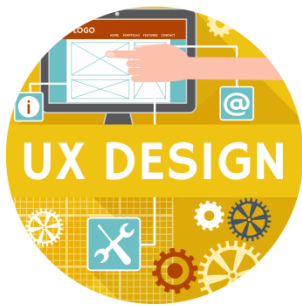


Dates: 05/19-08/07/15	Mode: T 4:30-5:55 GEM-120 In-Class/ R Hybrid	Course Forum: http://blackboard.valpo.edu
Instructor: Sonja Streuber	Office Hours: MWF 12-1 pm on Skype or Google chat	Contact: sonja.streuber@valpo.edu (219) 464-5937 (voicemail)

Introduction



Welcome to IT-630, User Interface! Many software development teams now have roles for a User Experience (UX) engineer or Human-Computer-Interface (HCI) specialist. And yet, software developers often still have primary responsibility for developing interactive systems, although they are not trained in UX methods and, therefore, do not have the knowledge, skills, or mindset to include UX methods in their life cycle activities. Many software developers believe that UX engineering is merely for making the user interface look pretty or that it is all about UX testing, done near the end of the development process. It is a goal of this course to help students realize

that UX engineering is an ongoing process throughout the full product life cycle, and developing the human-computer interface is not something to be done at the last minute, when the "rest of the system" is finished.

Learning Objectives

Students who successfully complete this course will gain a practical toolkit essential to User Experience Design. Students will be able to:

- Understand and apply User Experience design lifecycle concepts
- Engage productively in contextual inquiry and analysis in order to generate appropriate, doable, and well thought-out HCI requirements that will generate solid modeling and design thinking, whether for new products or for improvements on existing products
- Undertake a practical, applied, hands-on approach to Human-Computer Interface (HCI) design based on the application of established best practices, principles, and proven methods to ensure a quality user experience

Course Format

It is our goal for you to master the development activities of the UX lifecycle process. You are exposed to each activity in several ways: First you read about it in the book, and then the instructor will review the highlights in lectures. Then you get initial hands-on practice in a scaled-down classroom situation via in-class exercises. Finally, you will apply them in a more realistic hands-on situation through your semester-long team project assignments.

ATTENDANCE REQUIREMENT: In this hybrid course, we will be meeting in person on Tuesdays, which is when the instructor will take attendance. On Thursdays, you will be learning and exploring the concepts

via online tools and work with your team on your course project. **If you miss more than three (3) Tuesday sessions, you will fail the course.**

Ask all questions about the course assignments FIRST in the Administrative Course Discussion Forum—and if you have a question, first look in the forum to see if an answer already exists. For individual questions, the instructor is available through Skype and Google Chat during the office hours posted above. If you would like an in-person appointment, please send an email first.

Textbooks & Materials

- Rex Hartson, Pardha S. Pyla (2012). *The UX Book*.
<https://books.google.com/books?id=w4I3Y64SWLoC>
This book is available for rent as eBook from various places and through CourseSmart. It is also on 2-hour reserve in the Christopher Center Library for you to read free of charge.
- 1-2 stacks of yellow Post-It Notes, a notepad, and a pencil with eraser for in-class work.
- A laptop computer or a mobile device with which you can access Blackboard and the internet.
- Videos as posted on Blackboard

Workload

This 2-credit course requires significant individual and teamwork. You will be completing the following tasks every week:

- **Individual FRI: HW Assignments (10 points):** Each homework assignment addresses productively the content covered that week, sometimes in the shape of a Lynda.com course with follow-up quiz. These assignments must be completed on Blackboard by 11:59 pm CST on Friday evening.
- **Team In-Class Exercises (10 points):** This course is very interactive, and the in-class exercises on Tuesdays serve as a training ground for the implementation of the design principles discussed that week on your Course Project. If missed, In-Class Exercises CANNOT BE MADE UP.
- **Team Course Project (100 points):** The final project requires that your assigned team identifies and executes an interesting and useful design. You will draft the project in 6 stages (10 points each), and present it with a 5 to 10-minute online demonstration video and written report (20 points each), and apply everything that you learn in this course. The full description is in the final section of this syllabus. The aggregated final draft (100 points) is due on Blackboard on 08/02/2015 at 11:59 pm CST.

