Information Design

HCDE 510 Fall 2012

Prof. David K. Farkas

Human Centered Design & Engineering University of Washington

This is the printed version of the course syllabus, current as of 9/20/12. It is taken directly from the course website: http://faculty.washington.edu/farkas/HCDE510-Fall2012. The website, but not the course syllabus, will be updated during the quarter.

Syllabus

Week 1

September 26

Introduction to course AGENDA:

Explain course content, assignments, and procedures.

Concepts for information design: Communication, Discourse, Medium, Information Design, Mediation, Document, Genre, Negotiation of meaning, Canvas, Format, and Behaviors.

Week 2

October 3

Genres of consumer-information graphics; Preview of design guidance

AGENDA:

Discussion of course readings.

Concepts for information design: Structure, Linearity/Non-Lineary,

Modularity/Chunking.

Discussion of the Radiation Label case study.

Informal presentations: Each student discusses two of the Berkeley Competition labels.

Group review of preliminary version of Radiation Labels.

ASSIGNED:

Read the <u>Radiation Label case study</u> and prepare a preliminary design. Be prepared to discuss it both as an individual design and as an instance of the consumer-information graphics genre.

Read Pettersson, *It Depends*. Read the guidelines (pp. 171-77). Then peruse the preceding chapters of the book.

Read Larson & Farkas, "<u>Indicating Impact</u>: The Environmental Life-Cycle Rating Label." Read Farkas, Larson, & Naranjo, "<u>LabelPatterns.Org</u>: A Comprehensive Pattern Library for Environmental and Consumer-Decision Labels." Examine selected <u>Berkeley Competition</u> nutrition labels and prepare to discuss two (5 minutes for each).

Week 3

October 10

The design process

AGENDA:

Discussion of course readings.

Concepts for information design: Theme, Style, Mood, Stance, Color, Aesthetic appeal.

Group discussions of students' design practices.

Group review of second Preliminary versions of students' Radiation Labels. Informal discussion of the usefulness and limitations of (1) design patterns generally and (2) Label Patterns.org.

ASSIGNED:

Be prepared to identify three <u>Berkeley Competition</u> nutrition labels that violate one or more patterns in LabelPatterns.org. Be prepare to discuss the relevant design issues. Reflect on your design practices across media and genres, with special attention to your use of existing models and guidance. Be prepared to discuss your design practices. Read Iliinsky and Steele, *Designing Data Visualizations*, pp. 1-46 and 91-93. Read Hartley, "<u>Text Design</u>."

Read Farkas & Farkas, "Graphic Design," from Principles of Web Design.

Week 4

October 17

The design of infographics and data visualizations AGENDA:

Discussion of course readings.

Informal student presentations on Beta versions of Radiation Labels. Students are encouraged to borrow ideas from other Beta versions for their own final designs. **ASSIGNED:**

Submit the Beta version of your Radiation Label with explanatory annotations/memo. Read van der Waarde, "The Graphic Presentation of Patient Package Inserts." Read Iliinsky and Steele, *Designing Data Visualizations*, pp. 46-83 and review pp. 91-93.

Be prepared to display and discuss your Radiation Label design.

Week 5

October 24

Patterns and pattern libraries

AGENDA:

Discussion of course readings.

Informal discussion of the use of design patterns and pattern libraries.

Discussion of design patterns. Planning for writing your patterns.

ASSIGNED:

Submit your proposal for the individual design project. Submit: your four 1-paragraph descriptions for the design pattern assignment.

Read Marcus, "Patterns within Patterns: Introduction to Design Patterns,"

Read excerpt from Alexander's Timeless Way of Building

Peruse selected pattern libraries.

Be prepared to discuss the usefulness and limitations of design patterns generally and <u>LabelPatterns.org</u>.

FROM THE INSTRUCTORS:

Return the Beta Radiation Label assignment.

Week 6

October 31 (Halloween)

Longer documents

AGENDA:

Discussion of course readings.

Concepts for information design: Hierarchy, Standard Expository Model, Display unit/Display unit boundaries, Exigency and Problem-Solution Structure.

ASSIGNED:

Submit: Final Radiation Label with explanatory annotations/memo.

