

LOC/LS 308: Redesigning Everyday Organizations

(formerly "Cognition in Context")

Fall 2019

Monday 2:00 to 4:50

Annenberg Hall, G02

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COURSE OVERVIEW

How do people do things together? In our everyday lives, we learn and work within particular arrangements of people, objects, tools, and information. These designed systems and processes—which we'll call *everyday organizations*—allow us to solve problems, achieve our goals, and generally get things done.

Except when they don't. In this class, you'll learn to identify and analyze everyday organizations, document what's working and what's not, and figure out creative ways to redesign them. You'll conduct ethnographic fieldwork, using concepts and methods drawn from theories of human cognition as it happens in context. These concepts come from distributed cognition and actor-network approaches and stress the inextricability of humans and "non-humans" (i.e. tools, technologies, representations) in the conduct of everyday organizations. We'll also look critically and creatively at the *values and principles* that anchor our designs for change. The broad goal is to equip you with strategies for making organizational change that can be applied across professional, community, and personal contexts.

Course readings are varied and include literature from cognitive science, sociology, anthropology, design, and other disciplines. Podcasts relevant to the course ideas will also be part of the assignments. Classes will open with a discussion of the readings or podcasts and our experiences in the field, followed by a short lecture and then an extended project or group activity. Assignments include weekly reading responses, three field studies to tune your observation and writing skills, and a final design project.

Learning Objectives

- Practice and build systematic skills to observe, document, and understand everyday situations, communities, and organizations
- Read and discuss research that analyzes everyday organizations and apply the ideas to your own life and work
- Identify principles that guide your designs for change
- Conduct a theoretically informed design project, working on a team to redesign an everyday organization

Materials

- A wire-bound grid paper notebook. Any one will do, but the [Isometric Dot Grid Notebook](#), available on Amazon, is a good choice.
- *The Sketchnote Handbook*, [available for free online through the university library](#) or you can buy it at Norris and most bookstores.

More about the course

A foundational intellectual premise of Redesigning Everyday Organizations is an ecological, cultural, and pragmatic one—that people learn, think, and act in ways that are adaptive to the specific and recurring situations and contexts in which they find themselves. Thus, our understandings of thinking and learning should reflect this range of situations, cultures, and contexts; learning, thinking, and collaboration happen everywhere.

A core part of the course experience involves a number of field activities that ask you to explore important concepts and methods that are represented in the readings. You do not need prior fieldwork experience to participate in these activities. Since fieldwork of this kind will be new to most of you, we will equip you with some basic tools and strategies for looking, listening, noticing, and recording events in everyday life. The primary reason the course meets once a week, rather than twice as is the norm for undergraduate courses at Northwestern, is to combine readings with these field activities, to combine reflective and critical discussion with active exploration of the ideas.

The possible uses for the kinds of discoveries one makes through fieldwork in everyday contexts are many. One is simply to broaden your understanding of how learning, cognition, and culture are organized differently across peoples, times, and places. This is the core goal underlying much of the tradition of liberal arts education. However, your interest may be in making change, in making things better in the world around you.

Our primary goal is to give you some strategies and techniques to approach designing for change. First you'll learn to recognize, observe and analyze an everyday organization. Then, you'll look for an unmet need or a 'chronic snag' within that organization: something that's a recurring problem for the people involved. Finally, you'll work on a redesign that seeks to meet that need or ameliorate that chronic snag.

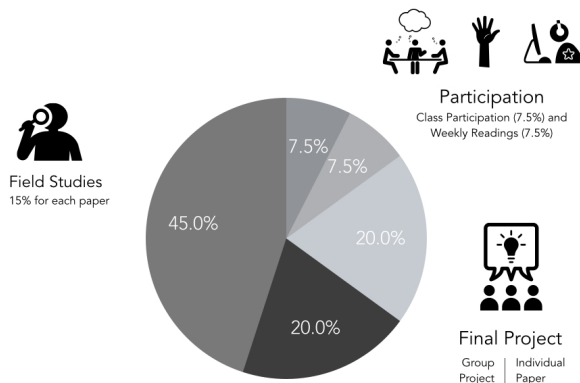
Whether you ultimately find yourself in industry or in a nonprofit, you'll be working with people who need deep and continually refreshed understandings of the people they serve. Creating change in those organizations—at the day-to-day level where things actually happen—depends on the sort of research and concepts explored in this class.

