

INFO 5223: Metadata Applications in Digital Repositories

Syllabus | INFO 5223.402 | Fall 2026 | Dr. Mary Burke

last updated: 31 August 2026

Course Overview

Teaching Team:

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Format: 100% online (Canvas and Zoom)

Class Meetings: via Zoom (see Table 1: Schedule)

Office Hours: by appointment

Communication: Canvas Messages, Canvas Announcements, UNT email

Description

Representation and organization of textual information resources and pictorial works and images, as well as collections of these resources, using key item-level and collection-level metadata schemes (Dublin Core DCTERMS, MODS, VRA Core, Dublin Core Collections Application Profile), data content standards, data value standards (various controlled vocabularies, etc.), and data encoding standards (with the focus on XML). Introduction to various other metadata schemes, tools, and technologies for representing and organizing information resources and collections in the digital environment. Exploration of metadata implications for retrieval of information resources and collections.

Prerequisite(s): [INFO 5200 Information Organization](#) or [INFO 5208 Learning Resources Organization](#) or equivalent, or consent of department.

Structure

This course is offered online in a hybrid mode with Class Meetings held via Zoom. The course is organized into 8 learning modules:

1. Introduction to metadata in information organization and retrieval
2. Components of a metadata scheme
3. Data content standards and data value standards
4. Metadata syntax
5. Dublin Core and DCTERMS metadata scheme
6. MODS metadata scheme
7. VRA Core 4.0 metadata scheme
8. Collection-level metadata

Learning outcomes obtained in Modules 1-4 are assessed through Quizzes A and B, the Metadata Research Presentation assignment, and the Portal to Texas History Metadata assignment. Learning outcomes obtained in Modules 5-8 are assessed through the Creating Metadata Records Project.

Students primarily work independently; students work collaboratively as part of the Creating Metadata Records Project.

Objectives

By the end of this course, students will be able to:

1. Identify the functions of metadata.
2. Identify and interpret the components of a metadata scheme.
3. Identify and apply major data content standards and data value standards that guide metadata creation.
4. Explore uses of XML and HTML as syntaxes for encoding metadata.
5. Independently collect information and develop and deliver a presentation on an important metadata-related topic.
6. Interpret and apply metadata guidelines to create and make available to the end-users the item-level metadata in locally developed metadata scheme using online metadata submission forms.
7. Interpret and apply documentation of key standard item-level metadata schemes; compare their strengths and weaknesses.
8. Interpret and apply documentation of the key standard collection-level metadata scheme; evaluate this metadata scheme's strengths and weaknesses.
9. Create item-level metadata in Dublin Core DCTERMS standard metadata scheme in XML syntax.
10. Create item-level metadata in MODS standard metadata scheme in XML syntax.
11. Create item-level metadata in VRA Core 4.0 standard metadata scheme in XML syntax.
12. Create collection-level metadata in DCCAP standard metadata scheme in XML or HTML syntax.

Materials

There is no textbook for this course. However, there are required readings, including lecture documents and slides created by the course developer, Dr. Oksana Zavalina, with associated external readings, and recordings of lectures with further details and examples for each learning module in an interactive form.

Evaluation

Student Perceptions of Teaching (SPOT) is the student evaluation system for UNT and allows students the ability to confidentially provide constructive feedback to their instructor and department to improve the quality of student experiences in the course. According to the [SPOT Calendar](#), in the Fall 2026 semester, the SPOT survey will be available 17 November – 03 December.

Attendance

Attendance and active participation is **only** required for 2 of the 6 Class Meetings: the final meeting, and the meeting for which a student's individual Metadata Research Presentation is scheduled. See Tables 1 and 2 below. Class Meetings will be held via Zoom from 6-7:30pm (US Central) on the following dates:

1. September 16, 2026
2. September 30, 2026
3. October 21, 2026
4. November 04, 2026
5. November 18, 2026
6. December 02, 2026 [**required for all students** as part of the Creating Metadata Records Project]

Table 1: Course Schedule

Date	Activities	Assignments
Week 1: August 17-23	Review Module 0 Start Here & Module 1 Metadata in Information Organization and Retrieval Review Metadata Research Presentation description, confirm assigned topic and date	Introduction discussion Portal to Texas History Editor survey
Week 2: August 24-30	Review Module 2 Components of a Metadata Scheme Continue Metadata Research Presentation	Quiz A
Week 3: August 31-September 06	Review Module 3 Data Content & Value Standards Continue Metadata Research Presentation	
Week 4: September 08-13	Review Portal to Texas History Metadata Exercise description Review Module 4 Metadata Syntax	Metadata Research Presentation draft slides
Week 5: September 14-20	Class Meeting 1 Continue Portal to Texas History Metadata Exercise	Quiz B
Week 6: September 21-27	Review Module 5 Dublin Core & DCTERMS Metadata Review Creating Metadata Records Project description, begin Report 1	Portal to Texas History Metadata Exercise
Week 7: September 28-October 04	Class Meeting 2 Continue Creating Metadata Records Project: Report 1	
Week 8: October 05-11	Review Module 6 MODS Metadata Scheme Review Creating Metadata Records Project description, begin Report 2	Creating Metadata Records Project: Report 1

