

# User-Centered Design

## Syllabus

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### INF0360A — Spring 2011

- **Lecture Days & Times:** Tuesdays & Thursdays, 9:30 a.m.-10:50 a.m.
- **Lecture Location:** Mary Gates Hall, Room 231
- **Lab Days & Times:** Wednesdays, 11:30 a.m.-1:20 p.m.
- **Lab Location:** Mary Gates Hall, Room 430
- **Credit Hours:** 5

### Class Website

The class website will be your main stop for the most up-to-date information on the course schedule, assignment descriptions, and links to important resources. Class website is:

<http://courses.washington.edu/info360/>

### Instructors

#### Dr. Julie A. Kientz

- *Email:* jkientz@uw.edu
- *Website:* <http://faculty.washington.edu/jkientz/>
- *Office:* Sieg Hall, Room 413
- *Office Phone:* 206-221-0614
- *IM:* Yahoo Messenger: prof\_kientz
- *Office Hours:* Tuesdays & Thursdays, 11:00 a.m.-12:00 p.m.

#### Teaching Assistant: Jared Bauer

- *Email:* jaredsb@uw.edu
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- *Office:* Sieg Hall, Room 314
- *Office Hours:* TBD

#### Teaching Practicum: Abigail Evans

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### Course Overview

INFO 360 is an introduction to the user centered design process and is oriented toward practical methods for approaching a design problem and overall design thinking. Design is a unique form of

inquiry. We design whenever we change some existing situation into a preferred one. The difficulty, of course, is how to envision a preferred situation and then get to it. In this class, we will develop an appreciation for the nature of design, and we will develop specific skills for studying and designing interactive systems. You will find the concepts and methods covered in this class to be widely applicable – you will be able to use them when designing organizations of people, when designing information structures, and when designing a business plan. But, in this class we will focus on the design of interactive systems, on human-centeredness, and on usability. The major question is: how do we design interactive systems that are useful, usable, and enjoyable?

## Aims

The general aims of this course are to:

1. Develop an appreciation for the theory and sensibilities of design
2. Develop skills in the use and application of a variety of design methods, specifically applicable to user-centered design
3. Improve individual and collaborative skills in design-based problem solving

## Objectives

On the successful completion of this course, you should be able to:

1. Given a problem setting, critically discuss the appropriateness of potential design methodologies such as contextual inquiry, ideation brainstorming, paper prototyping, etc.
2. Gather useful information about users and activities through observation or systematic inquiry
3. Use, adapt and extend classic design standards, guidelines, and patterns
4. Employ selected design methods at a basic level of competence: affinity diagrams, card sorting, scenarios of use, personas, storyboarding, sketching, and usability evaluation
5. Create a paper prototype for a small system and plan and perform a usability evaluation

## Materials & Books

- **REQUIRED:** Spiral bound sketchbook with blank pages and preferably perforated pages (can purchase at UW bookstore)
- **REQUIRED:** Buxton, B. (2007) *Sketching User Experiences: Getting the design right and the right design*. San Francisco: Morgan Kaufmann. ([Amazon](#))
- **RECOMMENDED:** Moggridge, B. (2007) *Designing Interactions*. Cambridge, MA: The M.I.T. Press. ([Amazon](#))



## Tools

### GradeBook

All course grades will be made available through Catalyst's GradeBook. The link for the GradeBook for this class is: <https://catalyst.uw.edu/gradebook/jkientz/40383>

### Mailing List

We will have a class mailing list, which you can reach via [info360a\\_sp11@u.washington.edu](mailto:info360a_sp11@u.washington.edu). Feel free to post links relevant to class or questions about assignments that may pertain to the whole class.

## Course Design Credit

Many course materials are both original and adapted from those of instructors of previous year's courses and similar courses, including Andrew Ko, Jacob Wobbrock, Dave Hendry, Batya Friedman, Mark Zachry, and Jennifer Turns. Please do not distribute materials without the instructor's consent.

