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LIS-643

Information Architecture & Interaction Design

Spring 2013

Wednesday 6:30-8:50p • Pratt Manhattan Center, Room 609

Credits: 3

Pre-requisites: LIS 653 and LIS 654

Office Hours: Monday 3-4p, Thursday 4-6p, and by appointment

Bulletin Description

Drawing on the principles of information architecture, interaction design, and from the domains of information science, design, art, media ecology, and psychology, this course provides students with a unified method for thinking about and designing for information and interactivity in space and to some extent, place. Special attention is given to new media in general and the web specifically. Students are expected to demonstrate not only an ability to think and do, but also to reflect on how thinking and doing iteratively lead to, and influence, each other.

Detailed Description

The ubiquity and pervasiveness of digital technology has highlighted the need for “good” design, but what is “good” design and, more importantly, how do you do it? In this course, students will explore this challenge while gaining the theoretical and practical knowledge of how to design interactive systems with a user-centered approach. Through lectures, in-class activities, readings, and individual and small group assignments, students will gain a solid understanding of and hands-on experience with a variety of design methods including user research, card sorting, sketching and ideation, prototyping, design critiques, and visual design. Because much of the work of information architects and interaction designers happens behind the scenes, effectively communicating the results and value of design work will be a core focus of this course.

Course Goals & Objectives

The goals of this course are to:

- Develop an understanding and appreciation of the principles and process of user-centered design.
- Provide practical experience with the methods and tools of information architecture and interaction design.
- Improve individual and collaborative skills in problem solving, communication, and creative thinking.

Upon successful completion of this course, a student will be able to:

- **Explain** and **describe** the principles of information architecture and interaction design using appropriate terminology.
- **Choose** and **employ** appropriate methods of information architecture and interaction design to understand users’ needs, behaviors, capabilities, and interests.
- **Select** and **use** industry-standard digital (and non-digital) technologies to effectively communicate design ideas.
- **Create** high-quality work products that are consistent with professional practice.

LIS-643: Information Architecture & Interaction Design
Professor Craig M. MacDonald

Teaching Philosophy

My goal is to make course material accessible, appealing, and meaningful so that students are actively engaged in the process of learning. To that end, I have four primary teaching objectives:

- (a) *Give students opportunities to learn-by-doing through course projects and hands-on activities.*
Engaging with the subject matter enhances learning by challenging students to think critically and reflectively about how theoretical concepts and principles can be applied to practical problems.
- (b) *Provide students with clear guidelines for assessment.*
Detailed assignment descriptions and grading rubrics define expectations, outline assessment standards, and serve as a framework for offering meaningful, substantive feedback on student work.
- (c) *Be accessible, approachable, and treat students with respect.*
Being organized, prepared, responsive, and approachable empowers students and creates a friendly, collegial atmosphere that is more conducive to learning.
- (d) *Bring research into the classroom by integrating current research results with course materials.*
Integrating recent research findings into the curriculum and asking students to reflect on the impact of these findings helps prepare students for careers in the rapidly changing information profession.

Group Work

A majority of course work will be carried out in the context of a group project, but individual assignments will make up a substantial portion of, and will directly inform, project work. Groups will consist of 3-4 people, depending on class size.

There are three primary reasons for using group work in this class:

1. **Pedagogical:** the discussion and negotiation that occurs in groups will not only deepen and extend your learning, but it also leads to enhanced creativity and increased effectiveness and productivity.
2. **Practical:** designing a system or tool individually would not be practical in a 15-week academic term. Working in a group reduces the workload and provides opportunities for each group member to contribute what they can, when they can.
3. **Vocational:** groups are a common feature of professional settings, particularly in system design. Job descriptions routinely ask for applicants with effective communication skills and experience working in teams, so I hope this course helps you develop these skills.

Course Website

A copy of the syllabus, assignment descriptions, and all course readings will be posted on the course website via Pratt's Learning Management System (LMS) accessible at lms.pratt.edu. All electronic communication for the course will be sent through the LMS, which requires use of your official Pratt e-mail address. If you don't use your Pratt e-mail address, please make sure you forward your messages to an address that you check regularly (this can be done from webmail).

