# INF385T.1 Fall 2019

# Presenting Information

### PROFESSOR Mycal Elliott

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# COURSE INFO Unique #27585

Monday 3:00-6:00 pm.

UTA 1.210A

Computer Lab Teaching Room

This room permits no food or

drinks except water in spill-proof

containers, but you may leave

your drinks in the main lab to

have during break

### Who needs to present information well?

Bad information design confronts us every day. Posters, software systems, flyers, and infographics force us to hunt for basic information such as where, when, who, what, and why. Reports lack clear formatting that would help us find information quickly; graphics appear in reports with no explanatory text or titles. We routinely hear talks that meander with no clear point, while slide decks inundate us with lengthy bulleted lists and distracting animation. Whether the presentation is numerical, visual, textual, or verbal, bad design choices hinder our ability to comprehend and use information.

As information professionals, we, of all people, ought to know better than to present information poorly. This course is one attempt to make sure we do. But mostly, it is an opportunity for us to have fun exploring new areas while learning how to be good presenters of information. If you think you'll like learning how to design for vision and cognition, why white space is your friend, and why "tell them where you're going, tell them where you are, tell them where you've been" is a bit tired as a plan for talk outlines, this course is for you. Note this course is not a course on data visualization, which we offer separately at the iSchool; by including topics such as report writing and giving verbal presentations, this course is much broader than data visualization, and it tends to deal with smaller datasets.

Although our time together will be slanted towards gaining practical skills, we will build up these skills based on our understanding of fundamental theories in areas such as *cognitive psychology* and communication that explain *how people perceive and construe sensory input*. Thus, I welcome students who are curious about the theory behind and the techniques of presentation, who are keen to add to their professional toolkit, who can work independently (no group projects), and who, in class, are willing to contribute in a friendly, non-competitive manner to facilitate learning in an active and open design environment. My goal in offering this course is to *prepare you for your professional career by helping you acquire the skills and knowledge needed to present information well in visual, textual, and verbal form.* 

## What materials do you need for this course?

Hardware and software that the school will supply

With classes held in the computer lab, you'll have full access to desktop machines and all the software that we will use in this course. You can also bring your laptop; the software that we will use is often freely downloadable. However, not all packages are available for or work well on Macs, which may mean you'll need the desktops for some assignments.

# Physical implements that you must supply (bring to class week 2)

- #2 pencils for sketching ideas and storyboards
- Wooden (preferred) or rigid plastic ruler

#### Books that you must purchase

(bring to class on appropriate day, used copies are fine)

Reynolds, Garr. 2011. Presentation Zen: ~\$9

Simple Ideas on Presentation Design and
Delivery. 2<sup>nd</sup> edition, Berkeley, CA: New
Riders.

Roman, K. and Raphaelson, J. 2000. Writing that Works: How to Communicate Effectively in Business, 3<sup>rd</sup> Edition. Collins.

Williams, Robin. 2015. *The Non-Designer's* ~\$28 *Design Book*, Fourth Edition. San Francisco, CA: Peachpit Press.

A grammar book of your choice. Here's a favorite of mine: Thurman, Susan. 2003. *The Only Grammar Book You'll Ever Need: A One-Stop Source for Every Writing Assignment*. Avon, Mass.: Adams Media.

total ~\$55

~\$9

# In this course, you will learn how to:

- Master the basics of clean layout and design, and then apply your new skills in creating effective information objects
- Design slide decks that illustrate your words, support your points, and transform your talk
- Design succinct, informationrich reports that get read
- Give talks that allow people to hear and see your message
- Work with various graphical design and presentation software packages beginning with in-class tutorials followed by independent exploration and learning
- Grasp theoretical underpinnings from fields such as cognitive psychology and communication so that you understand how the senses and brain work together to permit perception, and then design with those underpinnings in mind

#### Articles and book chapters that the school provides for you (find them on Canvas)

- Cleveland, William S. and McGill, Robert. 1985. Graphical perception and graphical methods for analyzing scientific data. *Science*, 229(4716): 828-833.
- Grant, Elizabeth R. and Spivey, Michael J. 2003. Eye movements and problem solving: Guiding attention guides thought. *Psychological Science*, 14(5): 462-466.
- Heath, C. & Heath, D. 2008. Making your presentation stick. From their website: http://heathbrothers.com/resources/.
- Hegarty, Mary. 2011. The cognitive science of visual-spatial displays: Implications for design. *Topics in Cognitive Science*, 3:446-474.
- Kosslyn, Stephen M. 1989. Understanding charts and graphs. 1989. *Applied Cognitive Psychology*, 3:185-226.
- McCabe, David P. and Catel, Alan D. 2008. Seeing is believing: The effect of brain images on judgments of scientific reasoning. *Cognition*, 107: 343-352.
- Savoy, April, Proctor, Robert W., and Salvendy, Gavriel. 2009. Information retention from PowerPoint<sup>TM</sup> and traditional lectures. *Computers & Education*, 52: 858-867.