The goal of the second part of the course is for you to put these concepts and methods to work. In a small R&D team, you will conduct a small-scale field study on the Northwestern campus or in Evanston and then use that field study as the basis for what we call “a design for change”. Your design for change may involve a new or revised organizational practice, product, technology, or educational approach. The project will be successful if you can link the documentation of a chronic snag to a design that ameliorates the snag you have discovered. You will share your designs for change in two forms: in paper that you write as an individual and in a team presentation on the last day of class. You will present to your classmates and your instructors. But in keeping with a core design principle of this course to minimize school ‘busywork’ and maximize realistic work activities, you will present to a panel of invited outside experts.

FEEDBACK, EVALUATION AND GRADING

To participate fully and successfully in the course, you must read the assigned texts or listen to the podcasts carefully before each class. We strongly

Class Evaluation



recommend you annotate the readings with your own questions, reactions, and connections—to other readings, fieldwork, and other personal experiences. (Having a ‘conversation’ with the readings in this active way will make a big difference in the depth of your understandings and your ability to use the ideas). The volume of assigned reading is not high. That is intentional, so that you can engage deeply with the

papers that are assigned. Please read all of the assigned texts and listen to the podcasts carefully and actively, generating your own questions and insights about them. One of the biggest opportunities you have in college is to learn from other people’s ideas and to put your ideas into interaction with those of your classmates and your instructors.

Weekly Reading Snapshots & Miscellaneous Writings (7.5% of grade): To ensure preparation for in class discussion, each week you are required to write a response that minimally captures each of the assigned readings from your perspective. These must be uploaded to Canvas by Sunday at 11 pm. If you have read closely and taken notes as you go, these will be straightforward and quick to put together. These also become a resource for you when you write the final paper. In addition, there will be occasional short, miscellaneous work to turn in, such as initial ideas for a final project.

Required elements of the snapshot documents (one for each assigned reading) are:

- a. a 2-4 sentence summary of the article or chapter

- b. a list of key concepts from the paper (1-3), with either a quoted definition or a definition of the concept in your own words
- c. your favorite sentence(s) from the paper
- d. 1-2 sentences on what you found most personally relevant/useful
- e. 1 question that the reading raises for you

You may type this material OR, alternatively, write it using pen and paper (including any visual/graphical representations to show relationships and connections among ideas), take a picture of it, and upload the picture to Canvas. These aren't graded; you'll receive full credit for reasonable effort.

On occasion, we'll give half credit for a reading snapshot, if it doesn't seem from the work like you engaged the assignment. In this case, you'll have the chance to revise for full credit.

Class Participation: (7.5% of grade): ATTENDANCE IS REQUIRED. Since we only meet once a week, and because the in-class activities are central to the learning experience in the class, ONE unexcused absence will result in a participation grade of 0. *We're extremely strict about this policy.* If you need to miss class, you are allowed ONE excused absence, but you will need to arrange this beforehand with the instructors, and will be asked to schedule time with one of the instructors and do makeup work. Conflict with other scheduled events, such as a job fair, is *not* considered an excused absence.

This class will be somewhat device-free. You'll use your notebook for in-class note-taking, although there will be times when we will be doing activities that do require a device. Please don't have your phone out during class. There will be at least one break and sometimes two each session; except in special situations, anything that appears on your phone can wait until a break. We will be strict about this policy. Of course, we'll also be using our devices as part of our fieldwork, especially for photography and videorecording. We'll also be constructing presentations in class, and for this work you will be able to use computers.