Date	Activities	Assignments
Week 9: October 12-18	Continue Creating Metadata Records Project: Report 2	
Week 10: October 19-25	Class Meeting 3 Review Module 7 VRA Core 4.0 Metadata Scheme Review Creating Metadata Records Project description, begin Report 3	Creating Metadata Records Project: Report 2
Week 11: October 26- November 01	Continue VRA Core 4.0 metadata for the Creating Metadata Records Project: Report 3	
Week 12: November 02-08	Class Meeting 4 Review Module 8 Collection-Level Metadata Begin Creating Metadata Records Project (Team)	Creating Metadata Records Project: Report 3
Week 13: November 09-15	Continue Creating Metadata Records Project	
Week 14: November 16-22	Class Meeting 5 Continue Creating Metadata Records Project	
Week 15: UNIVERSITY BREAK		
Week 16: November 30- December 06	Class Meeting 6 NOTE: attendance required as part of the Creating Metadata Records Project	Creating Metadata Records Project Team Presentation

Table 2: Assignments and Requirements

Category	Points	Grade %
Quizzes: Quiz A is the Module 1 and Module 2 assessment, aligned with course Learning Objectives no. 1 and 2. Quiz B is the Module 3 and Module 4 assessment, aligned with course Learning Objectives no. 3 and 4.	14	14%
Metadata Research Presentation: This assignment, aligned with course Learning Objective no. 5, allows students to develop a deeper understanding of a metadata scheme or relevant fundamental concept or technology and formally present their research.	20	20%
Portal to Texas History Metadata Exercise: In this practical exercise, aligned with course Learning Objective no. 6, students get real-life metadata creation experience by contributing to a digital repository and following guidelines for a locally-developed metadata scheme.	15	15%
Creating Metadata Records Project: This major project is aligned with course Learning Objectives no. 7-12. Students will create metadata records to represent information resources and collections in various metadata schemes: 3 individual written reports of item-level metadata records (DC, MODS, VRA) 1 team presentation of collection-level metadata record (DCCAP)	42	42%
Participation: - Introduction discussion - Attendance in two (2) online class meetings - Completion of the Portal to Texas History Email survey - Peer Evaluation Form (Creating Metadata Records Project)	9	9%
Extra Credit: SPOT evaluation survey (if 80% participation target is achieved)	2	2%
TOTAL:	102	102%

Course Policies

Grading

The point totals used to calculate the final semester grade in INFO 5223 are as follows:

- A = 90-102
- B = 80-89
- C = 70-79
- D = 60-69
- F = 0-59

INFO 5223 assignments are designed to provide students with necessary practical experience with the course topics and to evaluate the extent to which a student met the learning objectives of the module by developing the module-related knowledge and skills through completion of required readings and

activities. Your grade for each assignment will be shown in the course gradebook as the percentage of possible points earned (see above for the maximum points possible for each assignment in this course). For example, if the assignment is worth 15 points and a student received 13.5 points for this assignment, the grade will be shown as 90% of possible points (i.e., $13.5/15 \times 100\% = 90\%$).

A grade of A signifies excellent work beyond basic requirements; B signifies adequate work in response to the requirements; and grades F to C signify that students' work does not meet the basic requirements to a greater or smaller degree. Substantive content of assignments will be considered, including completeness, accuracy, and adherence to the assignment guidelines, knowledge of appropriate concepts, reasonable conclusions or solutions, and quality of writing (organization and clarity of expression, correct grammar, punctuation, and spelling).

In line with the UNT Honor Code, all work you submit must be your own. Using Generative AI tools to complete assignments will be considered a violation of academic integrity, as it prevents the development of your own skills, and will be addressed according to the [Student Academic Integrity policy](https://policy.unt.edu/policy/06-003) (<https://policy.unt.edu/policy/06-003>).