Performance Evaluation (Grading)

Your performance will be evaluated as shown below:

Required	Points Each	Total
FRI: HW 1-10	10	100
Weekly In-Class Work (10 of 11 required)	10	100
Final Project_n sections	10	60
Final Project video	20	20
Final Project writeup	20	20
TOTAL POINTS POSSIBLE		300

Letter Grade Conversion:

A	>93%	A-	90 to 93%	B+	87 to <90%	B	83 to <87%	B-	80 to <83%
C+	77 to <80%	C	73 to <77%	C-	70 to <73%	F	<70%		

Late work: Work is considered late if not posted to Blackboard by 11:59 pm CST on the day it is due (consult the schedule below).

Late work loses 50% of the grade.

Valparaiso University Honor Code

All work you submit for any course at Valparaiso University—and in any professional environment—must be your own. You may NOT use anyone else’s words (from books, blogs, webpages, magazine articles, etc.) without giving a clear source citation in a footnote. If you are unsure, consult <http://www.plagiarism.org/> or the Writing Center.

In addition, you must write out and sign with your full name the following statement on all deliverables submitted for academic credit:

I have neither given nor received, nor have I tolerated others' use of unauthorized aid.

For more information about Valparaiso University’s Academic Honor Code, case review cycles, and potential penalties, please refer to <http://www.valpo.edu/student/honorcouncil/index.php>

Diversity and Inclusion

Valparaiso University aspires to create and maintain a welcoming environment built on participation, mutual respect, freedom, faith, competency, positive regard, and inclusion. This course will not tolerate language or behavior that demeans members of our learning community based on age, ethnicity, race, color, religion, sexual orientation, gender identity, biological sex, disabilities (visible and invisible), socio-economic status, or national origin. The success of this class relies on all students' contribution to an anti-discriminatory environment where everyone feels safe, welcome, and encouraged to question, to engage, to challenge, to explore, and ultimately, "to embark on a rewarding personal and professional journey" (President Heckler).

Disability Support Services

As part of its mission for its students, Valparaiso University has developed a nondiscrimination policy which identifies its intention to provide a safe and tolerant environment for all, including those with disabilities. Please contact Sherry DeMik, Director of Disability Support Services, at 6956, or Zebediah Hall, Disability Support Services Coordinator, at 6496, if you believe you have a disability that might require a reasonable accommodation in order for you to perform as expected in this class. More information is on the Disability Support Services website at <http://www.valpo.edu/disabilityss/>

Academic Support

To get help, use the [Academic Success Center \(ASC\) online directory](http://valpo.edu/academicsuccess) (valpo.edu/academicsuccess) or contact the ASC (academic.success@valpo.edu) to help point you in the right direction for academic support resources for this course. Valpo's learning centers offer a variety of programs and services that provide group and individual learning assistance for many subject areas. These learning centers include:

- [Graduate Tutoring Lab](#): Serves the academic needs of Graduate students – tutors offer suggestions on organization of papers, assist in research and citations, and help in understanding difficult assignments. Additional one on one tutoring is also available.
- [Writing Center](#): Primarily serves the needs of undergraduate students, but is also available for Graduate students. Writing Consultants provide proofreading and editing assistance for papers and assignments.
- [Language Resource Center](#): Provides tutoring and other resources for language study as well as opportunities for authentic language use through conversation programs, enrichment activities and other exchanges.

Class Cancellations

Notifications of class cancellations will be made through Blackboard with as much advance notice as possible. It will be both posted on Blackboard and sent to your Valpo e-mail address. If you don't check your Valpo e-mail account regularly or have it set-up to be forwarded to your preferred e-mail account, you may not get the message. Please check Blackboard and your Valpo e-mail (or the e-mail address it forwards to) before coming to class.

Please check Blackboard for information about updates to the attached course schedule, office hours, and other administrative changes.