Required Texts & Course Readings

There is no required textbook for this course. However, there will be several required readings each week that are meant to not only introduce the concepts covered in the lectures but also to broaden and enrich your understanding of those concepts. It is expected that you come to class having read the assigned readings for the week. All readings will be available via the LMS (lms.pratt.edu).

Course Requirements

The overall course grade will be based on a total of 200 points, weighted as follows:

50% Individual Design Deliverables

- I1: User Research Report (15%)
- I2: Personas, Scenarios & User Flows (15%)
- I3: Sketches (10%)
- I4: Wireframes (10%)

35% Group Design Deliverables

- G1: Design Brief (10%)
- G2: Card Sorting Report (10%)
- G3: Prototypes (15%)

15% Final Paper: IA/IxD in the Real World

Grades will be awarded for points accumulated based on Pratt's grading scale:

Excellent	A	4.0 (93-100)	A-	3.7 (90-92.99)		
Above Average	B+	3.3 (87-89.99)	B	3.0 (83-86.99)	B-	2.7 (80-82.99)
Acceptable	C+	2.3 (77-79.99)	C	2.0 (73-76.99)		
Failure	F	0.0 (00-72.99)				

The main focus of the course will be a semester-long project in which each student will work with 2-3 classmates to re-design the existing website or application for a small- to medium-size organization (e.g., non-profit, library, art gallery, archive, etc.). Each group will have an opportunity select a project that best fits with their interests and with the structure/format of the course.

Individual Design Deliverables [50%]

There will be four individual design deliverables associated with the project: User Research Report (I1), Personas, Scenarios & User Flows (I2), Sketches (I3), and Wireframes (I4). Each of these deliverables will be submitted individually but will be completed in the context of the group project and thus may require group collaboration or communication. More details will be provided in class.

Group Design Deliverables [40%]

There will be three group design deliverables associated with the project: Design Brief (G1), Card Sorting Report (G2), and Prototypes (G3). Each of these deliverables will be submitted and graded as a group. More details will be provided in class.

Final Paper: Information Architecture & Interaction Design in the Real World [15%]

For the final paper, each student will be asked to write a paper on "IA/IxD in the Real World." Individual paper topics will vary but should fall under this broad theme. More details will be provided in class.

Participation

Although it is ungraded, active participation in class is essential to successful learning. Although the format may vary each week, typical class sessions will consist of short lectures followed by small group activities that will directly inform group project deliverables. Attendance is therefore critical, but simply attending class will not suffice; you must be consistently engaged with the discussions/activities.

Attendance is also critical because there will be substantial class time to complete project work; if you are not present, you will miss valuable time needed to communicate and coordinate with your fellow group members.

Course Schedule (Summary)

NOTE: A detailed schedule with assigned readings and topic descriptions is presented at the end of this document.

Week	Date	Topic	Due
1	1/16	Welcome + What is Design?	
2	1/23	Framing the Design Problem	
3	1/30	Context & User Needs	
4	2/6	Understanding Users	G1
5	2/13	Navigation, Organization & Labeling	
6	2/20	Personas	I1
7	2/27	Card Sorting	I2
8	3/6	Cognition & Emotion	
9	3/13	**NO CLASS** Spring Break	
10	3/20	Sketching	G2
11	3/27	Wireframes	I3
12	4/3	LAB on Wireframes + Prototyping	
13	4/10	Basics of Visual Design + LAB	I4
14	4/17	Design Critiques + LAB	
15	4/24	Course Wrap-up + LAB on Prototyping	
16	5/1	**NO CLASS** Professor at a conference	G3 + Final Paper

Assignments

Because of the project-based nature of this course, all graded assignments must be uploaded to the LMS before class on the due date (unless otherwise noted) **with no exceptions**.

*Late assignments will be graded at 50%. Assignments more than 24 hours late **will not be graded**.*

Attendance

Attendance is expected and required. Students with 3 absences (for any reason, including documented medical reasons) cannot expect to receive an A in the course and, in accordance with Pratt Institute policy, may be asked to drop the class.

