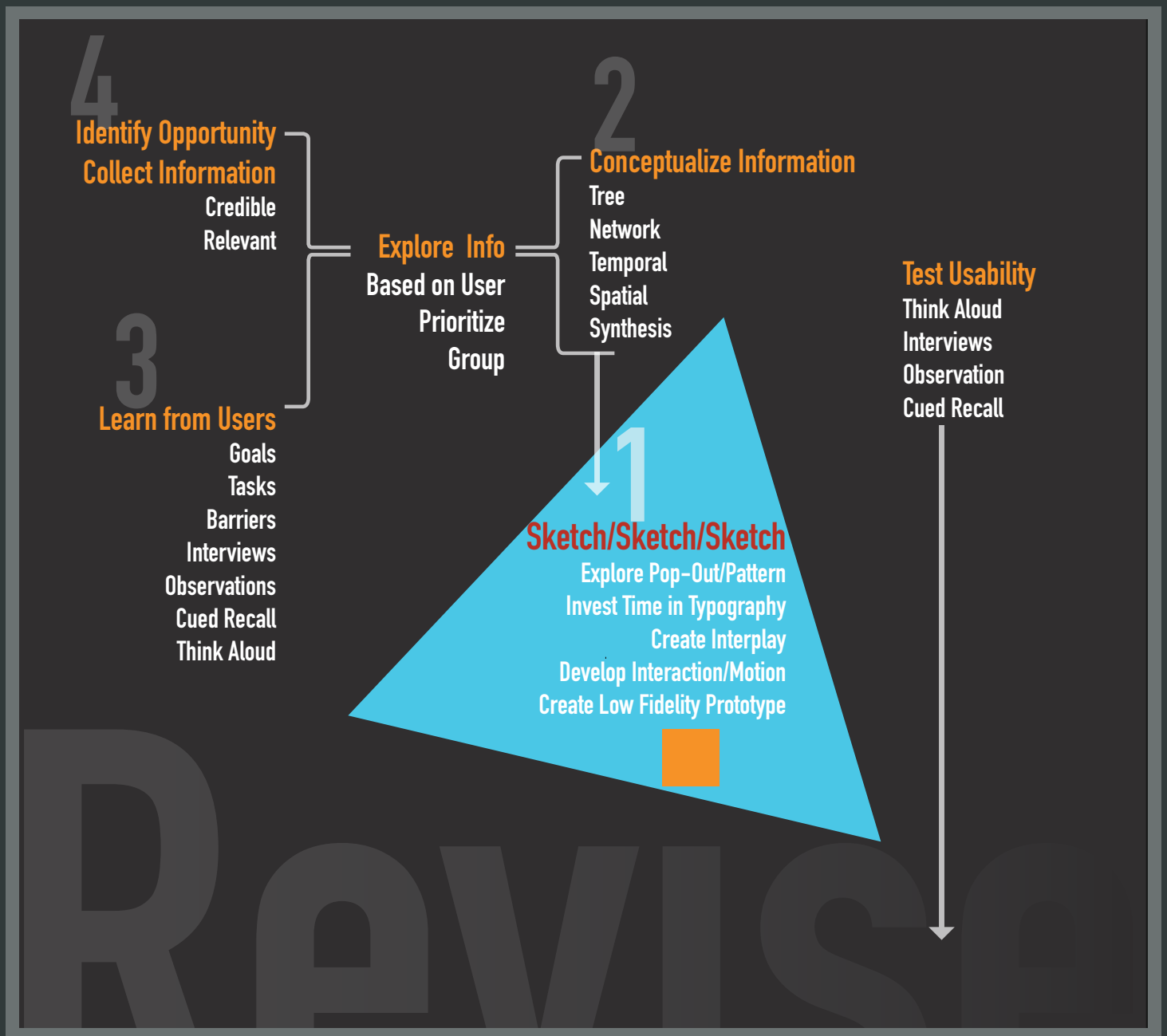


# Information Design Fundamentals

Professor Susan Hagan | [hagan@cmu.edu](mailto:hagan@cmu.edu)



## **Information Design Fundamentals**

builds from a foundation in visual composition and typographic layout, to visual/verbal communication through the interplay of images, text, and typeface.

You'll apply this core understanding to information design problems that consider both qualitative and quantitative data developed for descriptive and strategic purposes. Solutions to these problems take the form of timelines, maps, hierarchies, and networks.