# What are the assignments in this course and how will we do them?

There are several creative projects due in this course and at least 3 talks. Among these assignments, none is a group project. My sense is that you do plenty of group projects in our program, and I want each of you to gain all the skills in this course. Therefore, you must hand in assignments that reflect your individual effort, not others students' effort (current or past). I encourage you, however, to seek your peers' help, advice, and feedback. For example, your peers may show you a software trick to solve a problem you cannot resolve on your own or they may critique your design and offer ideas to improve it. I am available in class to offer feedback and ideas on your in-process designs but I cannot provide this service on draft items sent to me via email. In addition, you cannot "fix" returned assignments for me to re-evaluate in hopes of a higher grade; I simply do not have the time to grade your work twice.

## Follow instructions

In the assignment descriptions, I tell you what you need to do, how to do it, what to hand in and how to do so, and what I will look for when grading your work. Read each set of instructions three times:

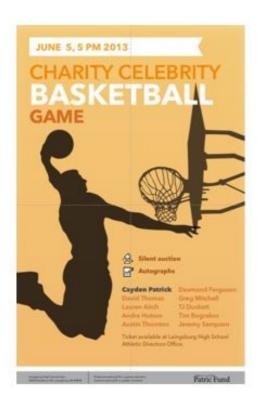
- First, read the instructions at the beginning of the semester so that you know what to expect. Block out time on your calendar to do the work (maybe twice what you estimate). These dates will not change.
- When the time comes to do the work, read the instructions a second time.
- Before you hand in your work, read the instructions one last time to make sure you did what you were supposed to in the manner I described.

#### **Example of a Creative Project: Refine an Existing Poster**

What to Do and How to Do It. You will redesign a poorly designed event poster of your choice. Your first task is to find a poorly designed event poster on your own (do not borrow from a friend a poster used in this class in prior semesters; I keep all files and will check). Such posters litter the campus and Guadalupe, or you may find one online. Capture an image of the poster you wish to redesign via a camera picture or an online snapshot; make sure the image is clear. Redesign the poster following the design principles we will discuss in class as well as the ones in the reading assignment. In your redesign, convey the same basic information that the original poster did (you may remove extraneous information), but in a better way. You may use Photoshop, for which we will have a tutorial in class, or any other design software (PowerPoint is also fine).

What to Hand in and How to Do So. Submit the original poster image and your redesign as digital files that you will post before class to a discussion in Canvas for this course as two slides (no more, no less) in a slide deck. We should not require special software to view the images (e.g., .pdf, an image file like .jpg or .png, or PowerPoint slides would be fine). Label the file with your last name followed by your first name. You file should not exceed 5 MB; if it does, check how you pasted in graphics. We will critique your work in class and you will use it as the basis for your first talk.

What I Will Look for When Grading. The poster is P/F, which means if you make an attempt that I deem conscientious, you will get a P, else not. You will receive feedback from the class and me that will highlight what you did well and where you can improve in terms of placement of graphics/logos, use of white space, font choices (e.g., resonance with your message and effect on layout and alignment), and overall effect of your poster, including how well it reflects the spirit of the event.



Student Xi Chen created this poster as an improvement over a poorly designed poster that she saw.

## **Turn Stuff in On Time**

I think that meeting deadlines is good preparation for a professional career: every design might benefit from extra time, but most deliverables at work need to done on time for a client, program, or project deadline. In addition, I have already set time aside on my calendar to grade each assignment in this course. When you hand your work in late, you require me to find a new time, just for you and separate from your classmates, to grade your work, which isn't being respectful of my time.

Thus, you will lose half a letter grade (e.g., A becomes A-, A- becomes B+, and so on) if your materials are not **submitted before class**, or in some cases as described below, **ready by the start of class** on their due date. You will lose another half a grade per additional day late.

When handing in your work, please do not tell me that your work is late or constructed inappropriately because a printer was not working in the lab, the software failed at the last minute, or you could not find a stapler. After all, the entire point of this course is the professional presentation of information, so please be professional.

## **Show Your Best Effort**

I expect you to give each assignment your best effort; you simply cannot gain the skills and knowledge this class offers if you don't put in the time.

Because giving talks is for many of you the most stressful activity in this class, your first talk is pass/fail (P/F) to help you focus on skill acquisition, not grades; the same is true for the poster, your first attempt at layout skills.

