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# LIS-643 Information Architecture & Interaction Design Fall 2016

Tuesday 3:00-5:50p (01) / 6:30-9:20p (02) • Pratt Manhattan Center, Room 609

**Credits:** 3 **Pre-requisites:** none

Office Hours: Thursdays 3-6p and by appointment

# **Bulletin Description**

This course provides students with practical knowledge and hands-on experience designing digital interfaces from a user-centered perspective through an exploration of the dual practices of information architecture and interaction design. Students will go through the entire user-centered design lifecycle, from concept to prototype, and in the process will 1) learn about and employ a variety of design methods aimed at understanding users and their contexts and 2) learn about and use appropriate tools and media to create a range of design deliverables that effectively communicate design insights. At the conclusion of this course, students will have a foundation of knowledge and skills that will prepare them to do practical design work in a variety of settings and organizations.

# **Course Goals & Objectives**

The goals of this course are to:

- Gain an understanding of information architecture and interaction design and their role in the user-centered design process.
- Provide practical experience using design methods and creating design deliverables.
- 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 roles of information architecture and interaction design.
- **Choose** and **employ** appropriate methods to understand users and their contexts.
- **Select** and **use** appropriate tools and media to create design deliverables.
- **Create** high-quality work products that effectively communicate design insights and are consistent with professional practice.

# **Required Readings**

There is no required textbook for this course. Instead, there will be several required readings each week that are meant to introduce the concepts covered in the lectures or, in some cases, broaden and enrich your understanding of those concepts.

All readings will be available via the LMS. It is expected that you come to class having read the assigned readings for the week.

# **Assessment and Grading**

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

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Note: (i) = individual assignment; (g) = group assignment
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55% Information Architecture Deliverables
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25% IA1: Understanding Users (i)

Three IA deliverables: user research brief, persona, scenario

15% IA2: Structuring Content (g)

Three IA deliverables: card sorting brief, tree testing brief, and new site map

15% IA3: Understanding the Competition (g)

One IA deliverable: competitive review brief

**30**% Interaction Design Deliverables

15% IxD1: Paper Prototyping (i)

Paper prototype usability testing brief

15% IxD2: Digital Prototype (g)

High-fidelity task-based digital wireframe prototype

**15**% Design Story (g)

A summary of your design process, with reflections on what you learned from each step. \*\*This assignment is e-Portfolio eligible (User-Centered Focus)

Detailed descriptions of each assignment will be distributed in class and posted to the LMS.

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

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

# **Course Schedule**

Date	Topic	Due		
Part I: Information Architecture (IA)				
1 Aug 23	<ul> <li>Welcome + What is Design?</li> <li>Resmini, A. &amp; Rosati, L. (2012). A Brief History of Information Architecture. <i>Journal of Information Architecture</i>, 3(2).</li> <li>Myers, B. (1998). A brief history of human-computer interaction technology. <i>ACM interactions</i>, 5(2), 44-54.</li> <li>Forlizzi, J., &amp; Battarbee, K. (2004). Understanding experience in Interactive Systems. In <i>Proceedings of the 2004 Conference on Designing Interactive Systems (DIS '04</i>). New York, NY: ACM. 261-268.</li> </ul>			
<b>2</b> Aug 30	<ul> <li>Understanding Users &amp; Contexts + LAB</li> <li>Rogers, Y., Sharp, H., &amp; Preece, J. (2011). Data gathering. In Interaction Design: Beyond Human-Computer Interaction (3<sup>rd</sup> Ed.) (pp. 222-269). Chichester: John Wiley &amp; Sons, Inc.</li> <li>Wright, P., &amp; McCarthy, J. (2008). Empathy and Experience in HCI. In Proceedings of the 2008 ACM SIGCHI Conference on Human Factors in Computing Systems (CHI '08). New York, NY: ACM. 637-646.</li> </ul>			
<b>3</b> Sep 6	Communicating Insights + LAB  ■ Dabner, D., Stewart, S., & Zempol, E. (2014). Fundamentals of Composition. In <i>Graphic Design School: The Principles and Practice</i> of Graphic Design (pp. 32-58). Hoboken, NJ: John Wiley & Sons, Inc.			
<b>4</b> Sep 13	<ul> <li>Modeling Users + LAB</li> <li>Cooper, A., Reimann, R., Cronin, D., Noessel, C. (2014). Modeling Users: Personas and Goals. In <i>About Face 4: The Essentials of Interaction Design</i> (pp. 61-99). Indianapolis, IN: Wiley Publishing.</li> <li>Nielsen, L. &amp; Hansen, K. S. (2014). Personas is Applicable - A Study on the Use of Personas in Denmark. In <i>Proceedings of the 32nd Annual ACM Conference on Human factors in Computing Systems (CHI '14)</i>. New York, NY: ACM. 1665-1674.</li> </ul>			
<b>5</b> Sep 20	<ul> <li>Navigation, Organization &amp; Labeling</li> <li>Karafillis, A. (2013). Efficiently Simplifying Navigation Systems,         Part 1: Information Architecture. Smashing Magazine.</li> <li>Karafillis, A. (2014). Efficiently Simplifying Navigation Systems,         Part 2: Navigation Systems. Smashing Magazine.</li> <li>Rosenfeld, L, Morville, P, &amp; Arango, J. (2015). Chapter 7 – Labeling         Systems. In Information Architecture for the World Wide Web (4<sup>th</sup>         Ed.) (pp. 133-173). Sebastopol, CA: O'Reilly Media.</li> </ul>			