Please notify me ASAP if you know you will be absent. You will be expected to make up any missed material for classes that you miss.

Communication

The best way to contact me is by email (cmacдона@pratt.edu). I check e-mail regularly during the work week and on weekends. Therefore, you can expect an email response within 24 hours (but usually much sooner). Should that change, you will be notified in advance.

Policies & Procedures

Academic Honesty

Instances of cheating, plagiarism, and improper use of intellectual property will not be tolerated. Do not plagiarize or copy from anywhere, including articles, websites, class handouts, class slides, other students' work, web design templates, work you have submitted to another course, etc. Unless specifically indicated otherwise, all assignments submitted for this course must be **your own work**, with sources properly cited.

Any assignment that includes copied material will be given an automatic **zero** – this includes cases where only a portion of the assignment is copied. Depending on the nature of the offense, this may also result in failure of the course. **No excuses will be accepted.** More information about Pratt's academic integrity code can be found at: <http://www.prattsenate.org/learning/02-academic.htm>

Disabilities

Students who require special accommodations for disabilities must obtain clearance from the Office of Disability Services at the beginning of the semester. For further information, contact the Coordinator of Disability Services in the Office of the Vice President for Student Affairs at 718.636.3711.

Incompletes

Incompletes will not be awarded except for documented medical reasons and at the discretion of the professor.

Institute-Wide Policies

All Institute-wide policies are listed in the Bulletin under "Community Standards" available online at http://www.pratt.edu/student_life/student_affairs/student_policies/ and which include policies on attendance, academic integrity, plagiarism, computer, and network use.

Laptops & Cell phones

Please turn your cell phone off during class. Laptops are permitted for coursework purposes only.

Research Participation

Students may be asked to participate in research studies being conducted by SILS faculty.

Revisions to the Syllabus

While this syllabus provides a reliable framework for the course, it is possible that assigned readings will be added or deleted or that events (guest lectures, extreme weather, etc.) may require changes to the schedule. Any changes will be announced in class or via e-mail.

SILS e-portfolio

Starting Fall 2012, all students entering the MSLIS degree program are required to complete an e-portfolio that must be approved by their advisor before they will be permitted to graduate. The e-portfolio provides students with an opportunity to showcase their best work from the courses they have taken at SILS, and an opportunity to demonstrate they have met the learning objectives of a Master of Information and Library Science.

Work completed for this course may be included in the e-portfolio. Students must demonstrate that their work fulfills at least one of the following learning outcomes:

1. Students carry-out and apply research.
2. Students demonstrate excellent communication skills and create and convey content.
3. Students use information technology and digital tools effectively.
4. Students apply concepts related to use and users of information and user needs and perspectives.
5. Students perform within the framework of professional practice.

Detailed information on the learning outcomes, requirements and how to create your e-portfolio is available from: http://www.pratt.edu/academics/information_and_library_sciences/about_sils/sils_eportfolio/

Course Schedule (Detailed)