Read Farkas, "Linear-Hierarchical Model."

Read Heller, <u>"Tom Suzuki, 76, a Designer Who Transformed Textbooks, Dies</u>." Read Tracey, Rugh, and Starkey, <u>STOP Report</u>.

Peruse QuikScan.org.

FROM THE INSTRUCTORS:

Return pattern proposal with the instructors' choice of two patterns for you to design and produce.

Respond to proposal for the individual design project with recommendations.

Week 7

November 7

Hypertext and multimedia

AGENDA:

Discussion of course readings.

Concepts for information design: Multimedia/Hypertext/Modularity/Interactivity **ASSIGNED:**

Submit Beta of two design patterns with hyperlinks and explanatory annotations/memo. Read Farkas, "<u>Hypertext and Hypermedia</u>."

Read Bernstein, *Hypertext Gardens*. Look at both <u>Web</u> and <u>PDF</u> versions.

Read Keep, et al, *Electronic Labyrinth*.

Read Raban, excerpt about modular writing.

Read Mayer and Moreno, "Nine Ways to Reduce Cognitive Load in Multimedia."

Read Wortham, "Shorter E-Books for Smaller Devices."

FROM THE INSTRUCTORS:

RETURN: Final Radiation Label.

Week 8

November 14

The infinite canvas

AGENDA:

Discussion of course readings

Concepts for information design: Infinitive canvas, Immersive VR, and augmented VR, **ASSIGNED:**

View Aguera y Aracas, Blaise, <u>Photosynth demo</u>. Peruse selected Prezi demos (to be announced). Read McCloud, "<u>Follow that Trail (I Can't Stop Thinking #4)</u>." Examine, McCloud, "Zot Online: Hearts and Minds" (Part #12).

Examine Horn, "Interactive Visual Scenario for the PanDefense 1.0 Conference," 2006. Examine Horn, "<u>Mega-Flu Pandemic</u>: Not Quite the Worst Case Scenario V.2," 2005. Read Nielsen, "<u>Transmedia Design</u> for the 3 Screens (Make That 5)."

Read Bosman, "E-Books Fly Beyond Mere Text."

Read Rich, "Curling Up With Hybrid Books, Videos Included."

FROM THE INSTRUCTORS:

Return Beta of two design patterns.

Week 9

November 21

Adaptive documents and synthetic interviews AGENDA:

Discussion of course readings.

Presentations on individual course projects.

ASSIGNED:

Submit final version of two design patterns.

Submit Beta of individual course project with explanatory annotations/memo.

Cawsey Cawsey, Grasso, and Paris, "Adaptive Information for Consumers of Healthcare."

Kiernan, "Multimedia Data Base at Carnegie Mellon Lets You 'Interview' Albert Einstein." Peruse the Synthetic Interview Studio website: http://www.etc.cmu.edu/projects/sistudio/team.html

Peruse the HCDE 510 Elvis Presley interactive interview (Team A and Team B). Marinelli and Stevens, "Synthetic interviews: the Art of Creating a 'Dyad' between Humans and Machine-Based Characters."

Ostinelli, "The Composite Intelligence of Virtual Assistants."

Be prepared to display and discuss individual course projects. Send instructors a URL, PPT file, or equivalent (etc.) 9:00 on Nov. 21.

Week 10

November 28

Information production: Crowdsourced vs. curated content, text mining

AGENDA:

Discussion of course readings.

Presentations on design patterns.

ASSIGNED:

Submit beta of individual course project with explanatory notes/memo.

Prepare to discuss your two design patterns.

Read Analore, "GM Uses Wiki to Tell its Story."

Read Krag, "Book Sprint Methodology," http://www.booksprints.net/book-sprintmethodology/

Read Rockley, "Dynamic Content Management."

Read Fisher, "Moving from Single Sourcing to Reuse with XML DITA."

Read "Text Mining" in Wikipedia.

Read Farkas and Farkas, "An Introduction to Copyright Law."

FROM THE INSTRUCTORS:

Return final versions of two design patterns.

Return Beta of individual course project.

Class 11

December 5 **Course Review; Exam ASSIGNED (for December 10):** Submit final of individual course project.

