Welcome to INLS 520 – Organization of Information!

In this version of INLS 520, we will focus on fundamental concepts of organizing systems that transcend particular implementations or professional contexts. We will not restrict ourselves to the traditional concerns of information science, narrowly defined, because organizing systems are not so restricted.

You will be able to use what you learn in INLS 520 in all information professions. INLS 520 will help you to understand, use, explain, create, assess, and interrogate any organizing system.

Although organizing systems are simple in the abstract, they become incredibly complex in practice. This is because organizing systems attempt to make an unruly, messy, and ambiguous world appear systematic and orderly—and, often, the world isn't having it. For INLS 520, this means that easy answers are impossible, and you cannot find refuge in following rules. But this is what makes organizing information fun—and fascinating.

Learning Objectives

At the end of this course, you will understand:

- Basic elements that constitute the structure and arrangement of organizing systems:
 - o Things (entities, resources, items, ..).
 - o Categories (attributes, dimensions, properties, elements, ..).
 - o Values (terms, tags, descriptors, ..).
 - o Relationships (between things, between categories, between values).
- The role of categorization in language and
- The ubiquity of organizing systems and categorization processes and their complex integration throughout our forms of life—social, cultural, scientific,
- The inherent instability, ambiguity, and arbitrariness of any organizing system.

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

- Design an organizing system.
- Implement an organizing system
- Explain how others should implement it.
- Assess an organizing system.
- Explain an organizing system.

Flexibility in uncertain times

The continuing COVID-19 pandemic has affected everyone. We are all operating under a multitude of stressors. I have attempted to adjust the course in a way that I think will be manageable. But if we need to change things around as the semester proceeds, we can. If, at any time during the semester, your personal circumstances require accommodation, do not hesitate to ask for whatever you need.

Course Structure

This is a remote synchronous course. Class sessions will take place once per week, over Zoom.

The course is divided into 14 units. Each unit will begin after our class session and continue until the following class session.

Each unit will incorporate a variety of activities: readings, lectures, discussions, games, work on one of your three class projects. You will perform most of the work for each unit before we meet on Zoom.

Material for each unit will have its own Lessons page in Sakai. All the activities for the unit will be documented on its page. When the new unit begins, access the unit page on Sakai and follow the instructions.

When a unit is over, its page be available in Sakai through the Previous Units tab, so that you can refer to it throughout the semester.

The Semester Calendar (below) provides an overview of each unit.

Class Sessions

Class sessions will primarily involve participatory activities: discussions, games, questions and answers, project work. (Lectures will be prerecorded; we will not have formal lectures during our class sessions.)

To ensure that our sessions run smoothly, preparatory materials will be included as part of the unit. For example, if we have a game, there will usually be an individual part for you to complete before the class session, and then we will continue with a group part together. Discussion questions will be available in advance, so that you are ready to talk about them. There shouldn't be any surprises.

Some of our work in class sessions will take place in groups: in discussion groups and in project groups. At our first class session, we will talk about how you would prefer these groups to work. Some options include:

- 1. One consistent group for everything: all discussions, games, and project work.
- 2. Two consistent groups: one group for discussions and games, and a different group for project work
- 3. A consistent group for project work, and different discussion groups each class session.
- 4. Different groups for each session.

We will also talk about your preferences for my involvement in discussion: whether I visit discussion groups, and how I do so, if I do.

Asking for help

One of the disadvantages of online courses is that it is difficult for me to know when you are confused, and information organization can be very confusing. Unfortunately, this means that you will often need

to ask for help when you don't understand something about course content, expectations, or logistics. Each unit will have its own set of discussion forums for this purpose. Please know that it is not a sign of weakness or stupidity to be confused. Rather, questions indicate an engaged mind. All questions are welcome.

There will also be time during class Zoom sessions to ask questions, both of me and of your classmates. We will experiment with different modalities for this, such as anonymous polls.

No busy work policy

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.

Contacting Me

For specific, concrete questions, e-mail is the most reliable means of contact for me. During the week (Monday 9 a.m. – Friday 5 p.m.) You should receive a response within 24 hours. Weekends or holidays might take 2 or 3 days. If you send a message on Friday and do not receive a response by Monday at noon, please follow up. Please keep this in mind when you are scheduling your own activities.

It is always helpful if your e-mail includes a targeted subject line that begins with "INLS 520."

For more complicated questions, conversation, or assignment feedback, make a Zoom appointment via my calendly link (https://calendly.com/megan-winget/15min).

You are welcome to call me by my first name ("Megan"). However, you may also use "Dr. Winget" or "Professor Winget" if that is more comfortable. Either is fine. "Ma'am," "Miss," and "Mrs." and the unnamed "Professor" are not appropriate.

Assessment

Assessment for this course has four components:

- 1. Schema
- 2. Taxonomy
- 3. Organizing system explanation
- 4. Participation

Complete instructions for each project, including deliverables and criteria for success, appear in at the end of this syllabus. Due dates and submission details can be found in Sakai.

For each project, we will meet, one-on-one for project feedback that will provide my sense of the project's strengths, as well as its opportunities for improvement. My assessment will be based around each project's criteria for success, as listed in each project's detailed instructions.

If, in my judgment, a project does not, for any reason, satisfy the success criteria to a minimum level of proficiency—perhaps you misunderstood the instructions, or a component was missing—I will inform you of the problem, and you will be invited to resubmit the project. (You are likewise welcome to revise and resubmit a project that does meet minimum standards, should you wish to address any of the opportunities for improvement.)

Participation

The class will be mostly based around discussions, in-class activities, and project work, with relatively few lectures. Class participation is a vital component of the course.

The essence of good participation is in helping the class to attain a greater understanding of concepts, readings, and activities. Asking questions and talking about things that you don't understand are *excellent* forms of participation.

Excellent participation typically involves these characteristics:

- Being prepared for synchronous class sessions.
- Enacting a non-judgmental space.
- Demonstrating engagement and attention.
- Supporting each other in mutual learning and growth.
- Exhibiting patience, flexibility, and respect for others.
- Showing interest in others' ideas, experiences, and values.
- Having the courage to embrace discomfort (perhaps by speaking up, perhaps by being silent; perhaps by offering constructive criticism, perhaps by receiving a response gracefully).
- Taking responsibility for our mutual mastery of the course material.