In courses you take at Northwestern, the class participation grade is often a throw away category, but in this course we treat it seriously, because of the ideas of distributed contribution and shared enterprise that are so central to the intellectual premise of this course. If you never participate and appear unprepared, you should expect to receive a low grade for in class participation. If you make a genuine effort and come prepared with the interesting questions and ideas we know you have, you will get full credit.

If you are less comfortable speaking frequently in class, you also have a digital opportunity to share your ideas, because the participation grade is composed of both in-class participation and weekly postings to a discussion board. You are required to post one question per week to the discussion board. You will have already generated this for the weekly reading snapshot (item E in the list above) so you need only copy and paste that question into the discussion board. (You are also welcome to post more than one question). The additional participation requirement is that you reply to at least one of your classmates' posts each week. Your reply must be posted by 11 am on the day of class (Monday), but the best time to do it is when you turn in your reading snapshot (Sunday, 11

pm). You are also welcome and encouraged to reply to more than one or to get into a multi-turn online discussion spurred by a question.

As a fun and playful addition, the question that we see as generating the most thought provoking responses each week will earn the question's author recognition in the form of a small prize. We'll read out the question and make the award at the beginning of each class to get discussion started.

Field activity narratives (3 @ 15% each): The motivation for the field activities is straightforward: this type of research (probably like all research) is best understood by participating in it and then representing it in well-selected media. Each of the field activities should be represented in a short electronic document (2-5 page single-spaced pages). You may choose to use other forms of media in addition to words for documentation, and we encourage you to do so. Other media might include photos, videos, audio recordings, diagrams, and maps. However, whatever media you combine for these papers, the core of the paper should be a well-written, coherent narrative. In class after each of the field activities are due, we will use some of class time to discuss shared lessons and new questions that arose.

We will assign you to a final project team composed of three or four members by Week 4. Your team will submit a project sketch, and we will provide you written feedback on your project sketch during Week 5. Do not hesitate to make a significant change in direction at this point based on the feedback!

Final project presentation (20% of grade; earned by team): The presentations will be on the last day of class. Snacks—pretzels, grapes, etc.—will be provided. The presentations will be made to the class and 2-3 expert guests, to be announced later. Presentations will be approximately 10-12 minutes with 5 minutes for questions from the expert panel. Grading will be based on a combined score from class members, the expert panel, and the instructors. Criteria for grading will be discussed later in the course but the basic criteria are: (1) Establishing through fieldwork an unmet need or chronic snag in an everyday organization; (2) a "design for change" that addresses the unmet need or snag and (3) an argument for why the design for change should be implementable (and perhaps even sustainable).

Final paper (20% of grade, earned by individual): The final paper is each individual team member's opportunity to write about his or her version of the final project. This is not a paper about your role in the project; it should be writing about the whole project. This paper is your way of putting it all together. This writing needs to be your own, though of course it will reflect joint work with your teammate(s). In addition to the components described above that should be the basis for your presentation, this paper should also include an engagement with ideas from the course and at least some additional readings that are relevant to your project topic. You should use readings from the course—or other related readings that are appropriate to your project focus—to support your ideas about why the "design for change" you propose will likely be successful. The final paper is due right before the beginning of Finals Week (Sunday, December 8, at 9 pm). It should be between 4 and 8 single-spaced pages, references and images excluded. Please use APA

format for references. We will provide further details on the final project, the presentation, and final paper, as these get closer.

LATE WORK

Our primary goal is for you to have a chance to do your best work in this class. If you will not be able to turn in your best work on time, send an email to both instructors before the due date and let us know what is going on. As a general rule, you may have **one extension of up to 3 days on one of the field study papers with no grade reduction**, as long as the instructors have approved the extension in advance. Other than that, there is a reduction of 5 points per day that an assignment is late.

Of course, there may be special circumstances that warrant an exception to this policy. Please communicate proactively with the instructors and we will work with you.

DISABILITIES

Any student requesting accommodations related to a disability or other condition is required to register with AccessibleNU (accessiblenu@northwestern.edu; 847-467-5530) and provide professors with an accommodation notification from AccessibleNU, preferably within the first two weeks of class. All information will remain confidential.

