

INSC 524: Metadata

COURSE INFORMATION

INSC 524: Metadata, Fall 2022

University of Tennessee, Knoxville

Class Meetings: Tuesdays, 5:05-6:20 PM ET

on Zoom, <https://tennessee.zoom.us/j/95620453867>

Passcode: 917850

Class Labs: asynchronous on Canvas



Faculty Contact Information

- Brian Dobreski (he/him/his)
- Assistant Professor
- bdobreski@utk.edu
- Office Hours: Tuesdays, 12:30-1:30PM ET on Zoom (<https://tennessee.zoom.us/j/7544125273>); other times by appointment

SIS Office Information

- 450 Communications Bldg.
- 1345 Circle Park Drive
- Knoxville, TN 37996-0341
- SIS Office: 865-974-2148
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COURSE DESCRIPTION

Catalog Description

Metadata has applications in many domains and communities that deal with digital information management and services (e.g., digital libraries, museums, and archives; scientific data centers; government organizations; educational and learning environments; commercial enterprises; and personal information systems). This course introduces concepts, principles, and practices of metadata and explores the role of metadata in our evolving information ecosystems. Topics covered in this course include element sets and schemas, ontologies, encoding formats, interoperability, metadata design, metadata administration, metadata's role in information search and display, vocabularies for metadata elements and values, data quality control, and metadata evaluation. Student performance will be assessed by a series of exercises offering practical experience as well as a final summative project.

Student Learning Outcomes

By the end of this course, students will:

- Understand the role of metadata for organizing resources and for facilitating resource discovery, particularly in the digital environment
- Understand the range of functions metadata supports, including resource preservation, management, authentication, use, and other activities
- Distinguish among a wide range of metadata standards, and understand the different applications and functions for these standards
- Acquire and apply basic skills for generating and encoding metadata, as well as designing and implementing a metadata schema
- Evaluate metadata and metadata applications
- Consider a theoretical context for metadata and the future of metadata

Course Design

The course adopts a split synchronous/asynchronous model. Prior to each week's synchronous session, students are expected to complete all required readings (listed in the **Course Schedule** section of this syllabus). During synchronous sessions, students are expected to attend and participate in all class activities including teacher-led and student-led discussions, and small-group and individual activities. Following synchronous sessions, students are expected to complete the week's asynchronous lab, available via Canvas, prior to the next synchronous meeting.

Required Text

Zeng, M. L. & Qin, J. (2022). *Metadata*. 3rd ed. New York: Neal-Schuman.

I'd strongly recommend getting the 3rd ed. for this semester; however, the 2nd ed. is extremely close in content, and I will allow you to use that edition this semester.

Other Texts

Baca, Murtha, ed. (2016). *Introduction to Metadata*. 3rd ed. Los Angeles: Getty Publications.

- Freely available at: <http://www.getty.edu/publications/intrometadata/>

Metadata etc. (textbook's accompanying website)

- Freely available at: <http://metadataetc.org/>

We will have some additional class readings available on the Canvas course site, listed under each class module. These will be made available as web links or downloadable PDFs.

COMMUNICATION

Email

The best way to reach me is by email (bdobreski@utk.edu). You are welcome to make appointments to meet with me via Zoom.

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 mail to your preferred address if you don't wish to check both accounts.

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. The [Office of Information Technology \(OIT\)](#) provides training classes in using varied technologies for students at no charge (advance registration is required).

You must obtain a UT email account and subscribe to the SIS student listserv to insure you're made aware of course-related information. In addition, you must have the PowerPoint Reader or the regular PowerPoint software installed on your computer in order to download the lecture notes from Canvas.

You will be provided with access to the Oxygen XML Editor software as part of this class. Instructions on installation and use will be provided during class.