Some of the ways that we can achieve excellence include:

- Getting through the materials for each unit (readings, lectures, activities) before class.
- Attending class.
- Taking the time to participate thoughtfully and deliberately; not being afraid of awkward silences.
- If it's hard for you to speak, make an effort to try it; if it's hard for you to keep quiet, make an effort to listen ("step up/step back" according to your own strengths and challenges).
- Using active listening techniques during class, so that, even when muted in Zoom, it's clear that you are paying attention (for instance, gestures, reaction emojis, chat).
- Demonstrating flexibility and graciousness in the face of technical breakdowns and other distractions.
- Taking advantage of alternate modalities (in Zoom, chat and breakout rooms; forums in Sakai).
- Acknowledging and encouraging the contributions of others; letting people know that you want to hear them (for instance, asking open-ended questions, referencing what others have said, learning each others' names).
- Taking responsibility to ask questions or get help when necessary.
- Approaching disagreement respectfully.
- Providing constructive and useful feedback for project peer reviews.

Participation will primarily be assessed through self-reflection. You will submit both a mid-term and final self-assessment that considers your participation against the criteria for excellence that we define as a class. Instructions for participation self-assessments appear at the end of this syllabus.

Late work

Late work causes problems, both in this class and in professional environments. When you turn something in late, you affect other people whose work is dependent on your own. In this class, late work makes it more difficult for me to organize my time effectively. It also makes the course more difficult for you, because we will move on to the next project immediately, and begin working on the next project as part of our class activities. So I want you to do your best to turn in projects on time. That said, I will accept late work, because it is more important for you to complete a project to your best ability than it is to rush to meet a deadline, and we all occasionally encounter scheduling difficulties. However, I would like as much advance notice as possible of your intent to turn in a project late. You don't need to be anxious about this; just send me an e-mail that briefly explains your circumstances and proposes a reasonable due date for you.

Grades

In uncertain times, we all need to avoid unnecessary anxiety. In this spirit, nothing in this course will be "graded" in the sense of assigning a score, although all your work will be assessed, with the opportunity to improve it, as described above.

Final course grades for graduate students

- All graduate students who complete all four course components to minimum proficiency standards will receive a P.
- If you are unable to complete one course component to minimum proficiency standards, you will receive an L.
- If you are unable to complete two or more course components to minimum proficiency standards, you will receive an F.

Final course grades for undergraduate students

- All undergraduate students will submit a semester self-assessment that makes a case for the final grade they should receive.
- As a baseline, all undergraduates who complete all four course components to minimum proficiency standards will receive a B+.
- In your final self-assessment, you will propose a grade for yourself against this baseline. (I will
 reserve the right to change your proposed grade if you do not have sufficient evidence—e.g.,
 from your project feedback, and from your participation self-assessments—to support it.)
- Instructions for undergraduate self-assessments will be distributed towards the end of the semester.

"Due Dates"

Project 1: Descriptive Schema

• Midterm Participation Self-Assessment

• Project 2: Taxonomy

• Project 3: Organizing System Explanation (Zine)

Final Participation Self-Assessment

Friday October 8, 11:55pm Friday October 8, 11:55pm Friday November 12, 11:55pm Tuesday November 30, 2pm Wednesday December 1, 11:55pm

Descriptive Schema

In this project, you will define a set of things, detailing the set's domain, scope, and means for establishing that one item is different from another. You will then outline a structure of attributes and associated values to systematically describe your set of things.

Next, you will develop documentation to help someone else (not you) to use the schema to describe instances of the things in your set.

To assess your schema and improve it, you will use the schema to describe (i.e., create metadata for) five varied instances of the things in your set. In class, you will further assess your schema by having someone else use it to describe three things. After these assessments, you may decide to revise your schema or the instructions.

Finally, you will write a short essay that reflects on your experience developing and assessing the schema.

This project is NOT designing a database. Your project is merely to instruct other people how to describe a set of things in a systematic way. (A good database design requires this kind of conceptual thinking also, but this project is not specific to a database implementation.)

Project component 1: Your set of things

This part of your project includes three parts:

- Domain
- Scope
- Identification

Domain

You will define a group of things to describe. This could be anything: concrete, physical things, informational things, or abstract, conceptual things. Some examples that students have previously used:

- Spoons
- Historical sites in Beijing
- Programming
- Jerky
- Characters based on Sherlock Holmes in film and television
- Knitting
- Reality television
- Computer viruses
- Yoga poses.
- Visualization
- Representations of "the aztec" in popular culture.

As part of the domain, you will also articulate a *purpose* and associated *target audience* to motivate your description. For example, you might want to help novice knitters find patterns that make nice

gifts, or you might want to interrogate stereotypes latent in "Aztec" imagery. Each situation will suggest a different set of attributes for the same set of things, so define the audience and purpose carefully.

Scope

Here you will clarify what is in, and what is out, of your set of things.

For example, is a yoga pose invented by your teacher a proper yoga pose? Is a ladle a spoon? What are central members of your set of things, and what are peripheral members? What doesn't belong at all? Thinking about central and border cases will help you create attributes that apply equally to all members of your set of things.

Identification

Now that you've clearly defined your scope, you should be able to more precisely define your things.

This involves deciding on a level of *abstraction*: for example, are you organizing individual physical books, or abstract literary expressions that may be manifested in various forms and editions? Are you describing a specific package of jerky or all instances of a certain product?

You also need to think about *parts* and *granularity*: do your things have parts that need to be kept track of? Are your things themselves collections? What about the *persistence* of your things: do they change over time? How much can a thing change before it is no longer the same thing?

Explain how you will distinguish between two different things. Do they have some intrinsic property that you can rely on for identification? Will you need to assign identifiers?

Project component 2: Attributes, value parameters, and documentation

You will articulate a set of 10-15 attributes to define your things in support of your identified audience and purpose.