ACADEMIC INTEGRITY

Students in this course are required to comply with the policies found in the booklet, "Academic Integrity at Northwestern University: A Basic guide". All papers submitted for credit in this course must be submitted electronically unless otherwise instructed by the professor. Your written work may be tested for plagiarized content. For details regarding academic integrity at Northwestern or to download the guide, visit: <http://www.northwestern.edu/provost/policies/academic-integrity/index.html>

CLASS READINGS

Week 1 (September 30) Introduction to Redesigning Everyday Organizations

Rohde, M. (2012). *The Sketchnote Handbook: the illustrated guide to visual note taking*. Peachpit Press. ISBN-10: 0321857895. ISBN-13: 978-0321857897

PODCAST: Vedantam, S. (2017). "Check Yourself". From the *Hidden Brain* podcast. Aired 10/30/17 and 8/27/18. Search for "hidden brain" in your podcast app or listen [here](#):

<https://www.npr.org/2017/10/30/559996276/the-trick-to-surviving-a-high-stakes-high-pressure-job-try-a-checklist>

Week 2 (October 7) The Argument for Fieldwork

Practice Observation Due

Hughes, E. C. (1960). Introduction: the place of field work in social science. *Field work: An introduction to the social sciences*.

Madsbjerg, C., & Rasmussen, M. (2014). "The Human Sciences (Chapter 4)" from *The moment of clarity: using the human sciences to solve your toughest business problems*. Harvard Business Review Press.

Resnick, L. B. (1987). The 1987 presidential address: Learning in school and out. *Educational Researcher*, 16(9), 13-54.

ALSO CHOOSE ONE (LS STUDENTS SHOULD READ HUTCHINS [2010]) FROM:

(choice) Hutchins, E. (2010). Cognitive ecology. *Topics in Cognitive Science*, 2(4), 705-715.

(choice) Suri & Howard (2006), "Going Deeper, Seeing Further"

(choice) Neisser (1982), "Memory: What are the Important Questions?"

(choice) Suchman (1995), *Making Work Visible*

(choice) Wasson, C. (2000). Ethnography in the Field of Design. *Human Organization*, 59(4), 377-378.

Week 3 (October 14) Making the familiar strange and the practices of 'othering'

First Field Activity Paper Due

Read this one first. Miner, H. (1956). Body ritual among the Nacirema. *American Anthropologist*, 58(3), 503-507.

Bell, G., Blythe, M., & Sengers, P. (2005). Making by making strange: Defamiliarization and the design of domestic technologies. *ACM Transactions on Computer-Human Interaction (TOCHI)*, 12(2), 149-173.

Bardzell, S. (2010, April). Feminist HCI: taking stock and outlining an agenda for design. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 1301-1310). ACM.

(choice) Chipchase, from *Hidden in Plain Sight*, "Social Lives of Everyday Objects" (ch 2) or "You Are What You Carry" (ch 4) pp. 51-60 & pp. 99-108.

Week 4 (October 21) Studying humans and non-humans working together

Second Field Activity Paper Due

Read this one first. Hutchins, E. (2000). Distributed cognition. International Encyclopedia of the Social and Behavioral Sciences. Elsevier Science.

Hutchins, E. (1995). How a cockpit remembers its speeds. Cognitive science, 19(3), 265-288.

Johnson, J. (1988). Mixing humans and nonhumans together: The sociology of a door-closer. Social problems, 298-310.

Martin and Hanington, from Universal Methods of Design
Observational Methods: 02, 06, 27, 42, 57, 59, 92

(optional) Hutchins, E., & Klausen, T. (1996). Distributed cognition in an airline cockpit. Cognition and communication at work, 15-34.

(optional) Hutchins, E. (2006). The distributed cognition perspective on human interaction. Roots of human sociality: Culture, cognition, and interaction, 375-398.