Finals week

ASSIGNED: Return final of individual course project and complete grading.

Readings and other materials

Assigned and recommended readings

The items listed below are a superset of the readings assigned on the syllabus. In addition to the assigned readings (with full bibliographic citations) are readings that may be mentioned in class discussion and that may be useful to you as your work on your course assignments.

Aguera y Aracas, Blaise, Photosynth demo, TED Conference (March) 2007. http://www.ted.com/index.php/talks/blaise_aguera_y_arcas_demos_photosynth.html

Alexander, Christopher, The Timeless Way of Building, New York: Oxford University Press, 1979.

Allen, Patrick, John Bateman, and Judy Delin, "<u>Genre and Layout Design in Multimodal Documents: Towards</u> <u>an Empirical Account</u>," American Association for Artificial Intelligence Fall Symposium on Using Layout for the Generation, Analysis, or Retrieval of Documents, Cape Cod, Autumn 1999.

Analore, Andrew, "GM Uses Wiki to Tell its Story." Ragan.com, August 29, 2008.

Berghel, Hal, "A Cyberpublishing Manifesto," *Communications of the ACM*, 44 (3), 2001, pp. 17-20.<u>http://www.berghel.net/publications/c_pub/c_pub.php</u>

Bernstein, Mark, HypertextGardens. http://www.eastgate.com/garden/ and pdf verson.

Billinghurst, Mark., Kato, Hirkazu., and Poupyrev, Ivan, "<u>The MagicBook - Moving Seamlessly between</u> <u>Reality and Virtuality</u>," *"Computer Graphics and Applications*," 21(3), 2001, pp. 2-4. <u>http://www.hitl.washington.edu/artoolkit/Papers/cgaMay2001.pdf</u>

Bosman, J., "E-Books Fly Beyond Mere Text," *New York Times* (NYTimes.com), July 29, 2010.<u>https://catalyst.uw.edu/sharespaces/space/farkas/7457</u>

Bush, Vannevar, "<u>As We May Think</u>," *Atlantic Monthly*, 176.1 (July), 1945, pp. 101-108. A version with valuable commentary was reprinted in the ACM magazine *Interactions*, 3 (2), March 1996, pp. 35-46. Sections 6-8 are the key sections in Bush's article. http://web.mit.edu/STS.035/www/PDFs/think.pdf

Cawsey, Alison, Floriana Grasso, and Cecile Paris, "<u>Adaptive Information for Consumers of Healthcare</u>," in P. Brusilovsky, A. Kobsa, and W. Nejdl (eds.), *The Adaptive Web*, Berlin/Heidelberg: Springer-Verlag 2007, pp. 465–484, 2007.

Chandler, Daniel, "<u>An Introduction to Genre Theory</u>," posted to the Web on August 7, 1997. <u>http://www.aber.ac.uk/media/Documents/intgenre/intgenre.html</u>

Chandler, Daniel. "<u>Montaigne and the Word Processor</u>," posted on the Web on May 26,1997. <u>http://www.aber.ac.uk/media/Documents/short/montword.html</u>

Clark, Ruth, "<u>Six Principles of Effective e-Learning: What Works and Why</u>." *The eLearning Developers' Journal*, September 10, 2002, pp. 1-8. (A summary of research by Richard Mayer.) <u>http://www.elearningguild.com/pdf/2/091002DES-H.pdf</u>

Communications of the ACM, The Adaptive Web, 45:5, (May 2002). Available from the ACM Digital Library at www.acm.org (Brusilovsky, Bental, Billsus, Cheverst, de Bra, and Andre).

Cotton, Bob and Richard Oliver, "<u>Hypermedia Applications: Education</u>" from *Understanding Hypermedia*, London: Phaidon Press, 1993, pp. 88-89.

De Bra, Paul, "<u>Adaptive Educational Hypermedia on the Web</u>," *Communications of the ACM*, 45 (1), 2002, pp. 60-61. Available from the ACM Digital Library at <u>www.acm.org</u>. Also see other articles on the Adaptive Web by Brusilovsky, Bental, Billsus, Cheverst, and Andre.