Technical Support

Please review the SIS Technology Introduction website for help getting started with the tools you'll need in the program: <https://sis.utk.edu/techintro/>

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
- Be respectful of others
- Actively contribute to the learning activities in class
- Abide by the UT Honor Code

Instructor Expectations

- Be prepared for all classes
- Evaluate all fairly and equitably
- Be respectful of all students
- Create and facilitate meaningful learning activities
- Behave according to University codes of conduct

Attendance and Participation

It is assumed that each student will be present and speak in class -- the equivalent of a "B" grade for "participation." Missing more classes or failing to participate will lower your grade; frequent participation will raise the grade.

Regular attendance is required and necessary. A substantial portion of your grade will be based on in-class work and participation. Unexplained absences will affect your grade. Contact me as soon as possible if you cannot attend class. If you will be absent from class, you must:

- Inform me in advance or as soon as possible after class
- Submit any work due from the missed class period
- Listen to class recording
- Obtain notes, handouts, etc. from Canvas
- Check with classmates for notes, announcements, etc.

Acceptable reasons for absence from class include:

- Illness
- Serious family emergencies
- Special curricular or job requirements (e.g., judging trips, field trips, professional conferences)
- Military obligation
- Severe weather conditions
- Religious holidays
- Participation in official university activities such as music performances, athletic competition or debate
- Obligations for court imposed legal obligations (i.e., jury duty, subpoena)

Missing more than one class meeting for reasons other than those listed above will have a negative impact on your course participation grade.

Inclement Weather

"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, information is distributed to the campus community, shared with local media, and posted on the front page at <http://utk.edu>. SIS will cancel classes when UT is closed. Please check the SIS student listserv (UTKSIS-L@LISTSERV.UTK.EDU) for messages about closing.

ADDITIONAL POLICIES AND POINTS OF INFORMATION

Disabilities that may Impede Learning

The University of Tennessee, Knoxville, is committed to providing an inclusive learning environment for all students. If you anticipate or experience a barrier in this course due to a chronic health condition, a learning, hearing, neurological, mental health, vision, physical, or other kind of disability, or a temporary injury, you are encouraged to contact Student Disability Services (SDS) at 865-974-6087 or sds@utk.edu. An SDS Coordinator will meet with you to develop a plan to ensure you have equitable access to this course. If you are already registered with SDS, please contact your instructor to discuss implementing accommodations included in your course access letter.

Civility

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: <http://civility.utk.edu/>.

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.

COVID-19 Guidelines

[CDC guidance](#) recognizes the changing dynamics of living in a world with COVID-19. It rates COVID-19 community levels as low, medium, and high, with recommendations at each level about the use of masks and other precautions. At all levels of community spread, staying up-to-date with vaccination is the best way to protect yourself from serious illness and to limit the spread of COVID-19. Wearing a mask is always an option for any individual who chooses to do so, and the CDC recommends that those with high risk of severe illness talk with their health care providers. If you are sick, please stay in, avoid being around others as much as possible, and contact your health care provider for any symptoms that are worsening, moderate to severe, or concerning to you. For more information about vaccination or to self-report an illness and receive support, visit <https://studenthealth.utk.edu/CommunityHealth>. For more information about COVID-19, visit <https://studenthealth.utk.edu/covid-19>.

ASSIGNMENTS, ASSESSMENTS, AND EVALUATIONS

Academic Integrity

Students should be familiar and maintain their *Academic Integrity* described in <https://hilltopics.utk.edu/academics/>, p. 15 as: “*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.*”

Students should abide by the **Honor Statement** (<https://hilltopics.utk.edu/student-code-of-conduct/> Section X. Honor Statement)

“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.”

Plagiarism

Plagiarism in any of its several forms is intolerable, and attention to matters of documentation in all written work is expected and required. Inadvertence, 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. (Additional resources are available at <http://www.lib.utk.edu/instruction/plagiarism>.)

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

Group Work Policy

Some of the assignments are to be completed by group. Once groups have formed, each group must complete a **group agreement**, which specifies the responsibilities, communication methods, how you will handle difficult situations, etc. For example, you may specify that if one group member consistently shows a lack of professionalism (e.g., poor/untimely communication and inadequate contribution—you will have to define these terms), the rest of the group will seek the instructor's intervention. The final grade for your group projects will depend partly on your individual performance.