You will label and document each attribute in sufficient detail so that someone else can assign values for things of the type that you have described. For each attribute, you will set parameters for acceptable values and provide guidelines that show how values should be expressed.

Preliminary assessment

Once you have sufficiently defined your attributes, use the structure that you have developed to preliminarily describe five instances to represent both central and border cases of your entity set.

If there are cases where you are unable to satisfactorily describe an instance, use this as an opportunity to revise the schema and clarify your attribute definitions. (You might even need to clarify the boundaries of your group of entities and sharpen its description.) Then use your revised schema to create five final descriptions for your entity instances.

User assessment

You will further assess your schema by having someone else use it to describe three things.

We will do this in class, but you will include your assessors' results with your final submission.

Project component 3: Reflection essay

Finally, write a brief critical reflection on your design process and resulting product. You might discuss questions such as the following:

- Did designing the schema clarify or complicate any of the ideas we've been reading about in class?
- What was difficult about designing the schema?
- How did you decide which attributes to include in the schema?
- How do you know what makes an attribute good or useful?
- How do you know if you've defined an attribute well?
- What might you keep in mind when designing similar kinds of organizing systems?

These are examples of questions that you might discuss. To create a concise yet cohesive essay, you will need to concentrate on a few design issues of particular relevance to your project. Do not merely answer the questions here.

Note that the point of this reflective essay is *not* to justify why your schema is awesome. Clearly, it is awesome, and you don't need to persuade me of that. Instead, the goal of this essay is to explore how the practical experience of designing a schema provokes insight onto the conceptual foundations of information organization.

Deliverables

Your final assignment should include:

- 1. The domain, scope, and identification information for your set of things.
- 2. Your attribute descriptions, value parameters, and associated guidelines for using the schema to describe the things. The description for each attribute should follow a consistent format. (You can use something similar to the NISO standard for Dublin Core metadata elements or devise your own format. You may use tables if you like)
- 3. Your descriptions of five instances. Use a consistent format for each record (perhaps a table for each instance).
- 4. The instance descriptions created by your peer.
- 5. Your critical reflection. This should be written in narrative form, as a cohesive paper of about 1000 words (3-4 pages).

Assessment criteria

A successful schema will exhibit these characteristics:

- The following are clearly described:
 - o What constitutes a member of the defined set of things,
 - o The schema's audience and purpose, and
 - o How a thing should be identified and distinguished from other, similar things.
- The defined attributes effectively represent the selected things in the context of the described purpose, and the value space effectively represents the extent of the attributes.
 - For example, when describing yoga poses for students, an attribute that indicates level
 of difficulty might be appropriate. However, such an attribute might seem less
 appropriate if describing yoga poses in relation to the history of Hindu thought and

culture. In addition, the values described for the potential level of difficulty attribute for yoga poses should encompass the full range of possibilities at an appropriate level of detail for the audience and purpose of the schema.

- The documentation is sufficient to describe actual things accurately and comprehensively within the context of the selected purpose.
- The critical reflection thoughtfully considers the design process, product, or both, using the experience of creating the descriptive schema to productively engage larger issues of theory and practice (that is, the reflection does not merely summarize or justify the design process or product; it interrogates it).
- All project components follow a logical document structure, are clearly written, and use correct grammar and usage.
- All the project components are present.

Taxonomy Development

In this project, you will develop a taxonomy of categories to relate and arrange the things that you described with your schema. You will document the taxonomy so that someone else can use it to put things within the categories that you define. In class, you will assess the taxonomy and its documentation by having others use the taxonomy to classify things. Finally, you will write a short essay that reflects on your experience developing and assessing the taxonomy.

Project component 1: Taxonomy

First, you will decide on a property to organize your things. This could be an attribute from your schema or it could be a new property.

To create a worthwhile taxonomy, the property that you select must be complex enough so that its values can be arranged in multiple levels of hierarchy. You might need to play around with several ideas before making your final selection.

To begin, select a property that has between 10-15 specific values that can then be organized under more general categories.

Here are some examples.

- If your entity set was *yoga poses*, you might create a taxonomy of *skills* associated with each pose: for example, arm strength, open hamstrings, balance, breath control, mental presence.
- If you entity set was *spoons*, you might create a taxonomy of *materials*: teak, silver, plastic, bone, glass.
- If your entity set was *still-life paintings*, you might create a taxonomy of depicted *objects*: lemons, oysters, goblets, petunias.
- If your entity set was *gardening implements*, you might create a taxonomy of gardening *activities* that the implements are used in: weeding, insect spraying, harvesting, sowing, mulching.

We will work on creating the basic taxonomy structure in class, but here are the fundamental steps for a bottom-up design approach:

- 1. Identify 10-15 specific values—the ones that you would have specified in your descriptive schema.
- 2. For each value, generalize it into a broader category. From lemons, go to citrus, or fruit. From teak, go to wood. From arm strength, go to upper body strength. From insect spraying, go to pest control.
- 3. For each broader category, go up another level, until you get to your top term: skills, materials, objects.
- 4. Now comes the hard part. Arrange, redefine, remove, add, and relabel your categories so that they are organized into proper hierarchical relationships with a single principle of division at each level of the hierarchy. (We'll talk about what this means in class)
- 5. Ensure that your taxonomy follows good design practice for hierarchies: at each level, categories are jointly exhaustive and mutually exclusive, and at a similar level of abstraction. (You'll get a set of design principles in class)

Your final taxonomy should include from 25-40 categories, dispersed throughout all its levels. It should be at least four levels deep (the root term, two intermediate levels, and terminating values). Arrange your final taxonomy in a diagram that shows the relationships between categories. (There is no advantage to creating a fancy diagram.)

Project component 2: Taxonomy documentation

To enable someone else to use your taxonomy to categorize actual things, you need to define each category in your taxonomy and provide guidance about which kinds of things to put where.

Here are some issues that you need to think about:

- Can things be placed into higher-level categories or only at the bottom level? If things can go into higher-level categories, when might this occur?
- Can things go into multiple categories or just one?
- If a thing seems to fall in between or outside the existing categories, where should it go?