Assignment	%
Personal Card Poster (P/F)	5 15
Report Slide Deck Talk I (P/F)	15 15 10
Talk II Participation & Feedback	20 20
Total	100%

#### Report

What to Do and How to Do It. Using the description you provided with your dashboard, you will create a graphically designed 8.5" x 11" report. You have ample time between submission of the dashboard and submission of the report to work with the writing center and the TA to get help in improving the grammar, spelling, logic, and style of your report copy. Thus, good writing is something that I expect and your focus at this point should be on the report design.

The report has no page limit; however, you should balance brevity with necessary detail, with no extension of the copy required unless I noted on your dashboard feedback that it was incomplete. The report has mandatory elements as follows.

- The first page of the report should be a well-designed cover page containing the report title, your name, the date submitted, and the organization's name.
- An executive summary labeled as such and no longer than one page should directly follow the cover page, briefly detailing what the report covers, why you wrote it, and what recommendations it makes. We will discuss in class how to craft tightly written, informative executive summaries.
- A well-designed table of contents should appear on the next page.
- Following the table of contents should be a well-designed list of figures by label, title, and page number (and not the figures themselves) and list of tables (same information). We will discuss in class how to create design-rich, informative tables of content and lists of figures and tables.
- The balance of the report should feature orderly well-designed sections with subheadings as specified in the dashboard assignment description. Use graphics such as tables and figures, all neatly titled and labeled, to help convey data-rich information.
- Attach with a paper clip to the front of the stapled report a brief formal business letter of transmittal addressed to your contact at the organization. It should tell the manager that the report is attached, remind the manager why you wrote the report (e.g., "At your request, ..."), and provide your contact information should the manager have questions. Create your own letterhead.

Remove embedded titles in charts and tables, labeling them instead below or above where they appear in your report. Choose line spacing, font sizes, and margins that best serve your design. For example, you most likely will want to use smaller font and line spacing than I required you to use on your other written work because large, widely-spaced text does not look good in a two-column format. Our in-class tutorial will introduce you to the desktop publishing features of InDesign. You may complete this assignment using InDesign or any desktop publishing software (e.g., Scribus, Word). No matter which software you use, you must have at least two pages of the report in two-column format.

What to Hand in and How to Do So. Bring a printed copy of your report to class; do not email it to me. If possible, print your report double-sided. A plastic cover or any binding other than what I specified above is not acceptable. Students often like to use color printing for this report, but routinely have problems with the printer before class. Do not put off printing your report until right before it is due.

What I Will Look for When Grading. I will grade your report based on solid writing (including good grammar), logical organization, coherent presentation, quality of content, good design (including recognition of design principles), and conformity to the specifications detailed here. As I will explain in class, I am not looking for a typical typed low-design class paper. Rather, I am looking for a professional report with multiple, high-design graphical elements. The design of this syllabus should serve as an example to give you some sense of the type of design I am looking for in the sections of your report.

#### Slide Deck

What to Do and How to Do It. You will create a slide deck for an organization or social justice issue of your choice that you have not already used in this class. The organization or topic must be real, but they need not know about or approve your intentions. The information that you present also need not be real, but typically is more interesting if it is.

In addition to your title slide, you must have at least four other slides in the deck: (1) a table of your own creation, (2) a chart of your own creation, (3) a photo or graphic (you may take one from the web), and (4) some textual information (for example, three main points, a quote, and so on, that you formatted).

We will have a tutorial on PowerPoint or another slide presentation technology but feel free to consult the purple shirts, your peers, or ample online resources if you have technical problems.

You may NOT use Prezi for this assignment for reasons I will discuss in class.



These slides are excerpts from decks that students Sarah Gardner and Sunjia Tseng, respectively, created.

What to Hand in and How to Do So. Submit your slide deck prior to class by posting it to a Canvas discussion. Label your file beginning with your last name and then your first name. Ask the purple shirts for help if your file exceeds 5 MB; in other words, do not post anything bigger than that. Posting a .pdf version of your slide deck is the safest option because then you need not worry that the instruction desktop at the front of the room does not have your fonts loaded. Do not remove the files from the discussion; I will later access them for grading.

What I Will Look for When Grading. I want to see you display a range of information that demands a range of presentation formats (e.g., text, charts, graphics, and photos, as noted above), yet forms a coherent set. I will further grade the designs based on the quality of your application of layout and design principles that we will have discussed in class, such as your use of white space, color, font type, placement, and so on, in addition to principles tailored to slide decks, such as font size, use of bullets, and color combinations.

