

INLS 520: Organization of Information Fall 2023

Basic information

Date and time: Mondays and Wednesdays, 1:25 p.m. to 2:40 p.m.

Location: Manning 208

Instructor information

Instructor: Melanie Feinberg

Pronouns: She, her, hers

E-mail: mfeinber@unc.edu

Office: Manning 024 (on the garden level. aka basement)

Student hours: Wednesdays, 3 p.m. to 4 p.m., in my office, or by appointment via Zoom

Introduction

In INLS 520, we examine fundamental concepts of organizing systems. These concepts transcend particular implementations or professional contexts. INLS 520 will help you to understand, use, explain, create, assess, and interrogate any organizing system. You will be able to use what you learn in INLS 520 in all your classes at SILS, and in all information professions—and throughout your daily life as well.

Organizing systems attempt to make an unruly, messy, and ambiguous world appear systematic and orderly—**but they fail, every time.** For INLS 520, this means that easy answers are impossible, and you cannot find refuge in following rules. Some of you may find this to be disquieting. Ultimately, however, I hope that you will also find inspiration in this state of affairs. The data that we create with our organizing systems will always be somewhat terrible, but we likewise have the power to shape and change it, in ways both large and small.

Learning objectives

At the end of this course, you will *understand*:

- Elements of organizing systems:
 - Things (entities, resources, items, phenomena...).
 - Categories (attributes, dimensions, properties, elements, fields...).
 - Values (terms, tags, descriptors, categories...).
 - Relationships (between things, between categories, between values).
- The complex integration of organizing systems throughout our forms of life—social, cultural, scientific, technical.
- The inherent instability, ambiguity, and arbitrariness of any organizing system.

At the end of this course, you will *be able to*:

- Design and implement an organizing system.
- Explain how organizing systems work.
- Critically interrogate how organizing systems present the world around us.

Course materials

We will use the Canvas learning management system.

All course materials will be available in Canvas modules. Readings, class plans, and other materials will be posted each week, typically on Wednesday afternoons.

Course structure

Our time in class will focus on discussion, games, and other forms of interaction. You will be expected to have read the assigned materials before class and be prepared to talk about them. When possible, recorded lectures will be made available with the readings, to help prepare for class (rather than delivered in class).

Assigned work will be submitted via the Assignments area of Canvas, and complete instructions for all assigned work will also be available there.

Assigned work, grading, and assessment

Assigned work

There are four course requirements:

- Three course projects.
 - Descriptive schema.
 - Taxonomy.
 - Telling and retelling a data story.
- Participation (collegiality points).

An overview of the project and participation requirements is below.

Complete instructions for all assigned work, including deliverables and criteria for success, are available in the Assignments area of Canvas.

Assessment and grading for graduate students

In alignment with Graduate School policies, graduate students will be assessed on a Pass/Fail basis.

To receive a P, you must:

- Complete the three course projects to minimum proficiency standards, as assessed via each project's documented success criteria and set of deliverables.
- Accrue eight collegiality points over the course of the semester and document these in a brief report.

All submitted work will receive written comments. My review will be informed by each project's documented success criteria. *There will be no scores or grades.*

If an assignment

- Does not include the specified set of deliverables
- Fails to fulfill the documented success criteria to a minimum standard of proficiency

the assignment must be revised and resubmitted in order to obtain a P. (This kind of problem typically involves some misunderstanding of the success criteria or deliverables.) Should this occur, I will explain the problem and provide written guidance for a successful resubmission.

Assessment and grading for undergraduate students

In alignment with the UNC registrar's grading policies for undergraduates, undergraduate students will be assessed on an A-F scale.

All four course components will be worth 100 points, for 400 total possible points.

- For each of the three projects, points will be divided as equally as possible amongst the documented success criteria for each project.
- For participation, you will receive 10 points for each documented collegiality point, up to a maximum of 100 points.

Course projects can be revised and resubmitted; resubmissions will be rescored according to the same success criteria. Any resubmissions must be completed by the end of the day on Wednesday, December 6.

Final grades for undergraduates will be assigned according to the following schedule:

A	375 to 400
A-	360 to 374
B+	348 to 359
B	336 to 347
B-	320 to 335
C+	308 to 319
C	296 to 307
C-	280 to 295
D+	268 to 279
D	240 to 267
F	<240

Projects overview

The three course projects provide an opportunity to apply the concepts of information organization in practice.