Your definitions should explain what the categories mean in the context of your taxonomy. For example, if you had a category of Bone to describe materials that spoons are made of, you would not transcribe the dictionary definition for Bone; that would be silly. You might write something like this:

Bone: Place here any spoons made of animal bone, tusks, teeth, or horn. Do not use Bone for spoons made from shells of marine animals.

Project component 3: reflection essay

Finally, write a brief critical reflection on your design process and resulting product. You might discuss questions such as the following:

- Did designing the taxonomy clarify or complicate any of the ideas we've been reading about in class?
- What was difficult about designing the taxonomy?
- How did you decide which categories to include in the taxonomy?
- How do you know what makes a category good or useful?
- How do you know if you've defined a category well?

• What might you keep in mind when designing similar kinds of organizing systems?

These are *examples* of questions that you *might* discuss. To create a concise yet cohesive essay, you will need to concentrate on a few design issues of particular relevance to your project. *Do not merely answer the questions here.*

Note that the point of this reflective essay is *not* to justify why your taxonomy is awesome. Clearly, it is awesome, and you don't need to persuade me of that. Instead, the goal of this essay is to explore how the practical experience of designing a taxonomy provokes insight onto the conceptual foundations of information organization.

Deliverables

Your final assignment should include:

- 1. A summary of the set of things to be arranged with the taxonomy, and the audience and purpose associated with organizing these things (this may come directly from your schema project).
- 2. A diagram that includes all the categories in the taxonomy and shows their relationships.
- 3. Your taxonomy documentation, including general guidelines and category definitions.
- 4. The category assignments made by your peer tester.
- 5. Your critical reflection. This should be written in narrative form, as a cohesive paper of about 1000 words (3-4 pages).

Assessment criteria

A successful taxonomy will exhibit these characteristics:

- The taxonomy itself includes an appropriate number of categories, arranged in well-formed hierarchical relationships, that follow best practices for taxonomy design and development.
- The selected categories represent the set of things well in the context of its identified audience and purpose (from the descriptive schema).
- The documentation is sufficient to categorize actual things accurately within the context of the selected audience and purpose.
- The critical reflection thoughtfully considers the design process, product, or both, using the experience of creating the taxonomy to productively engage larger issues of theory and practice (that is, the reflection does not merely summarize or justify the design process or product; it interrogates it).
- All project components follow a logical document structure, are clearly written, and use correct grammar and usage.
- All the project components are present.

Explaining an Organization System (Zine)

In this project, you will write and create a zine that explains and compares, in detail, how a set of things is presented in two or three organizing systems in the real world. These should be systems that are available to the public (that is, not the sock drawer in your house). You may organize physical or digital items. Your explanation will have several parts:

- A explanation of the category structure in each organizing system and the kinds of items placed in each.
- An interpretation of each category structure that attempts to understand the ideas it communicates about the entity set.
- A comparison of the different ideas presented in each organizing system.

Your goal in this project is to understand how each organizing system interprets the entity set: how it gives the entity set a particular meaning. Your goal is not to assess the effectiveness of the organizing system for retrieval. It doesn't matter if it's easy or difficult for you to find items in the entity set.

The real-world things

To write a meaningful, detailed, incisive explanation, you will need to focus on just one part of each organizing system. That is why you will keep your analysis to one type of things within the system.

Here are some examples:

- The organization of light fixtures at Home Depot and Target.
- The organization of chips at CVS and Harris Teeter.
- The organization of mystery novels at Flyleaf Books and at Barnes & Noble.
- The organization of Legos at the Southpoint Target and online, via the Lego Website.
- The organization of Japanese woodblock prints at two different online resources.

As with defining an entity set to organize with your schema, you will need to identify a set of things that is specific enough to analyze in depth but broad enough to enable you to say something interesting about it. So the entire supermarket would be too broad, but just the Cheerios would be too narrow. The cereal at the supermarket might be just right.

Explanation of category structure

Your zine will need to explain each category structure that you're investigating. Let's say you're looking at the cereal in a supermarket. Here are the kinds of questions you might ask:

- What different kinds of organizing principles are at play in arranging the cereal? Are the cereals arranged by size, price, brand, primary ingredients, level of sugar? How are these principles deployed—are the most expensive items on the top shelves or the bottom shelves?
- What principles inform the selection of items within the category? How many different kinds of cereal are there? What kinds are represented the most, and what kinds the least?
- Can you define central and peripheral members of the set of "cereal" each supermarket, and on what basis can you make that determination?
- How is cereal related to other entities? What is next to it?

Note that your set of things might be split up into multiple locations within the organizing system: for cereal, there might also be cereal in the bulk section, or in the International section. You'll need to investigate these as well.

When you describe the category structure in your zine, focus on *explaining* it, not documenting it. There is no need to map out or transcribe each item in the cereal section! That would be silly. Your goal is to explain how the cereal section works, not to merely copy it down.

In creating your explanation, make use of the readings and class activities from throughout the semester.

Interpretation of category structure

This is the fun part. What does the category structure that you've explained tell us about the set of things? Here's an example.

Let's say my entity set is Noodles, and I'm looking at the Harris Teeter. Most of the noodles are in a section labeled Pasta that is near the tomato sauce. Indeed, based on the selection and arrangement of pasta varieties, the central idea of "noodle" is oriented around the notion of spaghetti and tomato sauce as a common meal. However, not all the noodles are in the Pasta section. Rice noodles are with other "Asian" foods in the International section. These noodles are not near the tomato sauce. Rice noodles might be similarly shaped to spaghetti, but in the organizing system of the supermarket, they are far away from spaghetti. They are, in a sense, more Asian than noodle. They certainly do not appear to be interchangeable, based on their placement within the organizing system of the supermarket. There are implications to this: the supermarket is saying, in a way, that if you invited a friend over for pasta and served pad kee mao, your friend might be surprised. And yet, aren't rice noodles also noodles? (If you were defining "noodles" as an entity set for your descriptive schema, would you have excluded them?

(Probably not.)

While I encourage you to think deeply about the category structures that you're investigating, *make* sure to ground your interpretation within the evidence provided by your explanation. You need to show how your interpretation arises from that evidence.

In making your interpretation, you should also make use of the readings we've done throughout the semester.