#### Talks I & II

#### Talk I (two minutes)

What to Do and How to Do It. You will give a talk in which you will explain to us your rationale for selecting your desired topic and why we should share your passion. This talk is short, but it will provide ample time for us to discern any major issues on which you should focus when speaking.

What to Hand in and How to Do So. Place a slide deck (no Prezi) with three to five slides. Posting a .pdf version of your slide deck is the safest option because then you need not worry that the instruction desktop at the front of the room does not have your fonts loaded.

What I Will Look for When Grading. This talk is P/F, which means if you make an attempt that I deem conscientious (e.g., you are prepared and clearly have practiced), you will get a P, else, not. You will receive feedback from the class and me that will highlight what you did well and where you can improve, and we hope to videotape you so that you can watch later.

#### Talk II (four minutes, class size permitting)

What to Do and How to Do It. Building on your previous talk we will dive deeper into your chosen topic practicing growth areas identified during Talk I. Please note we will be looking for updates to both your Slide Deck and presentation skills. In this exercise you should imagine giving the presentation to a person from the organization or an expert in your topic areas. You will construe the class as the audience appropriate for that talk and begin your talk in a manner that lets us know who we are ("Getting people to prepare for disasters is tough work. Here at the Red Cross, we all know..."

What to Hand in and How to Do So. Similar to Talk I, now for refinement.

What I Will Look for When Grading. I will grade the talk in terms of a strong introduction and conclusion, logical flow throughout, and use of body, voice, and affect.

# The ground rules

#### Show Up, Speak Up, and Help Others

For this course to work, you need to attend every class and to have completed the reading and any assignments so that you can actively engage in discussions. Because I appreciate your attendance, your willingness to discuss topics, and your genuinely collaborative and helpful behavior towards your classmates, I may consider these factors (positively or negatively) if your grade lies at a border.

#### Honor Yourself, Honor the University, Honor Us All

The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community. Source: <a href="http://www.utexas.edu/welcome/mission.html">http://www.utexas.edu/welcome/mission.html</a>

#### Holler if You Need Help

Any student with a documented disability who requires academic accommodations should contact Services for Students with Disabilities (SSD) at (512) 471-6259 (voice) or 1-866-329-3986 (video phone). Faculty are not required to provide accommodations without an official accommodation letter from SSD.

- Please notify me as quickly as possible if the material being presented in class is not accessible (e.g., instructional videos need captioning, course packets are not readable for proper alternative text conversion, etc.).
- Please notify me as early in the semester as possible if disability-related accommodations for field trips are required. Advanced notice will permit the arrangement of accommodations on the given day (e.g., transportation, site accessibility, etc.).
- Contact Services for Students with Disabilities at 471-6259 (voice) or 1-866-329-3986 (video phone) or reference SSD's website for more disability-related information: <a href="http://www.utexas.edu/diversity/ddce/ssd/for\_cstudents.php">http://www.utexas.edu/diversity/ddce/ssd/for\_cstudents.php</a>

#### And When Religion Calls....

By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class or an assignment to observe a religious holy day, I will give you an opportunity to complete the missed work within a reasonable time after the absence.

# What will we be doing each week?

Class Week	Class Type	Guiding Question	Class Activities	Due (before or in class)
1	Lecture & Assessment	"What do people mean when they say good design? What underlying principles will we be exploring in this course?"	Typography, Basic Layout Principles & Skills Assessment Exercise	
2	Lecture & Working Session	"What is happening to your audience when information is being presented to them? How can you use this to your advantage?"	Intro to Cognitive Perception & Software Design Tools Orientation	
3	Lecture & Assignment	"How can we use color and space to help your audience see what you intended them to see?"	Intro to Color Theory & Personal Card Assignment	
4	Working Session	"Bringing these ideas together, what are your strengths or areas for growth? How can you provide constructive feedback to others?"	Personal Card Review & Feedback Best Practices	Personal Card Assignment
5	Lecture & Assignment	"How can you make numerical data more digestible to our intended audience?"	Intro to Infographics & Poster Assignment	
6	Working Session & Assignment	"How are the ideas we've explored helping you direct your audience's attention? How much of what you intended with your design, perceived by your audience?"	Poster Review & Report Assignment	Poster Assignment