- In the descriptive schema project, you will design specifications for creating data about a set of things.
- In the taxonomy project, you will define and relate a set of categories that encapsulate a topic area.
- In the telling and retelling a data story project, you will explain how an element of an organizing system characterizes the world (how it "tells a story") and you will devise a new way of structuring that organizing system to characterize the world in a different way ("retelling the story").

To explain how these projects relate to each other, let's think about the domain of *superheroes*, such as Magneto, Green Lantern, and the Wonder Twins.

- *In the descriptive schema project*, you'd define a set of characteristics that you wanted to describe superheroes with, and you'd develop instructions for creating data according to your specifications. For instance, you might describe superheroes with characteristics like Name, Place of Origin, and Superpowers.
- *In the taxonomy project*, you'd take a single characteristic from your schema—let's say, Superpowers, which can involve many different *kinds* of powers—and think about how those different *kinds* might be related. You will develop a *hierarchical structure* that illustrates some of these relationships. For instance, some superpowers manifest through mental actions (like telepathy) and other superpowers manifest through physical actions (like flight). In turn, some physical superpowers might involve different kinds of locomotion (flying, running) while other physical superpowers might involve kinds of transformation (turning invisible, shapeshifting). A taxonomy of superpowers would define and relate these kinds of *classes* (mental actions, physical actions, locomotion, transformation, flying, running, shapeshifting, invisibility).
- *In the telling and retelling a data story project*, you'd take some part of an existing organizing system for superheroes and explain how it characterizes the world in a certain way. Then you'd redesign that part of the existing organizing system so that it characterizes the world in a different way. For instance, in the the online Superhero Database (<https://www.superherodb.com/>), superhero creators are *organizations*, usually corporations. Additionally, superheroes are part of *universes* that typically include other superheroes whose copyright is held by the same corporation. This way of describing superheroes emphasizes their status as intellectual property. But superheroes don't have to be described according to their corporate associations; a retelling of this data story might focus on the writers and artists who brought a superhero into being, rather than the corporation that might have employed those writers and artists.

You'll be able to customize each project according to your own interests—you can define your own set of things for the descriptive schema, identify your own topic area for the taxonomy, and select your own real-world organizing system for the telling and retelling. (And, while I used superheroes as a common domain for my example, that was just for purposes of illustration: you can select a different focus for each project.)

Complete instructions for each project, including a list of deliverables and criteria for success, will be available in Canvas.

Participation overview (collegiality points)

We're all in this together! In a course that emphasizes interactive learning, it's important that we all find ways to contribute to our mutual learning and well-being. *Collegiality points* constitute our mechanism for ensuring baseline participation from everyone.¹

- *For graduate students*: To pass the class, you must acquire *at least eight* collegiality points throughout the semester.
- *For undergraduate students*: You will receive 10 points for each collegiality point you accrue, for a maximum of 100 points.

Some ways to obtain collegiality points include:

- *Consistently* doing the assigned reading and being prepared for class discussion.
- *Generally* fulfilling the discussion success criteria (these criteria are documented in Canvas).

¹ The idea for collegiality points is liberally adapted from Max Liboiron via Megan Winget.

- Facilitating a small-group discussion: getting the conversation started, keeping the group on task, ensuring that everyone has a chance to speak, synthesizing ideas, and so on.
- Serving as the “devil’s advocate” in a small-group discussion by articulating opinions or objections that you do not personally share, but that extend the conversation in interesting ways. (This involves acting as the persistent devil’s advocate for an entire class, rather than just making a single remark.)
- Acting as the reporter for a small-group discussion, presenting what the group talked about to the class as a whole.
- Contributing an idea, comment, or question to a discussion that involves the entire class (rather than a small group).
- Writing up thoughts about a course reading, lecture, discussion, or other activity as a Canvas discussion post.
- Reflecting on a recent news item or everyday experience that expands upon topics germane to the class as a Canvas discussion post.
- Sharing your knowledge with others: for example, helping to explain a reading, discussion topic, or something else from class to a colleague (either as part of a small-group interaction or outside of class).
- Soliciting knowledge from others: for example, asking a fellow student (or me) for help when you don’t understand something (again, either as part of class or outside of class).

Have an idea for some other way to obtain collegiality points? Great! Propose your idea to me and we’ll see about adding it to the list.

I will not keep track of your collegiality points; you will. At the end of the semester, you will submit a report that lists what you’ve done. This will not be onerous if you keep track throughout the semester.