Comparison of different organizing systems

In comparing the two (or three) organizing systems that you are investigating, you might consider the following kinds of questions:

- What are the different ideas presented by each organizing system about the entity set? Are these ideas compatible or incompatible? (For example, rice at the Li Ming Global Mart is the foundation of one's diet—it's in its own section in 25-lb bags. But rice at the Harris Teeter is just an occasional companion)
- Would items from one organizing system take on a different character in the other organizing system? (For example, sugary cereal might be common at the Harris Teeter but uncommon at Whole Foods.)
- Would any items from one organizing system be excluded from the other system? (For example, spaghetti probably doesn't appear at the Li Ming Global Mart, although there might be wheat noodles of similar shape.)

Deliverables

Your final assignment should include:

- 1. A summary of the set of things to be arranged with the taxonomy, and the audience and purpose associated with organizing these things (this may come directly from your schema project).
- 2. A diagram that includes all the categories in the taxonomy and shows their relationships.
- 3. Your taxonomy documentation, including general guidelines and category definitions.
- 4. The category assignments made by your peer tester.

5. Your critical reflection. This should be written in narrative form, as a cohesive paper of about 1000 words (3-4 pages).

Zine details

Your explanations, interpretations, and comparisons should take the form of a zine, a brochure, graphic webpage, only limitation is your imagination. I want you to practice communicating complicated ideas in a limited space, while using images and normal everyday language. A 'zine is This is a small maga**zine**, with different sections, images, textures etc. There are typically 8 pages in a zine, but this does not equal the same number of words you'd have in an 8-page essay. Your zine should have a clearly identified argument and structure. For example, your theme might be "Noodles! Different things to different people!" or, "Cereal! More complicated than you might think!" or, "Have you ever noticed? Salad bars contain very little salad: based on evidence from supermarket buffets."

Although your zine needs to include your explanation of category structure, your interpretation of category structure, and your comparison of organizing systems, it does NOT need to put these into separate sections. You should structure your essay in the way that makes the most sense for your argument.

Peer review

In Week 12-ish, you will submit a draft of your final project to sakai for peer review. This is not the finished zine. This is the text / images you plan to put in the zine. Two people will be assigned to read your draft and provide written and oral feedback on it at the next class session in Week 13.

In your peer review, you will provide written answers to the following questions:

- What is the argument put forth by the zine?
- What is the evidence used to make this argument?
- What going well?
- How can the argument be strengthened?

You will give this feedback to the zine's author. (We will also discuss the drafts in class.)

Your goal in writing peer review feedback is to help make the argument better. Harsh criticism is not helpful; neither is mindless praise. Be honest, constructive, and compassionate. Also be a mindful and attentive reader: your feedback should not direct the writer to do things your way but help the writer to accomplish his or her goals more effectively.

Assessment criteria

A successful organizing system explanation will exhibit these characteristics:

- The zine has a clearly identified topic and argument.
- The explanations of each organizing system are adequate and cogent.
- The interpretations of each organizing system are insightful and well supported by evidence.
- The comparison of the organizing systems is insightful and well supported by evidence.
- Material from course readings and activities is usefully employed to extend the argument.
- The zine follows a logical structure, is clearly written, and uses correct grammar and punctuation.

Policies

An organizing system expresses a particular, partial perspective on the world, and is, by nature, exclusionary. There is no unbiased organizing system. Sometimes, organizing systems are designed to reinforce dominant narratives. Other times, organizing systems are designed to subvert dominant narratives. Likewise, sometimes, organizing systems are more transparent about their goals and assumptions, and sometimes organizing systems obscure their goals and assumptions. These design choices can lead to disparate effects for different groups of people.

It is one of the guiding principles of this class that, in order to design and implement organizing systems responsibly, we need to directly engage with these aspects of organizing systems. We may, therefore, discuss topics that may be challenging or uncomfortable, and upon which we may well disagree.

Accordingly, we must endeavor to maintain an atmosphere of respect, care, and empathy for each other. I will do my best to ensure that our class time is safe for everyone, and I expect you to do your best to ensure this as well.

Inclusive learning

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.

Attendance

I do not take attendance. You do not need to inform me of absences, nor do you need to "make up" anything if you are absent. While participation is an important part of your grade, and attendance is an important part of participation, there are no requirements for mandatory attendance.

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 honorcode is appropriately followed. (The UNC Office of Student Conduct provides a variety of honor code resources.)

The UNC Libraries has online tutorials on <u>citation practices</u> and <u>plagiarism</u> that you might find helpful.

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 their caps.unc.edu or visit their facilities on the third floor of the Campus Health Services building.

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://odos.unc.edu/student-support/student-emergency-fund

If you are struggling with food insecurity and you are in the Chapel Hill area, you can get assisstance through Carolina Cupboard, an on-campus food pantry: http://carolinacupboard.web.unc.edu/

Students with disabilities

Students with disabilities should request accommodations from the UNC office of Accessibility Resources and Service. (https://accessibility.unc.edu/).

Schedule

Week 1 – Introductions (August 24)

Before Class

Read:

• Syllabus

Watch:

- Lecture: Welcome & Syllabus Review
- Lecture: What is Information Science

In Class

- Welcome introductions & check-in
- Orientation: syllabus overview & logistics
- Tour: Sakai!
- Group decisions: what does excellent participation mean to us? Determine class roles (chat monitor, vibes watcher, discussion reporter)

Week 2 - Information, Language and Cognition (August 31)

Before Class

Read:

- Luciano Floridi. 2010. Information: a very short introduction. London: Oxford University Press. (Chapters 2-4, p. 19-59.) (Floridi 2010)
- Phil Agre. 1995. Institutional circuitry: thinking about the forms and uses of information. Information Technology and Libraries 14(4): 225-230. (Agre 1995)

Watch:

- Lecture: What Do We Do? What is Information?
- Lecture: Introduction to Descriptive Schema Project

In Class

- Discussion: Be prepared to discuss descriptive schema ideas with your group
- Discussion: What is "Real" information (according to Floridi?) (According to Agre?)
- Discussion: Temporal nature of information...
- Discussion: Institutional Circuitry
- Q&A: Descriptive Schema?