Week	Date	Topic	Due
1	1/16	Welcome + What is Design?	
2	1/23	Framing the Design Problem <ul style="list-style-type: none"> ▪ Resmini, A. & Rosati, L. (2012). A Brief History of Information Architecture. <i>Journal of Information Architecture</i>, 3(2). ▪ Myers, B. (1998). A brief history of human-computer interaction technology. <i>ACM interactions</i>, 5(2), 44-54. ▪ Brown, D. (2011). Site maps. In <i>Communicating Design: Developing Web Site Documentation for Design and Planning</i> (2nd Ed.) (pp. 94-123). Berkeley, CA: New Riders. ▪ Brown, D. (2011). Competitive reviews. In <i>Communicating Design: Developing Web Site Documentation for Design and Planning</i> (2nd Ed.) (pp. 254-263). Berkeley, CA: New Riders. ▪ Detzi, C. (2012, March). From Content Audit to Design Insight: How a content audit facilitates decision-making and influences design strategy. <i>UX Magazine</i>. Retrieved from http://uxmag.com/articles/from-content-audit-to-design-insight 	
3	1/30	Context & User Needs <ul style="list-style-type: none"> ▪ Forlizzi, J., & Battarbee, K. (2004). Understanding experience in Interactive Systems. In <i>Proceedings of the 2004 Conference on Designing Interactive Systems (DIS 2004)</i>. New York, NY: ACM. 261-268. ▪ Wright, P., & McCarthy, J. (2008). Empathy and Experience in HCI. In <i>Proceedings of the 2008 ACM SIGCHI Conference on Human Factors in Computing Systems (CHI 2008)</i>. New York, NY: ACM. 637-646. 	
4	2/6	Understanding Users <ul style="list-style-type: none"> ▪ Rogers, Y., Sharp, H., & Preece, J. (2011). Data gathering. In <i>Interaction Design: Beyond Human-Computer Interaction</i> (3rd Ed.) (pp. 222-269). Chichester: John Wiley & Sons, Inc. 	G1
5	2/13	Navigation, Organization & Labeling <ul style="list-style-type: none"> ▪ Wodtke, C., & Govella, A. (2009). The tao of navigation. In <i>Information Architecture: Blueprints for the Web, Second Edition</i> (pp. 189-218). Berkeley, CA: New Riders. 	
6	2/20	Personas <ul style="list-style-type: none"> ▪ Cooper, A., Reimann, R., & Cronin, D. (2007). Modeling Users: Personas and Goals. In <i>About Face 3: The Essentials of Interaction Design</i> (pp. 75-108). Indianapolis, IN: Wiley Publishing. 	I1
7	2/27	Card Sorting <ul style="list-style-type: none"> ▪ Spencer, D., & Warfel, T. (2007). Card sorting: A definitive guide. Retrieved from: http://boxesandarrows.com/view/card_sorting_a_definitive_guide 	I2

8	3/6	Cognition & Emotion <ul style="list-style-type: none"> ▪ Rogers, Y., Sharp, H., & Preece, J. (2011). Cognitive aspects. In <i>Interaction Design: Beyond Human-Computer Interaction</i> (3rd Ed.) (pp. 65-99). Chichester: John Wiley & Sons, Inc. ▪ Norman, D. (2004). Three levels of design: Visceral, behavioral, and reflective. In <i>Emotional Design: Why We Love (or Hate) Everyday Things</i> (pp. 63-98). Cambridge, MA: Basic Books. 	
9	3/13	**NO CLASS** Spring Break	
10	3/20	Sketching <ul style="list-style-type: none"> ▪ Buxton, B. (2009). The anatomy of sketching. In <i>Sketching User Experiences</i> (pp. 105-114). San Francisco, CA: Morgan Kaufmann Publishers. ▪ Buxton, B. (2009). Sketches are not prototypes. In <i>Sketching User Experiences</i> (pp. 139-141). San Francisco, CA: Morgan Kaufmann Publishers. 	G2
11	3/27	Wireframes <ul style="list-style-type: none"> ▪ Unger, R., & Chandler C. (2009). Wireframes and annotations. In <i>A Project Guide to UX Design</i> (pp. 185-203). Berkeley, CA: New Riders. 	I3
12	4/3	LAB on Wireframes + Prototyping <ul style="list-style-type: none"> ▪ Unger, R., & Chandler C. (2009). Prototyping. In <i>A Project Guide to UX Design</i> (pp. 204-219). Berkeley, CA: New Riders. 	
13	4/10	Basics of Visual Design + LAB <ul style="list-style-type: none"> ▪ Cooper, A., Reimann, R., & Cronin, D. (2007). Visual interface design. In <i>About Face 3: The Essentials of Interaction Design</i> (pp. 287-319). Indianapolis, IN: Wiley Publishing. 	I4
14	4/17	Design Critiques + LAB <ul style="list-style-type: none"> ▪ Berkun, S. (2003). How to run a design critique. Retrieved from: http://www.scottberkun.com/essays/23-how-to-run-a-design-critique/ 	
15	4/24	Course Wrap-up + LAB on Prototyping <ul style="list-style-type: none"> ▪ <i>No readings this week</i> 	
16	5/1	**NO CLASS** Professor at a conference	G3* + Final Paper*

* G3 and Final Paper are due by 11:59pm on Sunday, May 5.