Also note that, although I encourage you to perform these activities whenever you can, your report will only document your *required* collegiality points (for graduate students, eight items; for undergraduate students, up to ten items). So your report can just tell me your *favorite* collegiality items (or the *first* ones that you completed), and *not* all 45 things that you did. In other words, if you want, you can get this report completed early in the semester and be done with it (as long as you don’t have more than two unexcused absences, as explained below).

Attendance

In a class that prioritizes student interaction, being absent affects the learning experience of others. Therefore, attendance is required.

There are two types of absences: excused and unexcused.

Unexcused absences

Everyone is allowed two unexcused absences for the semester. An unexcused absence is when you are away from class for any reason.

If you have more than two unexcused absences in the semester, you must obtain one extra collegiality point for each unexcused absence. (For instance, if you are a graduate student with

4 unexcused absences for the semester, you will need 10 collegiality points, rather than 8, in order to get a P. If you are an undergraduate student with 4 unexcused absences for the semester, you will need 12 collegiality points, rather than 10, to obtain the full 100 possible points for participation. If you are an undergraduate student with 4 unexcused absences and accrue 10 collegiality points, you will earn 80 points out of 100 for participation.)

You do not need to inform me of unexcused absences.

Excused absences

If you have a good reason to miss class, you can request an excused absence. You don't need to obtain an extra collegiality point for an excused absence.

Acceptable reasons for excused absences include:

- Ill health (physical or mental).
- Family emergencies (your child is sick, your partner is in the hospital).
- Accidents and unanticipated disasters (your apartment floods, your car is stolen, etc).
- Religious holidays.

To obtain an excused absence, send me an e-mail with your reason for being absent. *Do not go into detail about your personal circumstances, just tell me the basic reason (e.g., "I would like an excused absence because I'm not feeling well today," "I would like an excused absence because I will be observing Eid-al-Fitr," etc.).*

As a rule of thumb, if it would seem wrong for me to cancel class for that reason, it's probably not an acceptable excuse.

Keeping track of absences

You are responsible for tracking your own unexcused absences and adjusting your collegiality points accordingly.

Misrepresenting your unexcused absences would be a violation of the honor code (see the course policies below for more about the honor code).

Due dates

Project 1: Descriptive schema	Wednesday, September 27
Project 2: Taxonomy	Wednesday, November 1
Collegiality points report	Wednesday, December 6
Project 3: Telling and retelling a data story	Saturday, December 9, at noon (The
	scheduled time of the final exam, as per
	UNC policy)

All assignments should be submitted as a PDF document in the Assignments area of Canvas.

Late work

There are no penalties for late work. Should you need extra time to complete an assignment, simply send me an e-mail with your new due date. In your e-mail, you don't need to explain your circumstances or apologize. Just inform me when you plan to submit the work.

Late work will receive fewer comments than work submitted on time, and it may take longer for late work to be assessed. Excessively late work may receive no comments at all.

Because UNC has strict deadlines for final grade submission, late final projects may necessitate that you receive an IN (Incomplete) grade.

Semester Calendar

The following calendar displays all the assigned reading for the entire semester. (It's possible that I'll make some small adjustments, but this should enable you to plan ahead in a reasonable manner.)

All readings are available via each week's module in Canvas. However, although our final reading—Mark Doty's *Still Life with Oysters and Lemon*—is provided as an electronic resource via UNC Libraries, I recommend purchasing a print copy if you can. It's just nicer in print! (You can get it via Amazon or other sources.)