Week 3 – Information as Interpretation (September 7)

Before Class

Read:

- Lakoff, George. (1987) Women, fire, and dangerous things. Chicago: University of Chicago Press. Ch. 1-4, pp. 5-76. [Dropbox]
- Dupre, John. (2006) Scientific classification. Theory, Culture, and Society 23(2-3): 30-32. [Dropbox]
- Anne Gilliland: Setting the Stage
- Dublin Core Metadata Element Set: <u>User Guide: Creating Metadata</u>
- Handout: Attributes & Values (<u>DOC</u>)

Watch:

- Lecture: Lakoff & Dupre
- Lecture: Metadata / Dublin Core
- In-Class Instructions: Little Danny's Records Metadata

Do:

 Go through Little Danny's Records Instagram account and "create metadata" for records on that site (following instructions from video).

In Class

- Game: Apple Pie: Central Members of a Set
- Discussion: Compare & Contrast -Making Metadata: Little Danny's Records
 - How would knowing the audience and purpose of this metadata help you with this assignment?
 - Who were you making this metadata for?
 - What kinds of information made it to your description? What did not?
 - Did anything surprise you about your colleagues' metadata sets?
- Q&A: Descriptive Schema Project

Schema Proposal is due in Sakai by class time this week!!!

I will respond with any problems by then end of class.

Let's go to a former student's instagram: <u>Little.Dannys.Records</u>

Choose 5 singles. For each, using the <u>Dublin Core Metadata Element Set Documentation</u> to guide your work, create 5 instances of Dublin Core records, with the elements: (create a record of this, so you can share in class).

- Title: The title of the song.
- Creator: Who wrote that song? Who performed the song? (how to differentiate?)
- Identifier: The catalog number
- Date: When was it released
- Publisher: Who "published" the song?
- Description: Please describe the song.
- Language: what language is the song in?
- You may have multiples of the elements if you need it, but try to figure out how to differentiate between types of creators or types of publishers for example, using the elements.

Week 4 – Information as Collective Memory (September 14)

Before Class

Read:

- Zerubavel, Eviatar. (1991) The fine line. Chicago: University of Chicago Press. Chapter 2. [Dropbox]
- Basso, Keith. (1996) Wisdom sits in places: landscape and language amongst the western Apache. (Chapter 2 = required; Chapter 4. = Optional)
- Watson, Helen, David Chambers, and the Yolngu community at Yirrkala. (2008) Signing the land, signing the land. (Available <u>HERE</u>) Look at Exhibits 1 and 4 only.
- Patricia Hapring (2010). Introduction to Controlled Vocabularies: Terminology for Art, Architecture and other Cultural Works. Online Edition:
 - o Chapter 1: <u>Controlled</u> <u>Vocabularies in Context</u>
 - o Chapter 2: What are Controlled Vocabularies?
 - o Chapter 7: <u>Constructing a</u> <u>Controlled Vocabulary</u>
- XKCD. Color Survey Results (2010) http://blog.xkcd.com/2010/05/03/color-survey-results/
- * Andrews, I. (2021, July 23). Assigning Genre: Industry Insiders' Perspective. https://www.ilona-andrews.com/2021/assigning-genre-industry-insiders-perspective/ (optional)

Watch:

- Lecture: Controlled Vocabularies
- Instructions: Making a Controlled Vocabulary

In Class

- Discussion: What are some examples from daily life that support the Zerubavel's thesis? Thinking about some of these examples, what are advantages and disadvantages of creating arbitrary separations (distinct categories) between continuously varying social phenomena? For instance, what are some advantages of having a clear separation between "being married" and "being single"?
 - How do we, as information professionals, mediate between different worlds? How do we combat the alienation between systems?
 - How can we ensure the continued integrity of cultural systems while providing meaningful access within our heterogeneous world?
- Discussion: Creating a Controlled Vocabulary - Does this list of controlled terms sufficiently represent the richness of the collection? Does your list match your colleagues' lists?
- Project Work

Go back to <u>Little.Dannys.Records</u>, and reading his descriptions, quickly go through the first 30 records you see, and generate a list of genre descriptors. Copy and paste his descriptors of the singles, probably including the hashtags

Try to develop a controlled vocabulary from this list, so that you might be able to consistently describe these materials in a formalized system. Consolidate redundancies, either exact copies or if two terms are referring to the same kind of music.

As I mentioned last week, Dan Shiman is a former student and he pointed me toward his other project - and an essay he wrote about it, where he talks about genre definitions. Read if you're interested: http://exoticaproject.com/about.php

Week 5 – Information as Recorded Intellectual Creation (September 21)

Before Class

Read

- Wilson, Patrick. (1968) Two kinds of power: an essay on bibliographic control. Berkeley and Los Angeles: University of California Press. Chapter 2.
- Buckland, Michael. (1997) What is a "document"? Journal for the American Society of Information Science 48 (9): 804-809. [Dropbox]
- IFLA. Functional Requirements for Bibliographic Records final report. Full report available at: http://www.ifla.org/VII/s13/frbr/frbr.pdf Read pages 13-14, 17-24, 31-49 only (all that's in this PDF). This is the material about Group 1 entities.
- Handout: classification basics (DOC)

Watch:

• Lecture: Works / Texts / Exemplars

In Class

- Game: Work it out!
- Project Work

Schema Draft DUE 11:55pm today!

Document an initial set of attributes and value parameters for your schema and submit to the Sakai "Schema Draft" Assignment. Included in this assignment will be images / links to 3 things that you're describing with your schema. One thing should be central, and one thing should be peripheral (Remember Lakoff). Students will be randomly assigned to provide feedback to 2 or 3 other people.

For this assignment, please turn in:

- Initial set of attributes and value parameters
- 3 links to / images of items that your schema is describing
- ...Comments on other students' work.

Sakai will randomly assign readers to every paper by Thursday, and comments will be due by Sunday at midnight. Please check Sakai on Thursday or Friday for your assignments!!!