De Bra, Paul, "<u>Adaptive Hypermedia</u>," in Kinshuk, Sampson, Adelsberger and Pawlowski (Eds.), *Handbook* on Information Technologies for Education and Training. Berlin: Springer-Verlag, 2008, pp. 29-46.

Delin, Judy, John Bateman, and Patrick Allen. "A Model of Genre in Document Layout," *Information Design Journal*, 11(1), 2002-3, pp. 54–66.

Ding, Huiling, "Genre analysis of personal statements: Analysis of Moves in Application Essays to Medical and Dental Schools," *English for Specific Purposes*, 26 (2007) 368–392.

Erickson, Thomas, "Social Interaction on the Net: Virtual Community as Participatory Genre," Proceedings of the Thirtieth Hawaii International Conference on System Sciences, January 6-10, 1997, Maui, Hawaii. http://www.visi.com/~snowfall/VC as Genre.html

Farkas, David K., "The Linear Hierarchical Model," unpublished course material, 2010.

Farkas, David K. and Christopher Raleigh, "Designing Documents for Selective Reading," forthcoming, *Information Design Journal*.

Read Farkas, Larson, & Naranjo, "LabelPatterns.Org: A Comprehensive Pattern Library for Environmental and Consumer-Decision Labels," *Proceedings* of the 2011 IPCC Conference.

Farkas, David K., "<u>Managing Three Mediation Effects that Influence PowerPoint Deck Authoring</u>," *Technical Communication*, 56 (1), 2009.

Farkas, David K., "<u>A Heuristic for Reasoning about PowerPoint Deck Design</u>," *Proceedings* of the 2008 International Professional Communication Conference, Montreal, Canada, July 13-16.

Farkas, David K., "Toward a Better Understanding of PowerPoint Deck Design," *IDJ+DD (Information Design Journal + Document Design)*, 14 (2), 2006, pp. 162-71.

Farkas, David K., "Explicit Structure of Print and On-Screen Documents," *Technical Communication Quarterly*, 14 (1), 2005, pp. 9-30.

Farkas, David K., "<u>Understanding and Using PowerPoint</u>," *Proceedings* of the Society for Technical Communication 52nd Annual Conference, Seattle, WA, May 8-11, 2005, pp. 313-320. http://www.stc.org/ConfProceed/2005/PDFs/0066.pdf

Farkas, David K., "<u>Hypertext and Hypermedia</u>," *Berkshire Encyclopedia of Human-Computer Interaction*, Berkshire Publishing 2004, pp. 332-336.

Farkas, David K. "<u>Managing Headings in Print and Online Documents</u>," *Proceedings* of the 2002 IPCC Conference, Portland, OR, September 17-20.

Farkas, David K. and Farkas, Jean B., "<u>Writing for the Web</u>" (Chapter 10), in *Principles of Web Design*. Longman, 2002, pp. 220-240.

Farkas, David K. and Farkas, Jean B., "<u>An Introduction to Copyright Law</u> (Appendix B)," in *Principles of Web Design*. Longman, 2002.

Farkas, David K. and Farkas, Jean B., "Graphic Design," in Principles of Web Design. Longman, 2002.

Farkas, David K., Jerrod Larson, and Steven J. Naranjo, "LabelPatterns.Org: A Comprehensive Pattern Library for Consumer-Decision Labels," *Proceedings* of the 2011 IPCC Conference.

Farkas, David K. and Christopher Raleigh, "<u>Designing Documents for Selective Reading</u>," forthcoming 2012, *Information Design Journal*.>

Fisher, Lori, "<u>Moving from Single Sourcing to Reuse with XML DITA</u>," *Best Practices* (Comtech), June 2003, pp. 63-68. http://xml.coverpages.org/DITA-FisherLori.pdf

FLOSS Manuals Community Members, <u>FLOSS Manuals</u>, 2008 <u>http://en.flossmanuals.net</u>

French, Howard W., "<u>U.N. Congo Report Offers New View on Genocide</u>," *New York Times* (NYTimes.com), August 27, 2010.

