<td></td>
<td>02/11</td>
<td>Asynchronous activity</td>
<td>D is for …: Review essential digital and data curation terminology</td>
<td>• See Canvas module for detailed instructions.</td>
</tr>
<tr>
<td>5</td>
<td>02/16</td>
<td>Zoom (Synchronous)</td>
<td>Models: Review various data and curation life cycle models.</td>
<td>• See Canvas module for required class prep. • Quiz 1 in class (15%).</td>
</tr>
<tr>
<td></td>
<td>02/18</td>
<td>Zoom (Synchronous)</td>
<td>Standards: Review technical and organizational infrastructure standards, including the OAIS Reference Model.</td>
<td>• See Canvas module for required class prep.</td>
</tr>
<tr>
<td>6</td>
<td>02/23</td>
<td>Asynchronous activity</td>
<td>Digital and Data Repository Review: Review data and digital repository directories, and begin work on Digital and Data Repository Review assignment.</td>
<td>• See Canvas module for detailed instructions.</td>
</tr>
<tr>
<td></td>
<td>02/25</td>
<td>Zoom (Synchronous)</td>
<td>Data Producers and Data Consumers: Discuss vital role of content creators and end-users.</td>
<td>• See Canvas module for required class prep. • Digital and Data Repository Review (10pts) due.</td>
</tr>
<tr>
<td>7</td>
<td>03/02</td>
<td>Zoom (Synchronous)</td>
<td>Data Managers: Identify various roles and responsibilities for information professionals and others.</td>
<td>• See Canvas module for required class prep.</td>
</tr>
<tr>
<td></td>
<td>03/04</td>
<td>Asynchronous activity</td>
<td>Selection and Appraisal: Begin work on Twitter Archive Case Study assignment.</td>
<td>• See Canvas module for detailed instructions.</td>
</tr>
</tbody>
</table>
| 8 | 03/09 | **Zoom**  
(Synchronous) | **File Formats and Storage Media:** Identify key features of file formats and storage media that support digital preservation. Explore file format registries.  
• See Canvas module for required class prep.  
• Twitter Archive Case Study (15pts) due. |
|---|---|---|---|
| 03/11 | **Asynchronous activity**  
No Zoom meeting | **Swipe Left/Swipe Right.** Distinguish between specific recommended and not recommended formats and media. Begin work on **File Format and Storage Media Profile** assignment.  
• See Canvas module for detailed instructions. |
| 9 | 03/16 | **Zoom**  
(Synchronous) | **Metadata:** Explore different types of metadata and their uses. Distinguish between syntax and semantics.  
• See Canvas module for required class prep.  
• **File Format and Storage Media Profiles** (10pts) due. |
| 03/18 | **Asynchronous activity**  
No Zoom meeting | **Making Metadata**  
• See Canvas module for detailed instructions. |
| 10 | 03/23 | **Zoom**  
(Synchronous) | **Passive Approached to Preservation.** Distinguish between back-up and preservation. Understand implications of copyright laws.  
• See Canvas module for required class prep.  
• **Quiz 2 in class (15%).** |
| 03/25 | **Zoom**  
(Synchronous) | **Active Approaches to Preservation:** Identify more complex strategies including emulation, migration and the computer museum approach.  
• See Canvas module for required class prep. |
| 11 | 03/30 | **Asynchronous activity**  
No Zoom meeting | **Emulator Exploration**  
• See Canvas module for detailed instructions. |
| 04/01 | **Zoom**  
(Synchronous) | **Make it FAIR:** Describe various types of research data. Identify FAIR research data principles.  
• See Canvas module for required class prep. |
| 12 | 04/06 | **Zoom**  
(Synchronous) | **Research Data Management.** Identify effective strategies for effective research data management. Identify tools for developing a data management plans (DMP).  
• See Canvas module for required class prep. |
| 04/08 | **Asynchronous activity**  
No Zoom meeting | **DMPTool: Build Your Own Data Management Plan**  
• See Canvas module for detailed instructions. |
| 13 | 04/13 | **Zoom**  
(Synchronous) | **Research Data Use and Re-Use:** Examine issues of data quality and trust. Explore examples of secondary data use, and identify data citation conventions.  
• See Canvas module for required class prep.  
• **Quiz 3 in class (15%).** |
| 04/15 | **Asynchronous activity**  
No Zoom meeting | **Essential Project Management**  
• See Canvas module for detailed instructions. |
| 14 | 04/20 | **Zoom**  
(Synchronous) | **From DMP to PMP:** Identify key features of an effective project management plan.  
• See Canvas module for required class prep. |
| 04/22 | **Zoom**  
(Synchronous) | **Project Management Case Study**  
• See Canvas module for required class prep. |
| 15 | 04/27 | **Zoom**  
(Synchronous) | **Wrap-up:** Review student learning outcomes and reflect on learning; elevator pitch presentations.  
• See Canvas module for required class prep.  
• **Elevator Pitch (10pts) due.** |