Assignments and Grading

Student work is assigned a grade based on quality of thought and writing style, thoroughness of research and of references, appropriateness of length, and originality. Only exceptional work will receive an "A" grade. Papers that are received after the due date will be assigned a lower grade than would otherwise be received. All sources must be cited, quotations must be in quotation marks and attributed correctly. Not doing so constitutes plagiarism.

Preparation of Written Work

- All written assignments must be word processed and include your name, the course number, assignment number, and date
- Please use APA style for in-line citations and references
- All sources must be properly cited, and quotations must be formatted and attributed correctly

Due Dates and Late Assignments

Assignments should be submitted to the "assignments" area of Canvas and are due (officially) at 11:59 p.m. EST on the due date listed on the syllabus. If your assignment is not ready by the deadline:

- You must send me an email informing me that your assignment will be late

- After submitting your assignment to Canvas, send me an email informing me that your assignment has been submitted
- One point will be deducted for each 24-hour hour period the assignment is not turned in

Incompletes

Based on adopted University of Tennessee-Knoxville and SIS 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.

Assigning Grades

Please note that I do not assign letter grades for individual assignments, but will mark your paper with my comments and provide a point score based on the possible points earned for that assignment. Your final grade will be based on total points earned/total possible points over the course of the semester.

Evaluation

Semester grades will be assigned according to the following scale:

A	93≤	(4 quality points per semester hour) superior performance.
A-	90-92.99	(3.7 quality points per semester credit hour) intermediate grade performance.
B+	88-89.99	(3.5 quality points per semester hour) better than satisfactory performance.
B	83-87.99	(3 quality points per semester hour) satisfactory performance.
B-	80-82.99	(2.7 quality points per semester credit hour) intermediate grade performance.
C+	78-79.99	(2.5 quality points per semester hour) less than satisfactory performance.
C	70-77.99	(2 quality points per semester hour) performance well below the standard expected of graduate students.
D	60-69.99	(1 quality point per semester hour) clearly unsatisfactory performance and cannot be used to satisfy degree requirements.
F	59.99≥	(no quality points) extremely unsatisfactory performance and cannot be used to satisfy degree requirements.
I		(no quality points) a temporary grade indicating that the student has performed satisfactorily in the course but, due to unforeseen circumstances, has been unable to finish all requirements. An I is not given to enable a student to do additional work to raise a deficient grade. The instructor, in consultation with the student, decides the terms for the removal of the I, including the time limit for removal. If the I is not removed within one calendar year, the grade will be changed to an F. The course will not be counted in the cumulative grade point average until a final grade is assigned. No student may graduate with an I on the record.
S/NC		(carries credit hours, but no quality points) S is equivalent to a grade of B or better, and NC means no credit earned. A grade of Satisfactory/No Credit is allowed only where indicated in the course

		description in the <i>Graduate Catalog</i> . The number of Satisfactory/No Credit courses in a student's program is limited to one-fourth of the total credit hours required.
P/NP		(carries credit hours, but no quality points) P indicates progress toward completion of a thesis or dissertation. NP indicates no progress or inadequate progress.
W		(carries no credit hours or quality points) indicates that the student officially withdrew from the course.

Course Evaluation

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

MSIS Program Outcomes

It is our vision to provide a quality educational program, and for students to have the very best educational experience possible. By the end of their time in the MSIS program, each student should be able to:

1. Describe and discuss the processes of creation, organization, distribution, storage, access, retrieval, management, use, and preservation of information.
2. Describe and discuss the nature of leadership and management in the information professions and the importance of participation in the global information society.
3. Apply the general principles, values, and ethical standards of providing information services in a variety of settings and for diverse populations.
4. Comply with the changing responsibilities of the information professional in a culturally diverse and networked global society.
5. Identify critical professional issues in a variety of organizational, cultural, societal, disciplinary, transdisciplinary, and historical contexts.
6. Analyze and apply standards or policies related to the processes of creation, organization, distribution, storage, access, retrieval, management, use or preservation of information.
7. Explain the changing nature of information, information needs, and information behavior.
8. Assess and implement information technologies, systems, sources, and services that serve users effectively and efficiently.
9. Analyze research and apply it to information practice.