Explorations concentrate on learning and applying the heuristics of visual composition and visual/verbal communication. Exercises add ways of conceptualizing information along with usability testing. The project importantly incorporates user studies methods as one of the first steps of the design process in order to help users perform tasks that meet their goals in ways that minimize internal and external barriers.

# Tasks That Meet Our Goals

## 1. Homework 10%

Homework assignments will be on Canvas. They will often form the basis of our in-class discussions. **What I post will usually be due for the next class. Homework is given full marks for completion.**

## 2. Participation 5%

There are multiple ways to meet this requirement. Add insights during class discussions. Write notes that help other students improve their work in progress during crits. Add to our portfolio of examples. Don't use your phone in class. Stay tuned in when someone else is trying to think through a comment. Be engaged with critiques.

## 3. Explorations 20%

Explorations are quick studies with a 1-week turnaround time. They include an analysis component and will cover:

- a. Pop-Out/Pattern: How do you create contrast and unity in order to make a space inviting?
- b. Color: How can you use color theory to improve composition and create mood or meaning?
- c. Typography: What do you need to know about type to work with it effectively?
- d. Visual/Verbal Interplay: How do image, text, and typeface create complementary meaning?

## 3. Exercises: 30%

Exercises incorporate the lessons learned in explorations, are longer in duration, and involve discussions and planning concerning how you conceptualize information. We will synthesize the following to create two problem spaces.

### Mapping

Mapping a collection of data shows its spatial distribution and positions relative to other data in the set. The *DC Metro System Map*, shown in this syllabus, is one excellent example of those spatial distributions, but spatial distributions can include mental as well as physical models.

### Timeline

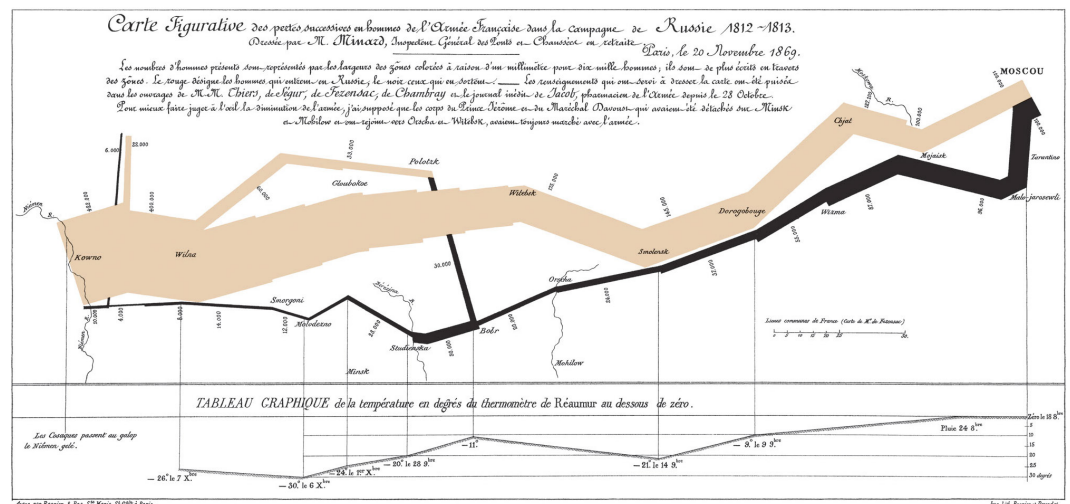
The metaphor of time can be conceptualized in multiple ways, in order to be understood within a container-like representation. Minard's *Napoleon's March*, below, is one stunning example.

### Networks

Networks consider the relationships between elements. For example, a social network emphasizes the value in the space between users rather than within the individual.

### Hierarchies

Hierarchical structures focus on greater to lesser relationships among elements in the set. *Carbon Footprint*, on the last page of the syllabus, is one interesting example.



#### 4. Test 10%

There will be one test based on the readings and class discussions. If you miss a test, it's up to you to arrange for the make up. You must have a verifiable excuse and make up the test within one week after your absence, or the grade is a zero.