Class Week	Class Type	Guiding Question	Class Activities	Due (before or in class)
7	Working Session	"How does the format for information impact a viewer's perception and how can you plan accordingly based on the medium?"	Report Review, Feedback & Revisions	Report Assignment
8	Lecture & Working Session	"What makes a good slide deck presentation engaging? How can you be sure to use my time effectively when using these principles in the future?"	Intro to Slide Decks, Story Structures & Storyboarding Techniques	Report Assignment Revised
9	Working Session	"How well were you able to communicate your intentions to your audience? What techniques can help you improve?"	Review Slide Decks, Feedback & Revisions	Slide Deck #1 Assignment
10	Lecture & Working Session	"How can you present yourself and your story more effectively? What are you potentially signaling to others, without knowing?"	Intro to Presentation Techniques, Body Language & Talk #1 Assignment	Slide Deck Assignment Revised
11	Working Session	"How can you present yourself and your story more effectively? What techniques can help you be more effective?"	Review Talk #1, Feedback & Revisions	Talk #1 Assignment
12	Working Session & Assignment	"How can you present yourself and your story more effectively? What techniques can help you be more effective?"	Review Talk #1, Feedback &Talk #2 Assignment	Talk #1 Assignment Revised

Class Week	Class Type	Guiding Question	Class Activities	Due (before or in class)
13	Working Session	"How can you present yourself and your story more effectively?"	Record and Review Talk #2, Feedback & Revisions	Talk #2 Assignment
14	Lecture & Working Session	"How far have you come since the beginning of the semester? What are some follow up topics and materials worth exploring further if you would like to learn more?"	Final Review of Talk #2 & Summary of Course Work	Talk #2 Assignment Revised

## Well, that was fun! How do I keep learning?

#### Handy Books (not required, but useful in everyday work)

- 1. Cairo, Alberto. 2013. *The Functional Art: An Introduction to Information Graphics and Visualization*. Berkeley, CA: New Riders.
- 2. Few, Stephen. 2004. *Show Me the Numbers: Designing Tables and Graphs to Enlighten*. Oakland, CA: Analytics Press.
- 3. French, N. (2006). InDesign type: professional typography with Adobe InDesign CS2. Adobe Press.
- 4. Golombisky, Kim and Hagen, Rebecca. 2010. White Space is Not Your Enemy: A Beginner's Guide to Communicating Visually through Graphic, Web, & Multimedia Design. Burlington, MA: Elsevier.
- 5. Kosslyn, Stephen M. 2006. *Graph Design for the Eye and Mind*. Oxford University Press.
- 6. Murray, Daniel G. 2013. *Tableau Your Data: Fast and Easy Visual Analysis with Tableau Software*<sup>®</sup>. Indianapolis, IN: John Wiley & Sons.
- 7. White, Alex W. 2011. The Elements of Graphic Design, Second Ed. NY: Allworth Press.
- 8. Williams, Robin. 1995. *The PC is Not a Typewriter*. San Francisco, CA: Peachpit Press. (or the similarly titled Mac book)
- 9. Wong, Dona M. 2010. The Wall Street Journal Guide to Information Graphics: The Do's and Don'ts of Presenting Data, Facts, and Figures. New York, NY: W.W. Norton.

#### **Informative Books** (not required, but useful in gaining scientific knowledge)

- 1. Bringhurst, R. (2004). *The Elements of Typographic Style*. Point Roberts, WA: Hartley & Marks. Changizi, Mark. 2009. *The Vision Revolution: How the Latest Research Overturns Everything We Thought We Knew About Human Vision*. Dallas, TX: Benbella Books.
- 2. Gregory, Richard L. 1997. *Eye and Brain: The Psychology of Seeing, Fifth Ed.* Princeton, NJ: Princeton University Press.
- 3. Hoffman, Donald D. 1998. *Visual Intelligence: How We Create What We See.* New York: W.W. Norton & Company.
- 4. Ware, Colin. 2013. *Information Visualization: Perception for Design, Third Ed.* Waltham, MA: Morgan Kaufmann.
- 5. Ware, Colin. 2008. Visual Thinking for Design. Burlington, MA: Morgan Kaufmann.

#### Fascinating Books (not required, but intriguing and helpful in developing understanding)

- 1. Frankel, Felice C., and DePace, Angela H. 2012. Visual Strategies: A Practical Guide to Graphics for Scientists & Engineers. Yale University Press: New Haven.
- 2. Meirelles, Isable. 2013. *Design for Information: An Introduction to the Histories, Theories, and Best Practices behind Effective Information Visualizations*. Beverley, MA: Rockport Publishers.
- 3. Muller-Brockmann, J. (1981). *Grid Systems in Graphic Design: A Visual Communication Manual for Graphic Designers, Typographers and Three Dimensional Designers*. A. Niggli.
- 4. Tufte, Edward R. 2001. *The Visual Display of Quantitative Information*. Cheshire, CT: Graphics Press.
- 5. Tufte, Edward R. 1990. *Envisioning Information*. Cheshire, CT: Graphics Press.