Assignments: Descriptions, Due Dates, and Program Outcomes for SLC

This table provides a brief summary of assignment names, due dates, grade distribution, and associated program outcomes. Further information follows below.

Assignment	Points	Due Date	Program Objectives
Participation	15	ongoing	
Weekly Labs	15	ongoing	
Assignment 1: Dublin Core	10	February 13	1, 6
Assignment 2: Record Creation and Value Vocabularies	10	March 13	1, 6

Assignment 3: Application Profiles. Part 1	10	March 27	6, 8
Assignment 4: Application Profiles. Part 2	10	April 17	6, 8
Assignment 5: Final Project	30	May 8	1, 6, 8
TOTAL	100		

In-class Participation (15%)

Much of the course material will be presented in the readings, discussions, and in-class activities. You are expected to do the reading assigned for class and come to class prepared to offer your opinions and insights.

Weekly Labs (15%)

Asynchronous labs are a significant portion of this class. Labs will be conducted weekly, on your own time, and will typically involve the completion of some deliverable. Students are expected to spend roughly one hour a week on lab time.

Assignments 1-4 (40%)

There are four regular assignments that must be submitted before the end of the specified day, via Canvas. Each assignment will be available about two weeks before its due date. It is to your advantage to start as soon as possible so you will have opportunities to seek feedback and revise your responses before the due date.

Final Project (30%)

The final project entails the creation of an application profile, along with supporting documents and examples. The final project builds heavily off of the previous regular assignments, particularly Assignments 3 & 4. During evaluation of your final project I will be checking to see if you've incorporated corrections and feedback provided on previous assignments. To be successful on the final project you should carefully consider the evaluations of your previous assignments and consult with me for further feedback as needed.

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 SCHEDULE/OUTLINE/ASSIGNMENTS/UNITS OF INSTRUCTION

Date	Topic	Readings	Lab	Assignments
Week 1 1/24	Course introduction, Metadata basics	Zeng & Qin 1, 2, Understanding Metadata (NISO)	XML	
Week 2 1/31	Metadata vocabularies, Metadata descriptions, Dublin Core	Zeng & Qin 3, 10.1	Oxygen: Getting started	
Week 3 2/7	Metadata for art and artifacts	CDWA Introduction, Zeng & Qin 10.2	CDWA	Assignment 1 due end of day 2/13
Week 4 2/14	Metadata for archives	Zeng & Qin 10.4, METS Overview	METS	
Week 5 2/21	Metadata for research data, Value vocabularies	Zeng & Qin 10.3, The Getty Vocabularies	AAT	
Week 6 2/28	Metadata schemas	Zeng & Qin 4	Oxygen: Using a schema	
Week 7 3/7	Application profiles	Singapore Framework, ISO/TC 46 SC11 N800, Guidelines for DC Application Profiles	Domain analysis	Assignment 2 due end of day 3/13
Week 8 3/14	<i>SPRING BREAK (NO CLASS)</i>			
Week 9 3/21	Encoding schemas, XSD, DTD	Zeng & Qin 5, W3.org	Oxygen: Generating a schema	Assignment 3 due end of day 3/27
Week 10 3/28	Interoperability, Rights	Zeng & Qin 8, 10.5, Whalen	OAI-PMH	
Week 11 4/4	Linked data, Schema.org	Heath & Bizer	RDF, SPARQL	
Week 12 4/11	Metadata services, Metadata publishing	Zeng & Qin 6	XPATH	Assignment 4 due end of day 4/17
Week 13 4/18	DPLA & EDM	EDM Primer, Introduction to DPLA MAP	Exploring DPLA	
Week 14 4/25	Metadata quality & assessment	Zeng & Qin 7, 10.8	OpenRefine	
Week 15 5/2	Course wrap-up	Zeng & Qin 9	none	Final Project due end of day 5/8