Gladwell, Malcolm, "<u>The Social Life of Paper: Looking for Method in the Mess</u>,"*The New Yorker*, March 25, 2002, pp. 92-96. http://www.gladwell.com/2002/2002_03_25_a paper.htm

Gold, Rich, "<u>Reading PowerPoint</u>," in *Working With Words And Images: New Steps in an Old Dance*, Nancy J. Allen (ed). Ablex, 2002.

Graham, S. Scott and Brandon Whalen, "Mode, Medium, and Genre.A Case Study of Decisions in New-Media Design," *Journal of Business and Technical Communication*, 22 (1), 2008, pp. 65-91.

Harrill, Rob, "<u>Readers Become Part of the Action through High-Tech Mixture of Traditional Storytelling and Virtual Reality in UW's 'Magic Book</u>,'" University of Washington press release, September 12, 2000. <u>http://uwnews.org/article.asp?articleID=3320</u>

Hartley, James, "<u>Text Design</u>," in *Handbook of Research for Educational Communications and Technology*, ed. David H. Jonassen, New York, Macmillan, 1996.

Heller, Steven, "<u>Tom Suzuki</u>, 76, a Designer Who Transformed Textbooks, Dies," *New York Times*(NYTimes.com), September, 12, 2006. http://www.nytimes.com/2006/09/12/books/12suzuki.html?pagewanted=print

Horn, Robert E., "Interactive Visual Scenario for the PanDefense 1.0 Conference," 2006.

Horn, Robert E., "Mega-Flu Pandemic: Not Quite the Worst Case Scenario V.2", 2005.

Horn, Robert E., "<u>What Kinds of Writing Have a Future?</u>" Presentation at the ACM SigDOC Conference, October 22, 2001. http://www.stanford.edu/~rhorn/a/recent/spchWhat%20KindsOfWrtng.pdf

Horn, Robert E., "<u>Knowledge Mapping for Complex Social Messes</u>," Presentation at the David and Lucile Packard Foundation, July 16, 2001.

Horn, Robert E. "<u>Structured Writing as a Paradigm</u>," in *Instructional Development: State of the Art*, Alexander Romiszowski and Charles Dills (eds). Englewood Cliffs, N. J., Educational Technology Publications, 1998. <u>http://www.stanford.edu/~rhorn/a/topic/stwrtng_infomap/artclStrctrdWrtngPrdigm.pdf</u>

Hyde, Adam, Book Sprints Face-2-Face, 2009. http://en.flossmanuals.net

Iliinsky, Noah and Julie Steele, *Designing Data Visualizations*, O'Reilly, 2011.

Jackson, Randolph L. and Eileen Fagan, "<u>Collaboration and Learning within Immersive Virtual</u> <u>Reality</u>,"*Proceedings* of the Third International Conference on Collaborative Virtual Environments 2000, San Francisco, California. Available from the ACM Digital Library at ACM.org.

Keep, Christopher, McLaughlin, Tim, and Parmar, Robin, <u>*The Electronic Labyrinth*</u> (written in 1993 and adapted for the World Wide Web in November 1995). <u>http://www2.iath.virginia.edu/elab/</u>

Kiernan, Vincent, "<u>Multimedia Data Base at Carnegie Mellon Lets You 'Interview' Albert Einstein</u>," *The Chronicle of Higher Education*, January 9, 1998, p. A27.

Krag, Tomas, "Book Sprint Methodology."

Larson, Jerrod and David K. Farkas, "Indicating Impact: The Environmental Life-Cycle Rating Label," *Proceedings* of the 2011 IPCC Conference.

Larson, Jerrod, *Indicating Impact: The Design of an Environmental Labeling System for Consumer Goods, doctoral dissertation, University of Washington, 2009.*

Lee, Moon, J., "<u>Expanding Hypertext: Does It Address Disorientation? Depends on Individuals</u>' <u>Adventurousness</u>." *>Journal of Computer-Mediated Communication*, 10(3). http://jcmc.indiana.edu/vol10/issue3/lee.html

Marcus Aaron, "Patterns within Patterns: Introduction to Design Patterns," Interactions, March-April 2004, pp. 39-34.

Marinelli, Donald and Scott Stevens, Scott, "<u>Synthetic interviews: the Art of Creating a 'Dyad' between</u> <u>Humans and Machine-Based Characters</u>," in IVTTA (Interactive Voice Technology for Telecommunications Applications) '98, pp. 1998,43-48.