Week 6 – Information as Evidence (September 28)

Before Class

Read:

- Gilliland, Anne. (2000) Enduring paradigm, new opportunities: the value of the archival perspective in the digital environment. Council of Library and Information Resources (CLIR). Full report available <u>HERE</u>: (Read: The archival paradigm: the genesis and rationales of archival practices and principles).
- Cvetkovich, Ann. (2003) An archive of feelings: trauma, sexuality, and lesbian public culture. Durham, NC: Duke University Press. Ch. 7, 239-271. [Dropbox]

Think About:

- Any controlled vocabularies you might use in your schema. Will you use existing controlled vocabularies? Create your own?
- How are you going to distinguish things that are in your set from things that are not in your set?

Look / Explore:

- Kirkland, A. (2019). Costume Core: Metadata for Historic Clothing. VRA Bulletin, 45(2). [Dropbox]
- CostumeCore

Watch:

• Lecture: Information as Evidence

In Class

- Creating Costume Core Metadata
- Project Work

Your schemas are due next week!

If you'd like to have a session with me to go over your schema, please make an appointment at: https://calendly.com/megan-winget/assignment-feedback

Week 7 – Information as Sign (October 5)

Before Class

Read:

- John Fiske. 1990. Introduction to Communication Studies, 2nd ed. London and New York: Routledge. (Excerpts: pages 6–12, 39–46, 56–58, 64–65.) [Dropbox]
- Scott McCloud. 1994. Understanding Comics. 1st HarperPerennial ed. New York: HarperPerennial. (Chapter 2, p. 24–59.) [Dropbox]
- ***Ereshevsky, Marc. (2007) The poverty of the Linnean hierarchy: a philosophical study of biological taxonomy. Cambridge, UK: Cambridge University Press. Ch. 2 and 4-5; pp. 50-80 and pp. 129-193. [Dropbox] [Notes on Ereshevsky DOC file] (***read the Notes Document first)

Listen (choose one):

- The Karen Has Always Been With Us. This Is How She Found Her Name. Slate Magazine. https://slate.com/podcasts/decoder-ring/2020/07/decoder-ring-the-karen
- Fool's Trade. Reply All (Yes, Yes, No Segment of #137 Fool's Trade – February 28, 2019)

Watch:

- Lecture: Information as Sign
- Introduction to the Taxonomies
- Introduction to Taxonomy Project

In Class

- Show & Tell: Know Your Memes
- Discussion: Is it a human?
- Introduction to the Taxonomy Project
- Q&A: Taxonomy Project

Descriptive Schema is DUE this Friday (October 8) by 11:55pm!

I will provide a video assessment of your project in Sakai by October 19.

My assessment will be based around each project's criteria for success, as listed in each project's detailed instructions.

The video assessment will be <5 minutes and will primarly cover:

- The following are clearly described:
 - What constitutes a member of the defined set of things,
 - The schema's audience and purpose, and
 - How a thing should be identified and distinguished from other, similar things.
- Whether the attributes effectively represent the selected things in the context of the described purpose, and the value space effectively represents the extent of the attributes.
- The documentation is sufficient
- The critical reflection thoughtfully considers and interrogates the design process, product, or both, using the experience of creating the descriptive schema to productively engage larger issues of theory and practice.
- All the project components are present.

Week 8 – Organized Information Structures (October 12)

Before Class

Read:

- Mai, J.E. (2011). The modernity of classification. Journal of Documentation, 67(4), 710–730. (PDF)
- Ranganathan, S.R. (1962) Elements of Library Classification. Bombay, India: Asia Publishing House. [Dropbox]
- Hunter, Eric J. (2002) Classification made simple. 2nd ed. Aldershot, England: Ashgate. (Ch. 1-5) [Dropbox]

Watch:

 Lecture: Organized Information Structures

In Class

- Real-Life examples of faceted classification systems
- Modern / Postmodern classification

DUE THIS WEEK

Taxonomy Proposal:

Please copy and paste your taxonomy idea into the text box in the Sakai "Assignments" section. Here is an example proposal:

I am going to create a taxonomy of superpowers to organize superheroes, so that the Hall of Justice can put together teams of complementary superheroes that effectively counteract their opponents.

Possible classes are:

- Flying
- Telepathy
- Super speed
- Super strength
- Shape shifting to look like any person
- Communicating telepathically with aquatic life

If there is a problem I will let you know by the end of class

Week 9 - Expressive Information Structures (October 19)

Before Class

Read:

- Lee, H.-L. (2012). Epistemic foundation of bibliographic classification in early China: A Ru classicist perspective. Journal of Documentation, 68(3), 378– 401. (PDF)
- Light, A., Shklovski, I., & Powell, A.
 (2017). Design for existential crisis.

 Proceedings of the 2017 CHI Conference
 Extended Abstracts on Human Factors in
 Computing Systems, 722–734. ACM.

 (PDF)
- Clifford, J. (1991). Four northwest coast museums: Travel reflections. In I. Karp & S. Levine (Eds.), Exhibiting Cultures: The Poetics and Politics of Museum Display. Washington, DC: Smithsonian Institution Press. (PDF)
- Handout: Four Museums, Two Archives (PDF)

In-Class

- Question: what do we owe the user?
- Debrief: Schema Project
- Project Work: Brainstorm a set of potential descriptors for your taxonomy

Watch

Lecture

Week 10 - Structured Information (October 26)

Before Class

Read:

- Brookshear, J. Glenn., David T. Smith, and Dennis Brylow. (2010) Computer science: an overview. 11th ed. Pearson. (Ch. 9 Database Systems, pp. 383-424.) [Dropbox]
- Bagui, Sikha, and Richard Earp.
 Database Design Using Entity Relationship Diagrams. Boca Raton, FL:
 Auerbach Publications. Ch. 2 [Dropbox].
- Fun with SQL Solve a Murder Mystery! https://mystery.knightlab.com/

Watch:

Lecture: Modeling information as sets

In Class

- What are databases good for?
- Let's try our hand at creating ER diagrams

DUE THIS WEEK

Complete a draft of your taxonomy and descriptor definitions and submit it to the "Taxonomy Draft" Assignment on Sakai.