## Assessment

### Grade Distribution

Component	Worth
Class & Lab Participation	20%
Reading Reflection Postings	10%
Individual Assignments	15%
Sketching Project	15%
Group Design Project	40%

### Graded Components

#### Class & Lab Participation (20%)

By actively participating in class and labs, you can develop your professional skills for design. In addition, much of the learning in this class will take place via in-class activities and working with your peers. Here are some examples of how you can participate:

1. Treat all with respect – be constructive in all discussions
2. Come to class prepared – read carefully prior to class meetings
3. Be an active listener – be attentive, be engaged, use in-class technology with discretion
4. Ask challenging questions
5. Comment, build on, or clarify others' contributions
6. Help your classmates use technologies
7. Post useful or interesting information to the class discussion list
8. Visit the instructor during office hours to chat, to ask questions, or to give feedback

In addition, every lab will have a deliverable which will be checked for your participation and count toward half your participation grade (10%). These will be graded as Credit/No Credit. If you miss a lab, it is your responsibility to make up the work outside of class. Because some of the labs require working with others, this will make it more difficult to make up. However, because life happens, you will be graded on 9 out of the 10 labs.

You also have the option to submit a 300-400 word personal statement on how you contributed to the class. If you submit a statement, it must be turned in Week 9 on **Thursday, May 26<sup>th</sup> at 9:30 A.M.**

#### Reading Reflections (10%)

For each day that reading is assigned, you will be required to post on the class's online discussion board at least one time by **9:30 A.M. the day the reading is due**. This can be a reflection in response to either a set of questions the instructor posts online or your own reactions. Responses must be based on the

readings, not “off the top of your head” and must be substantive (e.g., you can’t just say “me too” in response to someone else’s post without adding a new thought or idea). Posts will be graded as Credit/No Credit by their due date in class. No late postings will be accepted.

The link for the class Go Post is: <https://catalyst.uw.edu/gopost/board/jkientz/21534/>

### Individual Assignments (15%)

To give you practice with specific methods for interaction design, you will complete three assignments. All assignments must be conducted independently, unless otherwise stated by the instructor. Detailed assignment descriptions and instructions will be posted on the course website with sufficient time for assignment completion. Unless otherwise stated, assignments are **due at the beginning of class by 9:30 A.M. on their designated due date.**

Assignment	Worth	Due
<b>A1: Thinking About Design</b>	5%	4/7
<b>A2: Look, Learn, Ask, Try</b>	5%	4/26
<b>A3: Paper Prototype</b>	5%	5/18

### Sketching Project (15%)

One of the goals of this course is to be able to think critically about existing objects and interactions and come up with ways of improving them, as well as coming up with and communicating ideas for new solutions to different problems. It is also good to practice sketching design ideas, so that you become more comfortable and more experienced. Thus, for Weeks 3-8 of the quarter, you will keep a sketchbook where you will think about objects or interactions in your daily life and sketch ideas for how they could be improved. Each week, we will have a theme where you will do three sketches on products or information systems related to that theme. For example, for the theme “In the kitchen,” you might redesign your toaster knobs, come up with a new recipe sorting tool, or a smart refrigerator. The idea can focus on an entire system or one specific interaction. The focus is on quantity of sketches and not quality. Futuristic, creative, and original ideas are welcome and encouraged. The themes for each week will be as follows:

- **Week 3:** *Food* – cooking, appliances, eating, restaurants, food storage, etc.
- **Week 5:** *Sports and Recreation* –sports equipment, outdoor activities, sporting events, etc.
- **Week 4:** *Shopping* – finding items, purchasing, money, customer service, etc.
- **Week 6:** *Entertainment* – movies, video games, television, reading, museums, etc.
- **Week 7:** *Travel & Transportation* – air and car travel, bus travel, bicycling, etc.
- **Week 8:** *Family & Friends* – keeping in touch, childcare, eldercare, socializing, etc.

Every **Tuesday** for the six weeks listed above, you must bring your sketchbook to class with at least three new sketches related to the theme. Each sketch must be on a single page, numbered, and dated. The back of each sketch page should also be left blank to leave room for notes and critique signatures. You will break into small groups to discuss and critique each others’ sketches and get feedback on your ideas, and each critiquer will sign your sketches indicated that you’ve discussed them. Take good notes during these sessions, as you’ll need them for your reflection assignment. At the end of the quarter, you will write a short reflection upon your sketching experience, its usefulness in the generation of design ideas, and what you learned from feedback during the group critique sessions.

### Group Design Project (40%)

Design in the real world nearly always takes place with teams of people with diverse backgrounds working together toward a common goal. Developing group work skills, cooperation, and teamwork is an essential skill for students to learn who want to work in this space. Thus, a large component of this course will be to work as a team on a design project. Design teams will consist of 4 members and will be designated by the instructor during the first week of class to ensure diversity and fairness.