Marlow, Cameron, Mor Naaman, danah boyd, Marc Davis, "Position Paper, Tagging, Taxonomy, Flickr, Article, ToRead." Proceedings Hypertext '06 Conference.

Mayer, Richard E. and Roxana Moreno, "<u>Nine Ways to Reduce Cognitive Load in Multimedia</u> Learning," *Educational Psychologist*, 38(1), pp. 43-52, 2003.

McCloud, Scott, "Follow that Trail" (I Can't Stop Thinking #4). <u>http://www.scottmccloud.com/1-webcomics/icst/index.html</u>

McCloud, Scott. "Zot Online: Hearts and Minds" (Part #12). http://www.scottmccloud.com/1-webcomics/zot/index.htmll

McCloud, Scott, <u>*Google Chrome: Behind the Open Source Browser Project*.http://www.google.com/googlebooks/chrome/index.html</u>

National Endowment for the Arts, <u>*Reading on the Rise: A New Chapter in American Literacy.*</u> Washington, DC Undated/2009.

Nelson, Theodor Holm ("Ted"), <u>Excerpt from Computer Lib/Dream Machines</u>, from The New Media Reader, ed. Noah Wardrip-Fruin and Nick Montfort, MIT Press, Cambridge, MA, 2003.

Nelson, Theodor Holm ("Ted"), "Xanadu: Document Interconnection Enabling Re-use with Automatic Author Credit and Royalty Accounting," Information Services & Use, 14 (1994), pp. 255-265.

Nielsen, Jacob, "Transmedia Design for the 3 Screens (Make That 5)," Alertbox, August 29, 2011.

Nielsen, Jakob, "<u>How Little Do Users Read?</u>" Alertbox, May 6, 2008. http://www.useit.com/alertbox/percent-text-read.html

Nielsen, Jakob, "<u>Reviving Advanced Hypertext</u>." Alertbox, January 3, 2005. http://www.useit.com/alertbox/20050103.html

Nielsen, Jakob, "<u>The End of Legacy Media</u>" (Newspapers, Magazines, Books, TV Networks)." Alertbox, August 23, 1998.

http://www.useit.com/alertbox/980823.html

Onion, The, <u>"Nation Shudders At Large Block of Uninterrupted Text</u>," Science & Technology, March 9, 2010 (issue 46-10).

Ostinelli, "The Composite Intelligence of Virtual Assistants." Ostinelli.Net, 2007.

Peters, Jeremy W., "For New Yorker on iPad, Words Are the Thing," New York Times (NYTimes.com), July 31, 2011.

Pettersson, Rune, It Depends: Information Design: Principles/Guidelines, Fourth, ed., Tullinge, Sweden, 2012

Raban, Jonathan, Excerpt about modular writing from "<u>The Nuclear Threat</u>," a review of *The Atomic Bazaar* by William Langewiesche, New York Times, May 20, 2007. http://www.nytimes.com/2007/05/20/books/review/Raban-t.html

Ramaswami, Rama, "Best of Both Worlds," Campus Technology, September 1, 2009, pp. 24-31.

Redish, Janice (Ginny) Letting Go of the Words, Morgan Kaufmann/Elsevier, 2007.

Redish, Janice (Ginny), "Writing for the Web, Letting Go of the Words", Intercom, June 2004, pp. pp. 4-10.

Rich, Motoko, "<u>Curling Up With Hybrid Books, Videos Included</u>," *New York Times* online (NYTimes.com), October 1, 2009.

Rockley Group, "Preparing for DITA: What You Need to Know," white paper, Markham, Ontario, Canada, 2005.

Rockley, Ann, "Dynamic Content Management," Intercom, February 2001, pp. 28-32 and 42.

Schmandt-Besserat, Denise, "Signs of Life". Archaeology Odyssey, Jan-Feb 2002, 6–7, 63. https://webspace.utexas.edu/dsbay/Docs/SignsofLife.pdf

Self, Tony, "What If Readers Can't Read?" Intercom, February 2009, pp. 10-14.