Include 5 items (or information about those items) with the description, so that others can attempt to place those items within your taxonomy.

Each person will receive 2 sets of feedback on their taxonomy from peers.

Week 11 – Automated Information Structures (November 2)

Before Class

Read/Listen:

- M.E. Maron. 1961. Automatic indexing: an experimental inquiry. Journal of the ACM 8(3): 404–17. (PDF)
- Rieder, B. (2017). Scrutinizing an algorithmic technique: The Bayes classifier as interested reading of reality. Information, Communication & Society, 20(1), 100–117. (PDF)
- * Brookshear, J. Glenn., David T. Smith, and Dennis Brylow. (2010) Computer science: an overview. 11th ed. Pearson. (Ch 0 History of Computing / Ch 5 Algorithms / Ch 6 Programming Languages skim, do not do the problems) [Dropbox] (Optional but strongly recommended)
- Gladwell, M. (2021). Lord of the Rankings. Retrieved August 7, 2021, from https://www.pushkin.fm/show/revisionist-history/
- Gladwell, M. (2021). Project Dillard. Retrieved August 7, 2021, from https://www.pushkin.fm/show/revisionist-history/

Do:

Investigate the selection, categorization, and arrangement of one of the following at *at least* one supermarket (online or physical)

Cheese, / Wine, / Tea, / Oil

Be sure to find **all** of the places where these things are located.

Take notes! How does the selection, arrangement, and relationship of the instances in these categories present an interpretation of what this entity is?

Watch:

- Lecture: Probabilistic Retrieval
- Introduction to 'Zine Project

In Class

- Discussion: Grading as an "Automated Information Structure"
- Discussion: Cheese / Wine / Tea / Oil
- Project Work: Taxonomy Project

If you would like feedback on your Taxonomy Draft, please make an appointment with me via: https://calendly.com/megan-winget/assignment-feedback

Week 12 – Utopian Information Structures (November 9)

Before Class

Read:

- Rayward, Boyd. (1994) Visions of Xanadu: Paul Otlet and hypertext.
 Journal of the American Society for Information Science, 45(4): 235□-250.
 [Dropbox]
- David Easley and Jon Kleinberg. 2010. Networks, crowds, and markets: reasoning about a highly connected world. New York: Cambridge University Press. Chapter 1 (p. 1-20). (Dropbox)
 - Optional: Bush, Vannevar. (1948) As we may think. The Atlantic Monthly, July 1945: 101-108. (Available <u>HERE</u>)

Do:

Investigate the selection, categorization, and arrangement of either men's or women's "work shoes" at the following Web sites

Amazon / Zappos / Shoes.com

Be sure to find the categories associated with "work" shoes (in other words, HOW MANY categories will return "work shoes"?).

How does the selection, description, and arrangement of "work shoes" present an interpretation of what "work shoes" are and what "work" is?

Watch:

Lecture: Paul Otlet, Organizing the World

In Class

- Discussion: How is Paul Otlet different from Elon Musk, Mark Zuckerberg, or lack Dorsey
- Discussion: What are some of the intended / unintended consequences of our networked society on the services that our institutions offer?
- Discussion: What are "Work Shoes"

DUE THIS WEEK

ON TUESDAY: 'Zine Proposal

To write a meaningful, detailed, incisive explanation, you will need to focus on just one part of each organizing system. That is why you will keep your analysis to one type of things within the system. Here are some examples:

- The organization of light fixtures at Home Depot and Target.
- The organization of chips at CVS and Harris Teeter.
- The organization of mystery novels at Flyleaf Books and at Barnes & Noble.
- The organization of Legos at the Southpoint Target and online, via the Lego Website.
- The organization of Japanese woodblock prints at two different online resources.

As with defining an entity set to organize with your schema, you will need to identify a set of things that is specific enough to analyze in depth but broad enough to enable you to say something interesting about it. So the entire supermarket would be too broad, but just the Cheerios would be too narrow. The cereal at the supermarket might be just right.

I will respond with any problems by the end of the class.

ON FRIDAY: Taxonomy Project

Week 13 – We'd Like Our Facts Back? (November 16)

Before Class

Read:

- Marres, N. (2018). Why We Can't Have Our Facts Back. Engaging Science, Technology, and Society, 4, 423–443. (PDF)
- Choose:
 - Tripodi, F. (2018). Searching for Alternative Facts (p. 64). Data & Society. <u>HERE</u>
 - Tripodi, F. (2019). Devin Nunes and the Power of Keyword Signaling. Wired. <u>HERE</u>
- Dickerson, J. (2020, December 13).
 Excited Delirium: The controversial syndrome that can be used to protect police from misconduct charges. 60 Minutes. (HERE)

Watch:

Lecture: Facts

In Class

- Discussion: Do we want to have our facts back?
- Discussion: Bring in 3 examples of "facts" that that you've noticed / questioned since the beginning of the semester.
- Project Work: Comparison of Information Organization Systems

DUE THIS WEEK

Zine Draft: Please submit a draft of your Organizing System Explanation. This is not the finished work. This is the text / images you plan to put in the work. Two people will be assigned to read your draft and provide written and oral feedback by this Sunday.

In your peer review, you will provide written answers to the following questions:

- What is the argument put forth by the zine?
- What is the evidence used to make this argument?
- What going well?
- How can the argument be strengthened?

You will give this feedback to the zine's author.

Your goal in writing peer review feedback is to help make the argument better. Harsh criticism is not helpful; neither is mindless praise. Be honest, constructive, and compassionate. Also be a mindful and attentive reader: your feedback should not direct the writer to do things your way but help the writer to accomplish his or her goals more effectively.

If you would like feedback on your Taxonomy Draft, please make an appointment with me via: https://calendly.com/megan-winget/assignment-feedback

Week 14 - Project Work Week / Thanksgiving (November 23)

Thanksgiving is this week. You will have your peer reviews by class time, but I want to give you time to work on / create your final project.

We'll talk about whether to formally hold class for questions / input from me.

Week 15 – Sharing Final Project!!! (November 30)

We will spend the entire class time sharing our projects with each other. You will turn in a project to Sakai, AND be prepared to share your project with the class.