

# INSC 590: Knowledge Organization Systems

## COURSE INFORMATION

### INSC 590: Knowledge Organization Systems, Spring 2021

University of Tennessee, Knoxville

Class Meetings: Monday & Wednesday, 5:05-6:20 PM ET  
on Zoom (<https://tennessee.zoom.us/j/95991525953>)

Passcode: 930636



### Faculty Contact Information

- Brian Dobreski
- Assistant Professor
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- 865-974-2148
- Office Hours: Thursdays, 1PM 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
- Fax (SIS): 865-974-4667

## COURSE DESCRIPTION

### Description

Systems for organizing words, concepts, and their meanings and relationships. Theory, construction, and assessment of knowledge organization systems including classification, taxonomy, and ontology.

### Additional Information

Knowledge organization systems (KOS) are used to organize concepts, the labels we use to refer to them, and the relationships among them all. KOS include systems such as typologies, dictionaries, authority files, subject lists, thesauri, classifications, and more. Rather than how to use these systems to organize resources, this class will be about how to make and assess the systems themselves. Topics include the theory behind KOS, methods and tools for planning and designing them, and functional and critical approaches to evaluating them. Three KOS in particular will be covered in depth: classification, taxonomy, and ontology.

## Student Learning Outcomes

Students who complete this course will be able to:

- Understand the underlying theory and philosophy behind conceptualization, naming, categorization, and classification
- Develop a critical awareness of social issues involved in representation, organization, and labelling
- Demonstrate the ability to design basic KOS
- Demonstrate the ability to evaluate KOS
- Understand and articulate importance of KOS in larger information domain and applied settings

## Course Design

The course adopts an active learning approach. Students are required to complete all required readings, attend all class lectures, complete graded activities and assignments, and participate in all class activities, including teacher-led and student-led discussions, and small-group and individual activities. Some weeks may include asynchronous, self-paced labs.

## Required Texts

In this course, we do not have required textbook. Class readings are available on the Canvas course site (some are from the recommended texts), downloadable from each class module or available through the UTK Libraries as e-resources.

## Recommended Texts

We have access to both of these online through UTK Libraries, but these would make good additions to your personal collection at some point:

Bowker, G. C., & Star, S. L. (2000). *Sorting things out: classification and its consequences*. Cambridge, Mass.: The MIT Press.

Hedden, H. (2010). *The accidental taxonomist*. Medford, N.J.: Information Today.

## COMMUNICATION

### Email

The best way to reach me is by email ([bdobreski@utk.edu](mailto:bdobreski@utk.edu)). You are welcome to make appointments to meet with me in person or 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.

### 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](mailto:UTKSIS-L@LISTSERV.UTK.EDU)) for messages about closing.

## **ADDITIONAL POLICIES AND POINTS OF INFORMATION**

### **Disabilities that may Impede Learning**

Any student who feels s/he may need an accommodation based on the impact of a disability should contact [Student Disability Services](#) in 2227 Dunford Hall at 865-974-6087, or by video relay at 865-622-6566 to coordinate reasonable academic accommodations.

## **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](http://titleix.utk.edu).

## **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."

## **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 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	
Reading Reflections	20	ongoing	
Assignment 1: Evaluating a Classification	20		1, 8
Assignment 2: Designing a Taxonomy	20		1, 6, 8
Assignment 3: Designing an Ontology	25		1, 6, 8
<b>TOTAL</b>	<b>100</b>		

### 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.

### Reading Reflections (20%)

This course features a heavy emphasis on reading, and I want to make sure you get credit for the work you'll put in here. You'll be writing brief reflections/summaries for everything we read together. This will help foster our discussion and help you keep track of everything we've covered this semester. I'll review all of your recent reflections at three points during the semester (after Weeks 3, 8, & 12).

### Assignments 1-3 (65%)

There will be three individual assignments that must be submitted before a specific date/time via Canvas. The detailed instructions and rubrics will be posted on the canvas site.

## 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**

<b>Date</b>	<b>Topic</b>	<b>Readings</b>	<b>Assignments/Activities</b>
Week 0 (Jan. 20)	Course Introduction	none	
Week 1 (Jan. 25, 27)	Knowledge, Knowledge Organization, & KOS	Zeng, Mazzocchi, Gilchrist	
Week 2 (Feb. 1, 3)	Concepts & Naming	Olson, Hjørland, Bowker & Star 7	
Week 3 (Feb. 8, 10)	Classification: Theory, History, & Philosophy	Aristotle, Mervis & Rosch, Beghtol	Reading Reflection Check-In #1
Week 4 (Feb. 15, 17)	Classification: Structures & Notations	Kwaśnik, Satija, La Barre	
Week 5 (Feb. 22, 24)	Classification: Evaluation	Bowker & Star 6, Beghtol	
Week 6 (Mar. 1, 3)	Taxonomy: Overview & History	Hedden 1, Taxobook v. 2 (Ch. 1-2)	Assignment 1: Evaluating a Classification (due 3/7)
Week 7 (Mar. 8, 10)	Taxonomy: Design	Hedden 3 & 4	
Week 8 (Mar. 15, 17)	Taxonomy: Application & Evaluation	Szopinski	Reading Reflection Check-In #2
Week 9 (Mar. 22, 24)	Unofficial Break Week!		
Week 10 (Mar. 29, 31)	Ontology: Overview & History	Biagetti, SIOC Specification	Assignment 2: Designing a Taxonomy (due 4/4)
Week 11 (Apr. 5, 7)	Ontology: Design. Part 1	Noy & McGuiness, Kronk & Dexheimer	
Week 12 (Apr. 12, 14)	Ontology: Design. Part 2	none	Reading Reflection Check-In #3
Week 13 (Apr. 19, 21)	Ontology: Application & Evaluation	Poveda-Villalon et al., Brank et al. (no reflections)	
Week 14 (Apr. 26, 28)	Course Review	none	Assignment 3: Designing an Ontology (due 5/2)