Snyder, Carolyn, "Online Video: The Book Was Better," Eye for Design, July/August, 1998, pp. 8-10.

Steuer, Jonathan, "<u>Defining Virtual Reality: Dimensions Determining Telepresence</u>," *Journal of Communication*, 4(24) (Autumn, 1992), 73-93. <u>Graphic of Steuer's model</u> adapted by Clement Mok, Designing Business:> *Multiple Media, Multiple Disciplines* San Jose, CA: Adobe Press, 1996.

Tracey, J. R., D.E. Rugh, and W.S. Starkey, <u>Sequential Thematic Organization of Publications (STOP)</u>, Internal report for the Hughes Aircraft Company, 1965, reprinted in the *Journal of Computer Documentation*, 23 (3), August 1999. Available from the ACM Digital Library at ACM.org.

Tversky, B., J.B. Morrison, & M. Betrancourt, "<u>Animation: Can it facilitate?</u>" *International Journal of Human-Computer Studies*, 57, 2002, pp. 247-262.

University of Washington, *Biological Information Handling: Essentials for Engineers*, multimedia tutorial, 2004. <u>http://www.biologyforengineers.org/</u> (Click Get the CD and look for downloads).

van der Waarde, Karel, "The Graphic Presentation of Patient Package Inserts." *Information for Everyday Use: Design and Research Perspectives*. Zwaga, H., Boersema, T., Hoonhout, H. eds; London: Taylor and Francis, Ltd, 2009.

Walker, Randall C., Phil Schloss, Charles A. Vogel, Adam S. Gordon, Charles R. Fletcher, and Stan Walker, "<u>Visual-Syntactic Text Formatting</u>: Theoretical Basis and Empirical Evidence for Impact on Human Reading."*Proceedings* of the 2007 International Professional Communication Conference, Seattle, Washington, October 1-3. See also the annotated PowerPoint deck <u>WalkerVSTF-IPCC07</u>.

Weiss, Edmond, H., "Bits, Atoms, and the Technical Writer: The Rhetoric of STOP," adapted from *The Journal of Computer Documentation*, 23 (3), 1999, pp. 95-101.

Wortham, Jenna, "Shorter E-Books for Smaller Devices," New York Times (NYTimes.com), February 12, 2011.

Zhou, Quan and David K. Farkas, "QuikScan: Formatting Documents for Better Comprehension and Navigation," *Technical Communication*, 57 (2), 2010, pp. 197-209.

Sources of information on Consumer Information Graphics

Here are some resources pertinent to consumer information graphics that can serve as a good starting point for writing your design patterns.

Adams, Austin, Theo Boersema & Meijer Mijksenaar, Warning symbology: Difficult concepts may be successfully depicted with two-part signs, *Information Design Journal* 18(2), 94–106, 2010https://eres.lib.washington.edu/eres/coursepage.aspx?cid=9547&page=docs

Illinsky, Noah and Julie Steele, *Designing Data Visualizations*, O'Reilly, 2011.

LabelPatterns.org http://www.labelpatterns.org/bibliography.php

Thorne, J. and C. Egan, *An Evaluation of the Federal Trade Commission's Energy Guide Appliance Label: Final Report and Recommendations*. Washington, DC: American Council for an Energy-Efficient Economy, 2002.

Wolgaltern, Michael S, Vincent C. Conzola, & Tonya L. Smith-Jackson, "Research-based guidelines for warning design and evaluation," *Applied Ergonomics* 33(3), May, 2002, pp. 219-30.

Ware, Colin, *Information Visualization : Perception for Design*, Morgan Kaufman, 2000. (4-hour reserve UW Engineering Library).

Kimball, Miles A. and Ann R. Hawkins, *Document Design: A Guide for Technical Communications*. Bedford/St. Martins, 2008. (4-hour reserve UW Engineering Library).

Kostelnick, Charles, and David D. Roberts, *Desiging Visual Language: Strategies for Professional Communicators*, Allyn & Bacon, 1998. (4-hour reserve UW Engineering Library).

Lipton, Ronnie, *The Practical Guide to Information Design*, Wiley, 2007. (4-hour reserve UW Engineering Library).