Date	Themes	Readings
Monday, August 21	Introduction	Syllabus
Wednesday, August 23	Thinking about things, systematically	<ul style="list-style-type: none"> Kent, 1978
Monday, August 28	Thinking about things, systematically (continued)	<ul style="list-style-type: none"> Wilson, 1968 Buckland, 1997 <p><i>Optional</i></p> <ul style="list-style-type: none"> Feinberg, 2022 (chapter 3)
Wednesday, August 30	Thinking about things, practically (attributes and values)	<ul style="list-style-type: none"> Handout (attributes and values) Gilliland, 2015 ANSI/NISO, 2013
Monday, September 4	<i>Labor Day holiday; no classes scheduled</i>	
Wednesday, September 6	Thinking about things, cognitively	<ul style="list-style-type: none"> Lakoff, 1987
Monday, September 11	Thinking about things, culturally	<ul style="list-style-type: none"> Basso, 1996 Zerubavel, 1991
Wednesday, September 13	Thinking about things, practically (identifiers and disambiguation)	<ul style="list-style-type: none"> Coyle, 2006 Handout (disambiguation)
Monday, September 18	Thinking about things, scientifically	<ul style="list-style-type: none"> Ereshfsky, 2007
Wednesday, September 20	Descriptive schema project formative review	
Monday, September 25	<i>UNC wellbeing day; no classes scheduled</i>	
Wednesday, September 27	Coordinating our thinking about things	<ul style="list-style-type: none"> Bowker and Star, 2000
Monday, October 2	Coordinating our thinking about things (continued)	<ul style="list-style-type: none"> Star and Griesemer, 1989 <p><i>Optional</i></p> <ul style="list-style-type: none"> Shavit and Griesemer, 2017
Wednesday, October 4	Putting things together, practically (taxonomic structure)	<ul style="list-style-type: none"> Handout (classification basics) <p><i>Optional</i></p> <ul style="list-style-type: none"> Feinberg, 2022 (chapter 5)
Monday, October 9	Putting things together: for what purpose? A traditional view	<ul style="list-style-type: none"> Rayward, 1994
Wednesday, October 11	Putting things together, practically (faceted structure)	<ul style="list-style-type: none"> Handout (faceted classification)
Monday, October 16	Putting things together: on what basis? A traditional view	<ul style="list-style-type: none"> Mai, 2011
Wednesday, October 18	Putting things together, practically (equivalence relationships and nomenclature)	<ul style="list-style-type: none"> Handout (equivalence) Handout (nomenclature) <p><i>Optional</i></p> <ul style="list-style-type: none"> Feinberg, 2022 (chapter 6)

Date	Themes	Readings
Monday, October 23	Putting things together: on what basis? Another view	<ul style="list-style-type: none"> • Lee, 2012
Wednesday, October 25	Putting things together: on what basis? A third view	<ul style="list-style-type: none"> • Littletree, Belarde-Lewis, and Duarte 2020
Monday, October 30	Taxonomy project formative review	
Wednesday, November 1	Putting things together, automatically	<ul style="list-style-type: none"> • Rieder, 2017
Monday, November 6	Telling and data stories, comparatively	<ul style="list-style-type: none"> • Clifford, 1991 • Cvetkovich, 2003
Wednesday, November 8	Telling data stories, practically (explaining an organizing system)	
Monday, November 13	Telling data stories: comprehending facts	<ul style="list-style-type: none"> • D'Ignazio and Klein, 2020 • Haider and Sundin, 2019
Wednesday, November 15	Retelling data stories: practically (redesigning an organizing system to present an alternate account of the world)	
Monday, November 20	Telling data stories: design justice	<ul style="list-style-type: none"> • Costanza-Chock, 2020
Wednesday, November 22	<i>Thanksgiving holiday; no classes scheduled</i>	
Monday, November 27	Telling data stories: mushrooms	<ul style="list-style-type: none"> • Tsing, 2015
Wednesday, November 29	Telling data stories: mortality	<ul style="list-style-type: none"> • Wernimont, 2018
Monday, December 4	Telling and retelling project formative review	
Wednesday, December 6	Telling data stories: poetry	<ul style="list-style-type: none"> • Doty, 2002

Course policies

Respectful class environment

Learning requires an atmosphere of respect, care, and empathy for each other. This does not mean that we can't disagree; understanding the nature of our disagreements can help us all grow. But disrespect for any person or their identity will not be tolerated.

Asking for help

Information organization is confusing, and it often doesn't seem to make sense. If you are confused, it does not mean you are lazy or stupid. I encourage asking questions in class. Please feel empowered to do so at any time.

Additionally, should you encounter barriers to your learning—whether it's something that I'm doing or not doing, or challenges in your personal circumstances—I am here to help. Please set up an appointment so that we can work together towards your success.

No busy work

No one wants to do boring things for no reason, including me! From my perspective, everything that we do in this class has a purpose that requires thinking. If anything seems like busy work, I probably haven't articulated the purpose well. Be sure to ask for help, so that I can better explain what the task is supposed to achieve.

Instructor communication

For specific, concrete questions, e-mail is the most reliable means of contact for me. If you do not receive a response after a few days, please follow up. It is always helpful if your e-mail includes a targeted subject line that begins with "INLS 520."

For more complicated questions or help, come to student hours (no appointment necessary) or make an appointment to talk with me at a different time.