The class will have a joint theme for this quarter, though the individual topic within that theme will be up to you and your teammates. The theme for this quarter's project is **relaxation**. In the age of information overload, an always-on lifestyle, and constant connectivity and distraction, people are finding it harder and harder to relax and be calm. You and your teammates will be responsible for identifying a design question and coming up with a solution for a topic within that theme. Possible questions might include:

- How can busy parents find time to relax?
- How can technology promote healthy sleep habits?
- How can we reduce information overload?
- How can college students manage their many distractions and find time to concentrate?
- How can mobile technology promote leisure activities?
- What are ways of supporting individuals while on vacation?
- What ways can technology promote meditation and focus?

Your grade will not depend on how well you solve the problem, but how well you can follow a design process, articulate your design rationale, and how you can provide documentation of the design process.

The group project will consist of a number of different deliverables, the full descriptions of which will be posted on the course website. Each component must be conducted and submitted as a group and will be due by in class by **9:30 A.M. on their designated due dates**.

Project Component	Worth	Due Date
<b>P0: Project Team Form &amp; Design Question</b>	0%	4/12
<b>P1: User Research</b>	10%	4/28
<b>P2: Ideation &amp; Sketching</b>	5%	5/5
<b>P3: Hi-Fidelity Prototype and Evaluation</b>	10%	5/24
<b>P4: Final Design Document &amp; Presentation</b>	15%	5/31 & 6/2

### Grading

Each deliverable is designed to test your achievement against one or more of the learning objectives. Different assignments emphasize different learning objectives, and please note that some grading will be subjective in nature. The following chart characterizes the numeric grades in words:

Grade	Letter	Performance Quality*
3.9 - 4.0	A/A+	Superior performance in all aspects of the course with work exemplifying the highest quality. Unquestionably prepared for subsequent courses in field.

3.5 - 3.8	A-/B+	Superior performance in most aspects of the course; high quality work in the remainder. Unquestionably prepared for subsequent courses in field.
3.2 - 3.4	B	High quality performance in all or most aspects of the course. Very good chance of success in subsequent courses in field.
2.9 - 3.1	B-	High quality performance in some of the course; satisfactory performance in the remainder. Good chance of success in subsequent courses in field.
2.5 - 2.8	C+	Satisfactory performance in the course. Evidence of sufficient learning to succeed in subsequent courses in field.
2.2 - 2.4	C	Satisfactory performance in most of the course, with the remainder being somewhat substandard. Evidence of sufficient learning to succeed in subsequent courses in field with effort.
1.9 - 2.1	C-	Evidence of some learning but generally marginal performance. Marginal chance of success in subsequent courses in field.
*Taken from Faculty Resource on Grading, <a href="http://depts.washington.edu/grading/practices/guidelines.html">http://depts.washington.edu/grading/practices/guidelines.html</a>		

## Class Policies

### Academic Conduct

The following paragraphs discuss academic integrity, copyright and privacy concerns governing student conduct at the University of Washington. They apply to all assignments and communications in this course.

### Academic Integrity

The essence of academic life revolves around respect not only for the ideas of others, but also their rights to those ideas and their promulgation. It is therefore essential that all of us engaged in the life of the mind take the utmost care that the ideas and expressions of ideas of other people always be appropriately handled, and, where necessary, cited. For writing assignments, when ideas or materials of others are used, they must be cited. The format is not that important as long as it is consistent, the source material can be located and the citation can be verified. In any situation, if you have a question, please feel free to ask the instructor or teaching assistant. Such attention to ideas and acknowledgment of their sources is central not only to academic life, but life in general.

Please acquaint yourself with the [University of Washington's resources on academic honesty](#).

### Copyright

All of the expressions of ideas in this class that are fixed in any tangible medium such as digital and physical documents are protected by copyright law as embodied in title 17 of the United States Code. These expressions include the work product of both: (1) your student colleagues (e.g., any assignments published here in the course environment or statements committed to text in a discussion forum); and, (2) your instructors (e.g., the syllabus, assignments, reading lists, and lectures). Within the constraints of "fair use," you may download or copy slides, recordings or notes for your personal intellectual use in support of your education here in the Information School. All of these examples are copyrighted expressions, and fair use by you does not include further distribution by any means of copying,

performance, or presentation beyond the circle of your student colleagues in this class. If you have any questions regarding whether a use to which you wish to put one of these expressions violates the creator's copyright interests, please feel free to ask the instructor for guidance.