#### **Understanding Mental Models** IA1 (i) 6 Young, I. (2008). What and Why? The Advantages of a Mental Sep 27 Model. In Mental Models: Aligning Design Strategy with Human Behavior (pp. 1-39). Brooklyn, NY: Rosenfeld Media. • Spencer, D., & Warfel, T. (2007). Card sorting: A definitive guide. Boxes and Arrows. Retrieved from: http://boxesandarrows.com/card-sorting-a-definitive-guide/ Creating (and Testing) Your IA ■ Brown, D. (2011). Site maps. In Communicating Design: Developing Oct 4 Web Site Documentation for Design and Planning (2nd Ed.) (pp. 94-123). Berkeley, CA: New Riders. • Spencer, D. (2014). How to Test an Information Architecture. Retrieved from http://uxmastery.com/testing-informationarchitecture/ \*\*NO CLASS - Mid-semester Break\*\* Oct 11 **Cognition & Emotion** 8 Rogers, Y., Sharp, H., & Preece, J. (2011). Cognitive aspects. In Oct 18 Interaction Design: Beyond Human-Computer Interaction (3<sup>rd</sup> Ed.) (pp. 65-99). Chichester: John Wiley & Sons, Inc. • Norman, D. (2004). Three levels of design: Visceral, behavioral, and reflective. In Emotional Design: Why We Love (or Hate) Everyday Things (pp. 63-98). Cambridge, MA: Basic Books. IA2 (g) **Understanding The Design Space** Brown, D. (2011). Competitive reviews. In *Communicating Design*: Oct 25 Developing Web Site Documentation for Design and Planning (2nd Ed.) (pp. 254-263). Berkeley, CA: New Riders. Part II: Interaction Design (IxD) Sketching, Task Flows, and Prototyping Interactions IA3 (g) 10 Buxton, B. (2009). The anatomy of sketching & Sketching User Nov 1 Experiences. In Sketching User Experiences (pp. 105-114, 139-141). San Francisco, CA: Morgan Kaufmann Publishers. • Unger, R., & Chandler C. (2009). Prototyping. In A Project Guide to UX Design (pp. 204-219). Berkeley, CA: New Riders. • Medero, S. (2007). Paper Prototyping. A List Apart: For People Who Make Websites, 231. Retrieved from http://alistapart.com/article/paperprototyping

# 11 Interacting with Information & Mobile Contexts + LAB

Nov 8

 Peterson, C. (2014). Responsive Workflows + Mobile and Beyond. In Learning Responsive Web Design: A Beginner's Guide (pp. 183-259). Sebastpol, CA: O'Reilly Media.

<b>12</b> Nov 15	LAB  No readings assigned	
13 Nov 22	Digital Prototypes + LAB  ■ No readings assigned	IxD1 (i)
<b>14</b> Nov 29	LAB  ■ No readings this week	
Dec 6	**NO CLASS – Studio Days**	
<b>15</b> Dec 13	Course Wrap-up	IxD2 (g) DS (g)

### **Policies**

# **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% and assignments more than 24 hours late will not be graded.

#### **Attendance & Participation**

Although it is ungraded, active participation in class is essential to successful learning in this course. The course format may vary each week, but typical class sessions will consist of short lectures and small group activities that directly inform individual and group project deliverables.

Attendance is therefore 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.

Additionally, there will be several activities throughout the term that must be completed before coming to class. These activities will not be graded but are essential to fulfilling course requirements, especially those that require group collaboration. Failure to complete these activities in a timely fashion will not only let down your classmates, it will have a negative impact on your overall learning experience.

#### **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**.

#### Communication

The best way to contact me is by email (<a href="mailto:cmacdona@pratt.edu">cmacdona@pratt.edu</a>). I check e-mail regularly and you can expect an email response within 48 hours. Should that change, you will be notified in advance.

#### **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 at 718.636.3711.

#### **Incompletes**

Incompletes will not be awarded except for documented medical reasons.

#### **Institute-Wide Policies**

All Institute-wide policies, including policies on attendance, academic integrity, plagiarism, computer, and network use, are listed in the Bulletin under "Community Standards" available online at https://www.pratt.edu/student-life/student-affairs/office-of-the-vice-president-for-student-affairs/student-policies/.

#### **Laptops & Cell phones**

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

#### **Research Participation**

As part of this course, students may be asked to participate in research studies conducted by Pratt faculty.

# **Revisions to the Syllabus**

While this syllabus provides a reliable framework for the course, it is 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.

#### MSLIS e-Portfolio

The MSLIS e-Portfolio provides students with an opportunity to showcase their best coursework and to demonstrate they have met the MSLIS program-level student learning outcomes. Work completed for this course may be included in the MSLIS e-Portfolio to satisfy one or more of the following learning outcomes (outcomes with a primary focus in this course are **in bold**):

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