Grade of Incomplete & Withdrawal

[UNT policy regarding a grade of Incomplete \(I\)](#) is explained on the UNT Registrar Office website. In addition, the [UNT Academic Calendar](#) which lists specific deadlines regarding the grade of Incomplete, including the earliest possible date to request a grade of Incomplete (usually, the last 4 weeks of the semester). A grade of Incomplete will be given only for a justifiable reason AND only if the student is passing the course as of the date when a grade of Incomplete is requested. The student is responsible for contacting the instructor to request a grade of Incomplete and to discuss requirements for completing the course. Students enrolled in UNT Department of Information Science courses requesting a grade of Incomplete must complete and submit via email to course instructor the following [Application for Incomplete Form](#) at least 5 business days before the end of semester. Students who are granted a grade of Incomplete are required to clear it by completing and submitting the remaining coursework for review and approval by instructor and UNT administration within one (1) academic year. If a grade of Incomplete (I) is not removed within this time frame, the student's grade will automatically revert to Fail (F). The UNT Graduate Catalog describes and explains withdrawal policies and deadlines. The [UNT Academic Calendar](#) lists specific deadlines regarding withdrawal from an individual course with or without an automatic grade of Withdraw (W), as well as the last date to [withdraw from the entire semester](#).

Assignments and Late Work

Due dates and instructions for each assignment are found in the Assignments section of the course website. Extra credit opportunities other than those listed in **Table 2** will not be provided.

All assignments must be submitted on time. One-half grade (i.e., 5 points out of 100 or 5%) will be deducted for each day when an assignment is late (i.e., not submitted by the date/time specified). For example, for an assignment that would earn a grade of 20 on a 25-point scale (B) if submitted on-time, the grade will be reduced to 15 (D) if the assignment is submitted 4 days after the due date ($20 - 0.25 \times 5 \times 4 = 15$).

An exception can be made if a student cannot meet the deadline for a serious reason AND notifies the instructor promptly (if possible before the due date). Please keep in mind that any UNT semester

officially ends at 5:00 pm on the Friday of the last week of semester. Unless a student officially requests (and qualifies for) a grade of Incomplete, submissions received after that cut-off time will NOT be accepted and graded, and a student will automatically receive a grade of zero (0) for these submissions.

Technical Requirements & Skills

This course has digital components; to fully participate in this class, students will need:

- Access to a device on which you can install software
- XML editor of your choice (e.g., [Sublime Text](https://www.sublimetext.com/) (<https://www.sublimetext.com/>))
- Free version of [Adobe Acrobat Reader](https://get.adobe.com/reader/) (<https://get.adobe.com/reader/>)
- Microsoft Office 365 Suite ([available for free for UNT students](#))
- Reliable internet access, speakers or headphones, and microphone

Course-specific technical skills needed to succeed include:

- Using Zoom and Canvas. See also [Canvas Technical Help](#).
- Downloading and installing software
- Formatting documents (e.g., indenting paragraphs or lines of code, copying and pasting text and images, creating, naming, and saving files)

UNT's [IT Help Desk](#) offers support for Canvas and other technological issues. Contact them via helpdesk@unt.edu or (940) 565-2324 or on campus at Sage Hall 330. Students will be informed of any additional requirements needed to access course content. Information on how to be successful in a digital learning environment can be found on UNT's [Online Student Experience website](#).

Philosophy Used in Developing This Course

This section describes the teaching philosophy that guided development of INFO 5223 by [UNT Professor Dr. Oksana L. Zavalina](#). Courses which provide a balance between theory and practice and offer a strong “learning by doing” component are the most efficient in achieving student learning objectives. The INFO 5223 course reflects course developer’s major research interests. Step-by-step examples are provided that allow students to practice the skills that will be assessed in the course assignments. In addition to seminal works, course materials incorporate the results of the most recent research and practical developments in the area. This includes completed and ongoing relevant research projects that UNT faculty are or were involved with.

Course materials are developed to accommodate visual learners as well as auditory learners, so while reviewing the online lecture, associated external readings, and video recording of the instructor presentation for each module is required for everyone, it is each student’s whether to view the instructor presentation slides, to listen to the instructor presentation recording audio file, or to review the transcript of the recording generated by Zoom.

The clear structure of INFO 5223 course, where each learning module and each activity build on the previous ones, is intended to further improve communication and result in effective learning. To succeed in this course, please make sure not to skip any learning modules and assignments. Complete the learning in the order in which the course is organized. INFO 5223 students are provided with timely,

detailed, and constructive feedback throughout the semester. It is your responsibility as a student to examine this feedback and to learn from it.

The timeliness of course materials is very important. INFO 5223 course materials are continuously updated based not only on the newest developments in the field but also on feedback from students and graduates. There are multiple ways to share such feedback, including through the UNT SPOT survey that all students are encouraged to complete at the end of semester. To motivate participation in the survey and submission of constructive feedback on the course, each INFO 5223 student who is active in the course is given extra credit points (2% of semester grade) if SPOT survey participation rate meets or exceeds the 80% target.