Week 5 (October 28) Snags, breakdowns, and disruptions as spurs to change

Third Field Activity Paper Due
Final Project Initial Idea Due

De la Rocha, O. L. (1986), "Conflict and invention: Repairing a chronic snag" from Problems of sense and problems of scale: An ethnographic study of arithmetic in everyday life (Doctoral dissertation, University of California, Irvine).

Martin and Hanington, from Universal Methods of Design
Interactive Methods: 04, 20, 30, 62, 64, 76, 89

Kelley, Ten Faces of Innovation (2005) from, pp. 6-15 on 'learning personas' & Anthropologist, pp. 17-39
Experience architect, pp. 166-192

(Optional) Engestrom, Yrjo. "Activity theory as a framework for analyzing and redesigning work." Ergonomics 43.7 (2000): 960-974.

(Optional) Koschmann, Kuutti, & Hickman, The Concept of Breakdown in Heidegger, Leont'ev, and Dewey and Its Implications for Education

(Optional) Alter, Steven (2014) "Theory of Workarounds," Communications of the Association for Information Systems: Vol. 34, Article 55, pp. 1041-1066.

Week 6 (November 4) Designing from what we learn in the field

Final Project Sketch Due

Brown, T. (2008). Design thinking. *Harvard business review*, 86(6), 86-92.

Norman, D. A. (2013). The Psychopathology of Everyday Things (Chapter 1) and Design Thinking (Chapter 6). in *The design of everyday things: Revised and expanded edition*. Basic books.

Madsbjerg, C., & Rasmussen, M. (2014). "The Turnaround (Chapter 5)" from *The moment of clarity: using the human sciences to solve your toughest business problems*. Harvard Business Review Press.

Podcasts:

[99% Invisible: The Gruen Effect](#)

[99% Invisible: Unpleasant Design & Hostile Urban Architecture](#)

[Planet Money: Open Office \(Episode 704\)](#)

(optional but highly recommended) Sara Cantor Aye, [Designing Everything But the Food](#) (Video)

(optional) Kelley & Littman, "Innovation begins with an Eye"

(optional). Lin, M. C., Hughes, B. L., Katica, M. K., Dining-Zuber, C., & Plsek, P. E. (2011). Service design and change of systems: Human-centered approaches to implementing and spreading service design. *International Journal of Design*, 5(2).

(optional) Ideo (2015). *Field Guide to Human-Centered Design*. Ideo.org.

Week 7 (November 11) Learning 'on the job', in everyday life

Read this one first. Bransford, J., Vye, N., Stevens, R., Kuhl, P., Schwartz, D., Bell, P., ... & Roschelle, J. (2006). [Informal learning section](#) of *Learning theories and education: Toward a decade of synergy*. *Handbook of educational psychology*, 2, 209-244.

Becker, H. S. (1972). A school is a lousy place to learn anything in. *The American Behavioral Scientist*, 16(1), 85-105.

Pinkard, N., Erete, S., Martin, C. K., & McKinney de Royston, M. (2017). Digital Youth Divas: Exploring narrative-driven curriculum to spark middle school girls' interest in computational activities. *Journal of the Learning Sciences*, 26(3), 477-516.

Week 8 (November 18) What promotes or prevents organizational change?

Berkun, S. (2010). "People Love New Ideas" from *The myths of innovation*. O'Reilly Media, Inc.

Becker, H. S. (1995). The power of inertia. *Qualitative Sociology*, 18(3), 301-309.

Heath, C., & Heath, D. (2010). "Three Surprises About Change" from *Switch: How to change when change is hard*. Broadway Books.

Week 9 (November 25) Student week

[Readings will be nominated by students and selected by instructors]

Blevis, E. (2007, April). Sustainable interaction design: invention & disposal, renewal & reuse. In *Proceedings of the SIGCHI conference on Human factors in computing systems*(pp. 503-512). ACM.

Serial: Season 3 [1st 3 episodes only] about the Cleveland court system OR StartUp: Season 7 [all episodes] about Success Academy

Week 9 (December 2) Final presentations

Final paper due Sunday, December 8, 9 pm. Both instructors will be available for additional consultations on final papers during Reading Week.