Schedule

Week	Dates	Topic	Read/ Watch/ Do	Due 11:59 pm CST
1	5/19/2015	Introduction	Preface, Chapter 1	
	5/21/2015	Lifecycle concepts	YouTube videos as posted	FRI: HW 1: Design Analysis
2	5/26/2015	Lifecycle concepts	Chapter 2 Lynda.com course: Foundations of UX: Logic and Content	
	5/28/2015	Contextual inquiry	Chapter 3 YouTube videos as posted	FRI: HW2: Upload your Lynda.com course completion certificate SUN: Project 1. Team and client discovery and system concept statement
3	6/2/2015	Contextual inquiry & analysis	Chapters 3, 4 YouTube videos as posted	
	6/4/2015	Contextual analysis, requirements	Chapter 4, 5 YouTube videos as posted	SUN: Project 2. Contextual inquiry and analysis
4	6/9/2015	Requirements and modeling	Chapters 5, 6 YouTube videos as posted	
	6/11/2015	Modeling	Chapter 6 YouTube videos as posted	FRI: HW3: Modeling, Hierarchical Task Inventory
5	6/16/2015	Modeling, Design Thinking	Chapter 7 Lynda.com course Foundations of UX: Multidevice Design	
	6/18/2015	Design thinking, conceptual design	Chapters 7, 8 YouTube videos as posted	FRI: HW4: Upload your Lynda.com course completion certificate SUN: Project 3. Requirements and modeling
6	6/23/2015	Design production	Chapter 9 YouTube videos as posted	
	6/25/2015	Design production, Metrics and Targets	Chapter 9, 10 YouTube videos as posted	FRI: HW5: Ideation and Sketching SUN: Project 4. Design
7	6/30/2015	Prototyping THIS WILL BE AN	Chapter 11 YouTube videos as posted	

		ONLINE SESSION		
	7/2/2015	Evaluation introduction	Chapter 12 YouTube videos as posted	FRI: HW6: Sketching Usage Experience
8	7/7/2015	Rapid evaluation	Chapter 13 Lynda.com course Foundations of UX: Making the Case for Usability Testing	
	7/9/2015	Cost-importance analysis	Chapter 16, especially Section 16.5 YouTube videos as posted	FRI: HW7: Upload your Lynda.com course completion certificate SUN: Project 5. Prototype
9	7/14/2015	Reporting	Chapter 17 Lynda.com course Foundations of UX: Accessibility	
	7/16/2015	Affordances, Interaction Cycle and UAF	Chapter 20, 21 YouTube videos as posted	FRI: HW8: Upload your Lynda.com course completion certificate
10	7/21/2015	Guidelines	Chapter 22 YouTube videos as posted	
	7/23/2015	Guidelines	Chapter 22 YouTube videos as posted	SUN: Project 6. UX evaluation and reporting
11	7/28/2015	Connections with Software Engineering	Chapter 23 Lynda.com course Developing Android Apps Essential Training	
	7/30/2015	Connections with Software Engineering	Chapter 23 YouTube videos as posted	FRI: HW9: Upload your Lynda.com course completion certificate
12	8/4/2015	Project presentations		TUE: 7. Project presentation
	8/6/2015	Project presentations		TUE: 7. Project presentation FRI: HW10: Project Evaluation

Final Project (100 points)—Completed in stages; check the syllabus for due dates

The major work (and major credit) component for the course is the semester team-oriented development project. It involves defining, analyzing, specifying, designing, prototyping, and evaluating an interaction design for a client. The purpose of the project is to give you real-world exposure to all steps involved in developing a significant user interaction design.

The project stages are:

Project 1: Topic and client discovery and system (or product) concept statement (10 pts)

In this project assignment, you get started by discovering the target product or system that you will work on FOR a client and by writing a system (or product) concept statement. You also get to BE the client for one of your peer teams.

1. Discover your assigned product or application system for which you will develop the user interaction design
2. Interview the client for your project.
3. Write and refine (several times) a 100-150-word system concept statement for your target system, to be used as a synopsis or "boilerplate" description of your project in all of the deliverables.