#### 5. Project 25%

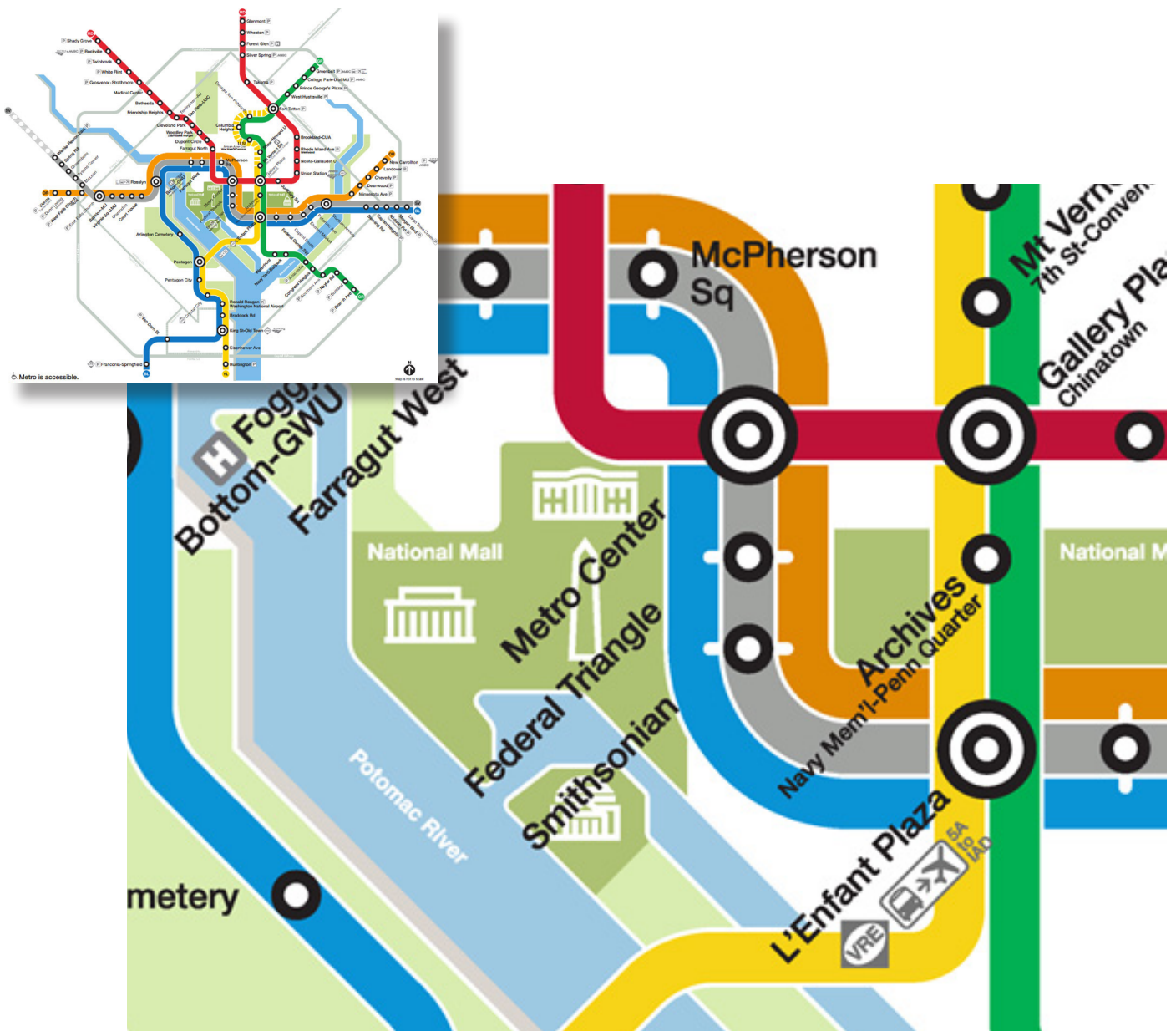
The project presents a problem that can be successfully explored using the path described on the first page of this syllabus. The project will be driven by an understanding of user needs and goals as well as insights concerning users' internal barriers to information seeking, leading to a useful and desirable information design strategy. That strategy will be subject to usability testing in order to refine the project before releasing a useful, desirable, and usable design

### Texts

Meirelles, I. (2013). Design for information. Beverly, MA: Rockport.

Other readings will be available directly through Canvas.

Bring the assigned materials to class on the appropriate days.



## Grading

For assignments that receive letter grades, the following scale will be used for the purposes of numerical averaging:

A+ = 98	B+ = 88	C+ = 78	D+ = 68	F = 50
A = 95	B = 85	C = 75	D = 65	
A- = 91	B- = 81	C- = 71	D- = 61	

Final Course Grades will be assigned using the following scale:

A = 90-99	B=80-89	C=70-79	D=60-69	R < 60
-----------	---------	---------	---------	--------

**A** Superior design process and product. Ideas are well planned with convincing useful detail. Design has been build on in-depth iterative development. Student sometimes goes out on a limb in order to explore potential rewards that come with significant risks.