UNT Policies

Student Academic Integrity Policy

Academic Integrity Standards and Consequences. According to [UNT Policy 06.003](#), Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

Americans with Disabilities Act (ADA) Policy

The University of North Texas makes reasonable accommodations for students with disabilities. To request accommodations, you must first register with the Office of Disability Access (ODA) by completing an application for services and providing documentation to verify your eligibility each semester. Once your eligibility is confirmed, you may request your letter of accommodation. ODA will then email your faculty a letter of reasonable accommodation, initiating a private discussion about your specific needs in the course. You can request accommodations at any time, but it's important to provide ODA notice to your faculty as early as possible in the semester to avoid delays in implementation. Keep in mind that you must obtain a new letter of accommodation for each semester and meet with each faculty member before accommodations can be implemented in each class. You are strongly encouraged to meet with faculty regarding your accommodations during office hours or by appointment. Faculty have the authority to ask you to discuss your letter during their designated office hours to protect your privacy. For more information and to access resources that can support your needs, refer to the [Office of Disability Access](#) website.

Prohibition of Discrimination, Harassment, and Retaliation

The University of North Texas (UNT) prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The University takes active measures to prevent such conduct and investigates and takes remedial action when appropriate. For more information, see: [Policy 16.004](#).

Emergency Notification & Procedures

UNT uses a system called [Eagle Alert and @UNTEAGLEALERT](#) to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

Retention of Student Records

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Canvas online system, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student's records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University's policy. See [UNT Policy 10.10, Records Management and Retention](#) for additional information.

Acceptable Student Behavior

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classroom, labs, discussion groups, field trips, etc. Visit UNT's [Code of Student Conduct](https://policy.unt.edu/policy/07-012) (<https://policy.unt.edu/policy/07-012>) to learn more.

Survivor Advocacy

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence Against Women Act) and UNT policies prohibit discrimination on the basis of sex, and therefore prohibit sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking, and/or sexual assault, there are campus resources available to provide support and assistance. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off campus. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at [940-565-2648](tel:940-565-2648). Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at oeo@unt.edu or at [940-565 2759](tel:940-565-2759).

International Students on F-1 Visas Taking Distance Education Courses

Federal regulations state that students may apply only 3 fully-online semester credit hours (SCH) to the hours required for full-time status for [F-1 Visa \(DOC\)](#) holders. Full-time status for F-1 Visa students is 12 hours for undergraduates and 9 hours for graduate students. To read detailed Immigration and Customs

Enforcement regulations for F-1 students taking online courses, please go to the [Electronic Code of Federal Regulations website](#).

Use of Student Work

A student owns the copyright for all work (e.g., software, photographs, reports, presentations, and postings) he or she creates within a class and the UNT is not entitled to use any student work without the student's permission unless all the following criteria are met:

- The work is used only once.
- The work is not used in its entirety.
- Use of the work does not affect any potential profits from the work.
- The student is not identified.
- The work is identified as student work.

If the use of the work does not meet all of the above criteria, then the University office or department using the work must obtain the student's written permission by using the UNT System Permission, Waiver and Release Form.

Transmission and Recording of Student Images in Electronically-Delivered Courses

1. No permission is needed from a student for their image or voice to be transmitted live via videoconference or streaming media, but all students should be informed when courses are to be conducted using either method of delivery.
2. In the event an instructor records student presentations, they must obtain permission from the student using a signed release to use the recording for **future** classes in accordance with the guidelines above.
3. Instructors who video-record their class lectures with the intention of re-using some or all of recordings for future class offerings must notify students on the course syllabus if students' images may appear on video. Instructors are also advised to provide accommodation for students who do not wish to appear in class recordings.
4. No notification is needed if only audio and slide capture is used or if the video only records the instructor's image. However, the instructor is encouraged to let students know the recordings will be available to them for study purposes.

INFO 5223 employs lecture capture technology to record class sessions. Students may occasionally appear on video. The lecture recordings will be available to you for study purposes and may also be reused in future course offerings. INFO 5223 student presentations made in class are recorded for your use during the semester, but will NOT be reused in future course offerings.

Synchronous (live) sessions in courses will be recorded for students enrolled in specific class sections to refer to throughout the semester. Class recordings are the intellectual property of the University or instructor and are reserved for use only by students in the class and only for educational purposes. Students may not post or otherwise share the recordings outside the Canvas Learning Management System in any form. Failing to follow this restriction is a violation of the UNT Code of Student Conduct and could lead to disciplinary action.