Project 2: Contextual inquiry and contextual analysis (10 pts)

In this project assignment, you perform contextual inquiry and analysis, starting with research to understand the existing customer, client, or user work (or play) practice, the activities people undertake to accomplish goals in the work or play domain and the complete work context.

- While true contextual inquiry involves interviews of customers and users (what they say) as well as observations of work practice in real-world context (what they do), in this course, we will work with what we know about the client's work environment. The result will be close to raw work activity data, transcripts or notes in the user's voice.
- Contextual analysis involves systematic analysis—extraction, synthesis, identification, sorting, organization, interpretation, and consolidation—of the raw contextual user work activity data.

Project 3: Requirements and modeling (10 pts)

In this project assignment you extract interaction design requirements from your work activity notes and work activity affinity diagram and write them in formal requirements statements. You will also construct some design-informing models.

Project 4: Design (10 pts)

In this project assignment you develop a design persona and do design thinking, ideation, sketching, conceptual design, and some design production, included some sample wireframe screen mockups.

Project 5: Prototype (10 pts)

In this project assignment you will build and pilot test a low-fidelity (non-functional) prototype using wireframes.

Project 6: UX Evaluation and reporting (10 pts)

In this project assignment your team will operate as an evaluation team to evaluate another team's interaction design with a rapid UX evaluation method. You will then write a corresponding UX evaluation report for that design team.

FINAL Project Video Demonstration (20 pts)

Prepare and present a 10-minute video (you may upload it to YouTube or Vimeo), showing off your design process, demonstrating your prototype, and highlighting your lessons learned.

FINAL Project Paper (20 pts)

Aggregate all of your Project Writeups into one polished final report to show your progress and to showcase your design and your prototype. This includes proper English grammar, vocabulary, and expressions, and proper formatting.

This is a team project. All development activities, including writing the deliverables, are team activities. All team members are to participate in all development activities. Do not go too far in the direction of dividing the overall process among the team members. Even though this might seem like a more efficient way to proceed, this leads to a kind of specialization that poses a barrier to each person learning the overall process. This is especially true for a person who gets the job of programming the prototype (if your project calls for programming) at the price of not learning UX engineering skills.

APPENDIX**Student Learning Objectives—Graduate School**

1. Students will understand and practice methods of inquiry and strategies of interpretation within the student's field of study.
2. Students will master the knowledge and skills pertinent to the student's field of study.
3. Students will effectively articulate the ideas, concepts, and methods through written and oral presentation.
4. Students will understand the connection between their knowledge and skills on the one hand and their professional identity, responsibilities, and demands on the other.
5. Students will integrate knowledge and methods of their study with cognates and other disciplines.
6. Students will study, reflect upon, and practice ethical behavior and cultural sensitivity as they relate to professional and personal responsibility.

Student Learning Objectives—Information Technology Program

1. To understand and practice methods of inquiry and strategies of interpretation within the student's field of study.
 - 1A. Students will master several programming environments.
 - 1B. Students will learn to identify and isolate problems.
2. To master the knowledge and skills pertinent to the student's field of study.
 - 2A. Students will acquire an extensive technology related vocabulary.
 - 2B. Students will become comfortable using a wide range of technology environments.
3. To effectively articulate the ideas, concepts, and methods through written and oral presentation.
 - 3A. Students will be taught how to make formal, oral presentations and be required to give 6 such presentations during their program.
 - 3B. Students will write numerous, thorough papers requiring extensive research. They will be required to use the services on the writing center.
4. To understand the connection between their knowledge and skills on one hand and their professional identity, responsibilities, and demands on the other.
 - 4A. Students will understand the implications of legal and professional regulations as they relate to information technology.
 - 4B. Students will study how technology can be made available to people that are traditionally less advantaged.
5. To integrate knowledge and methods of their study with cognates and other disciplines.
 - 5A. Students will learn techniques of modeling data from other disciplines.
 - 5B. Students will study human factors in IT.
6. To practice ethical and cultural sensitivity as it relates to professional and personal responsibility.
 - 6A. Students will examine a wide range of ethical issues related to technology and the potential effects on people and the environment.
 - 6B. Students will explore the relationship between IT and ethnic and cultural diversity.