## Privacy

To support an academic environment of rigorous discussion and open expression of personal thoughts and feelings, we, as members of the academic community, must be committed to the inviolate right of privacy of our student and instructor colleagues. As a result, we must forego sharing personally identifiable information about any member of our community including information about the ideas they express, their families, life styles and their political and social affiliations. If you have any questions regarding whether a disclosure you wish to make regarding anyone in this course violates that person's privacy interests, please feel free to ask the instructor for guidance.

Knowing violations of these principles of academic conduct, privacy, or copyright may result in University disciplinary action under the Student Code of Conduct.

## Students with Disabilities

To request academic accommodations due to a disability, please contact Disabled Student Services: 448 Schmitz, 206-543-8924 (V/TTY). If you have a letter from DSS indicating that you have a disability which requires academic accommodations, please present the letter to the instructor so you can discuss the accommodations you might need in the class.

Academic accommodations due to disability will not be made unless the student has a letter from DSS specifying the type and nature of accommodations needed.

## Student Code of Conduct

Good student conduct is important for maintaining a healthy course environment. Please familiarize yourself with the [University of Washington's Student Code of Conduct](#).

## Quality of Written Assignments

As a graduate student in a field that requires excellent communication skills, this course has high expectations on the written quality and presentation of completed assignments and reports. Reports should be well organized, be thoroughly proofread, and free from grammatical errors. The use of appropriate, clear titles, figure captions, and headings is also important. Each assignment will have "quality of written assignments" as a graded component worth at least 10%. This does NOT apply to the sketchbook portion of the sketching assignment, as they are intended to be quick and low quality.

In addition to the above recommendations, all assignments should include the following information:

- INFO 360 – User Centered Design - Winter 2011
- Assignment number and name (e.g., A1 – Thinking About Design)
- Your name and e-mail address (all names and emails for group projects)

## Attendance

Students are expected to attend class and labs regularly. Although attendance is not specifically graded, missing a significant number of classes and/or labs will likely have a negative impact your class participation grade, as you will have fewer opportunities to participate in discussion and in-class activities. If you must miss a class, due to an illness or other extenuating circumstance, please send an email to the instructor as soon as possible to make arrangements for a makeup of in-class activities.

## Late Assignments

1. If you will miss the deadline, you should inform the instructor as soon as you can, indicating when you will submit the work. The instructor will try to accommodate your needs. You should use this clause only for extraordinary personal reasons (e.g., personal illness, death in the family, etc.).
2. It is at the instructor's discretion to accept late work or assign late penalties (see 1 above). In general, late work is deducted 10% of its total grade per calendar day.

Work that is handed in late is penalized for two reasons. First, to be fair, all students should be given the same time limits. Second, if you spend too much time on one assignment, it is quite likely that you will have insufficient time to spend on subsequent assignments.

## Contacting the Instructor

You are welcome to give me feedback about the course, to ask a question about an assignment, to share an interesting article or resource, to report that you will be absent from a class/lab, to request additional time for an assignment (because of significant health, personal, or educational matter), or similar communication. Please note the following guidelines:

- Email and office hours are the preferred and most reliable methods of contact
- For office hours, you can find me in my office
- Whenever appropriate, please copy the class mailing list with your question or comment
- E-mail concerning assignments might not be replied to if it is sent within 36 hours of an assignment due date
- If your e-mail concerns your grade, please follow the re-grading policy (see below)
- E-mail that is sent on Friday afternoon or over the weekend it is not likely to be replied to until Monday or Tuesday of the following week
- If you don't receive a reply within 2 days or so, please resend your e-mail or ask about it during class or lab

## Re-grading Policy

To have work re-graded, you must submit a Re-grade Request within five days of when your work was returned. The request must be a single page, printed on paper or sent by e-mail. It should contain the following information:

- Re-grade Request
- The information contained on the standard cover sheet
- An explanation for why you believe you deserve a higher grade.

The instructor will consider your request. If the instructor is convinced by your argument, your work will be re-graded. If not, the instructor will send you e-mail explaining why. No re-grades will be considered for late work.

## Right to Revise

The instructor reserves the right to revise this syllabus.