Pettersson, Rune, <u>It Depends</u> and his <u>complete information design series</u>. Message Design Text Design Image Design Graphic Design Cognition Basic ID-concepts

Course materials

Below are handouts, slide decks, and other resources that are not academic or professional publications. This includes a PDF version of the course syllabus (current as of the start of the quarter).

HCDE 510 Elvis Presley interactive interview (Team A and Team B). Radiation label case study Printed Course Syllabus V1 Problem-Solution Structure slide deck Basic Communication Concepts slide deck Medium and Genre slide deck Format and Behaviors slide deck Farkas, "Navigation vs. Scent" slide deck John Henry Hypertext Exercise Horn, Social Messages Missile Defense Horn, Social Messes Multnomah Horn, Social Messes Alameda Noah Iliinsky, Knowledge Map Noah Iliinsky, Book Diagram Scriptographic-Your Eyes Scriptographic-Ergonomics MSReader-MagicOfReading

Assignments and Grading/Course

Policies Assignments and Grading

Note: I may modify the weighting of the course assignments and add a limited number of extra readings and written assignments.

Project #1 (Radiation Label) - 8% for Beta version and 17% for final version = 25%

Project #2 (Design Patterns) - 8% for Beta version and 17% for final version = 25%

Project #3 â€" (Student-Defined Project) - 8% for Beta version and 17% for final version = 25%

Comprehensive exam = 25%

Radiation label. You will design a consumer-information label indicating risks from radiation in beef products following a regional nuclear war.

Design patterns. You will research, design, write, and hyperlink two design patterns for a pattern library on consumer information graphics.

Student-defined project. In conjunction with the instructors you will define and carry out an information-design project that accords with your own interests.

The comprehensive exam. This 90-minute short-essay exam will cover all course readings and class discussion (but not GoPost conversation) up until the exam date. The exam will require both recall and synthesisis of ideas.

Other activities. There is no grade for class participation, but I may raise the final grade of students whose class participation and GoPost contributions are outstanding. Each student is required to contribute a weekly post to GoPost, excluding purely social posts (which are encouraged). **Failure to post weekly to GoPost will result in a deduction from the course grade.**

This is the URL for our GoPost bulletin board: https://catalyst.uw.edu/gopost/board/farkas/23308/

Course Policies

Academic Integrity

Students are expected to work independently unless other instructions are given. Consult with the instructor if you think your work plan might constitute plagiarism. You should also acquaint yourself with the <u>HCDE Plagiarism Policy</u>.

Student Rights

Please read the HCDE statement on student rights.

Contact Info and Office Hours

David K. Farkas

Email: farkas AT uw.edu **Office:** Sieg Hall 414

Office Hours: Tuesday: 1:30 - 2:30 Wednesday: 4:30 - 5:30 Thursday: 1:30 - 2:30 And by appointment

I can meet face-to-face or via phone/Skype. If possible, let me know in advance that you want to meet with me.

Ben Samples

Email: samples AT uw.edu **Office:** Sieg Hall TBA

Office Hours:

Wednesday: 4:30 - 5:30 Thursday: 1:00 - 3:30 And by appointment

I can meet face-to-face or via phone/Skype. If possible, let me know in advance that you want to meet with me.

Introduction to course (from home page)

Whether you are a student in HCDE 510 or a visitor from outside the course, welcome to this course website.

Information design is the use of imagery, text, sound, interactivity, and umediated human behavior to create a message and an information experience.

Information products are fundamental to human culture. Information design is very widely practiced, and information design concepts and skills are valuable in user interface and user experience design.

This fall we will learn and use a wide range of information design concepts, carry out three design projects, and examine the information design process. The three projects are these: designing a consumer-information graphic, researching and writing two design patterns, and engaging in a design project that you define in collaboration with the instructors.

The broad goals of the course are that you will:

- Gain a deeper understanding of the concepts that underlie information design and learn to use them both as a designer and evaluator.
- Reflect productively upon the many ways in which information design is carried out and strengthen your own design process.
- Understand the role of design patterns and pattern libraries as part of the design process.
- ecome a more broadly educated individual and a stronger participant in conversations and innovations regarding media and communication.