**B** Strong design process and product with all assignment tasks met. There's evidence of good effort in this assignment, although there may be small problems with design heuristics.

**C** Acceptable in its representation of the task, but the work feels more last-minute in its development. There may be an obvious conceptual or execution problem. Details may be somewhat limited, and concepts may be ambiguously defined. Students in this category sometimes have used a prototyping site that looks polished but fails to meet assignment goals.

**D** Below average work. These assignments do not move beyond broad generalizations and do little to explain core ideas. Designs sometimes do not represent the brief.

**R** Unacceptable lack of effort.

## Deadlines

You may submit **one exercise or exploration** one week late by:

1. Informing me by noon the day before the deadline.
2. Submitting the assignment within one week of the original deadline.

Homework must be turned in on time. The lowest grade will be dropped. The project is not eligible for an extension as it is due at the end of the semester.

## Attendance

Attendance and participation can positively or negatively affect your overall grade. You may have four absences over the course of the semester for any reason. You don't need to email me. If you see me, say hello. Ask for the notes from another student in class.

When you receive a **fifth absence for any reason, except those covered by an Accommodations Memorandum or communication with the Office of Health and Wellness** <<https://www.cmu.edu/wellness/>> or the **Office of Disability Resources** <<https://www.cmu.edu/disability-resources/>>, **your overall grade will drop one-third of a letter grade.** Each subsequent absence results in another third of a letter drop. Assume I have an "A" in this class. I miss one day because I'm sick. I then take 2 "de-stress" days and one bad weather day. But then I get the flu. This is my fifth absence, and my grade drops to an "A-." So what. But then my car runs out of gas on the way to class. My grade now drops to a "B+." I ask my instructor if she'll cut me a break, because after all, it was impossible to find a gas station. She still thinks I'm a fine person, but annoyingly reminds me about this paragraph where my grade drops.

How you chose to use your absences is totally your business. But once you go over the 4 absences built into the system, your grade will drop. Exceptions including family emergencies, severe illnesses, or injuries (documented according to school policy) fall outside of the absences rule. Other than that, in order to be counted present, you must sign the sign-in sheet.



## Academic Integrity

If you plagiarize visual or textual work, you will receive an R for the assignment **plus** lose the number of points that the assignment is worth. You will also be reported. Plagiarism occurs when you submit anyone else's work as your own—from a draft to a final version of a formal or informal assignment. Sources to be cited include web and hard copy sources. If you want to create some kind of homage, cite it and show how your work goes beyond the derivative.

## For Anyone with Suspected or Diagnosed Learning Disabilities

CMU genuinely is committed to providing reasonable accommodations. To access accommodation services you need to initiate the request and submit a Voluntary Disclosure of Disability Form to the Office of Health & Wellness or CaPS. To receive services/accommodations, verification of a disability is required as recommended in writing by a doctor, licensed psychologist or psycho-educational specialist. The office of Health & Wellness, CaPS, and Office of Disability Resources will review the information you provide. All information is confidential and only released to appropriate persons on a need to know basis.

Once the accommodations have been approved, you will be issued a Summary of Accommodations Memorandum documenting the disability and describing the accommodation. You are responsible for providing the Memorandum to your professors at the beginning of each semester.





## Put Taking Care of Yourself on the Calendar

Except for states of flow when you're focused and most productive, remember that it's helpful to take a break to eat healthy stuff and move around. A few minutes can make a difference when you're in the middle of stressful coursework that's confusing <<https://www.psychologytoday.com/blog/changepower/201704/how-do-work-breaks-help-your-brain-5-surprising-answers>>. Counselors can be incredibly helpful if you're feeling overwhelmed. Call CaPS at 412.268.2922. In an emergency call 911

Further, the office of Title IX Initiatives is available should you experience harassment that causes you to feel uncomfortable or unsafe. Contact them through [tix@andrew.cmu.edu](mailto:tix@andrew.cmu.edu)

## End Notes

I encourage you to bring snacks, coffee, or anything that helps to keep your focus on our illuminating discussions. Life can become a little intense here, so if you think you're going to nod off in your chair, feel free to stand and stretch.

No  ,  ,  ,  , new thing, new thing. I am easily distracted by your distractions.