You are welcome to call me by my first name (“Melanie”). However, you may also use “Dr. Feinberg” or “Professor Feinberg” if that is more comfortable for you.

Student hours

During student hours, I am available to talk with students about anything, without an appointment.

You can use student hours to ask questions, seek help, consult about project work, obtain more information about course topics, or just say hello. You're not bothering me if you attend student hours! I've dedicated this time to talk with students.

During student hours, my office door will be open; simply come in! If I'm talking with someone else, make sure that I know you're there.

Inclusive learning and accessibility

I want everyone to do well in this class. If there are aspects of this course that prevent you from learning or exclude you, please let me know. We'll work together on strategies to meet your needs and satisfy the requirements of the course.

The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in barriers to fully accessing University courses, programs and activities.

Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the ARS Web site (ars.unc.edu) for details.

COVID-19 and mask use

As specified by current UNC community standards, everyone at UNC is encouraged to be fully vaccinated and to receive any eligible boosters.

Mask use is optional in university buildings.

Please do not come to class if you are sick. Any illness is always an excused absence. Although this class will not offer a remote option, class materials will be posted to Canvas so that you will have access to them, even if you are ill.

Mental health resources

All students have access to counseling and other resources through Counseling and Psychological Services (CAPS). CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to caps.unc.edu or visit their facilities on the third floor of the Campus Health Services building.

If you are concerned about a fellow student's wellbeing, one option is to consult the Dean of Students:

<https://dos.unc.edu/urgent-concerns/>

Basic needs

If you are navigating financial, health, or housing challenges that may have an impact on your ability to thrive at UNC, one resource is the Dean of Students, which also oversees the Dean's Emergency Fund: <https://dos.unc.edu/student-support/student-emergency-funds/>

If you are struggling with food insecurity, SILS has a food pantry in the student lounge on the second floor of Manning Hall; feel free to take what you need (or donate items for others).

Carolina Cupboard is another on-campus food pantry: <http://carolinacupboard.web.unc.edu/>

Academic integrity

The UNC Honor Code states that:

It shall be the responsibility of every student enrolled at the University of North Carolina to support the principles of academic integrity and to refrain from all forms of academic dishonesty...

This includes prohibitions against the following:

- Plagiarism.
- Falsification, fabrication, or misrepresentation of data or citations.
- Unauthorized assistance or collaboration.
- Cheating.

All scholarship builds on previous work, and all scholarship is a form of collaboration, even when working independently. Incorporating the work of others, and collaborating with colleagues, is welcomed in academic work. However, the honor code clarifies that you must always acknowledge when you make use of the ideas, words, or assistance of others in your work. This is typically accomplished through practices of reference, quotation, and citation.

If you are not certain what constitutes proper procedures for acknowledging the work of others, please ask the instructor for assistance. It is your responsibility to ensure that the [honor code](#) is appropriately followed. (The [UNC Office of Student Conduct](#) provides a variety of honor code resources.)

The UNC Libraries has online tutorials on [citation practices](#) and [plagiarism](#) that you might find helpful.

Use of generative AI tools, such as ChatGPT

You *may* use generative AI tools as a study aid, but you should be very careful regarding the responses that you might receive. ChatGPT, for instance, is quite apt to provide inaccurate or misleading information. These responses typically sound quite reasonable, even when they are absolutely wrong. Likewise, the prompt that you use can alter a response significantly. For instance, depending on what exactly I ask, ChatGPT will tell me that antelopes can indeed be documents, or that antelopes are organisms and not documents. So beware!

You *may* also use generative AI tools to compare their responses to human ones—for example, to see how ChatGPT would undertake one of our in-class activities, or to compare how ChatGPT would create data with your descriptive schema against how human peer reviewers created data with your descriptive schema. You will also want to be careful here not to assume that the responses of AI tools are “correct.” (I’ve asked ChatGPT to do one of my practice taxonomy puzzles, for instance, and it had a hard time establishing mutually exclusive branches—it also didn’t do a great job of explaining its design rationale.)

Attribution of AI tools for assigned work

For any of our course projects, you must submit a disclosure statement that documents *all* the different ways that you used generative AI tools. As part of your documentation, you should include links to *all* the conversations that you may have had with chat-based tools.

Additionally, if you

- Incorporate direct quotations from an AI tool
- Make use of ideas that an AI tool conveyed to you

you need to cite that material in the text of your essay, just as you would cite any other outside source.

Failure to abide by these rules will be considered a violation of the UNC Honor Code.

Bibliography

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