Section No.: 26333  Credit Hours: 3
Time: Mondays 6:00–8:40 pm
Location: IT 355, Informatics & Communications Technology Complex
535 West Michigan Street, Indianapolis, IN 46202 [map]
First Class: January 11, 2016
Last Class: May 8, 2016
Canvas: https://iu.instructure.com/courses/1535064

Instructor: Lynn Dombrowski
Assistant Professor, Human-Centered Computing Department
IT 583, Informatics & Communications Technology Complex (my office)
535 West Michigan Street, Indianapolis, IN 46202
(317) 278-7673 (Office)
lisdombro@iu.edu (or through CANVAS/Messages)
https://soic.iupui.edu/people/lynn-dombrowski/

Office Hours: By Appointment

TA: Julie Elbin
MS Candidate, Informatics - Human-Computer Interaction
Office Hours: TBA & By Appointment

Course Prerequisites: None.

Summary Course Description
This course builds upon the basics of human computer interaction (HCI), user experience (UX), and design techniques to help students develop expertise in formative design methods and basic knowledge of contextual design.

Last semester, about the basics of human-computer interaction (HCI), which examines the interaction between humans and computing technology. In this course, we learn more deeply about formative, generative, and evaluative design methods. By formative, we refer to design and research practices that help designers understand and frame a problem space. Generative design methods refer to methods that help design create new artifacts, designs, and systems. It is the highly creative practices that help designers move from the existing to the preferred. Lastly, evaluative methods help designers understand and assess the outcomes of their design process. A primary outcome of this course is that you will learn how to understand and apply new design methods.
The second half of this course will focus on contextual design, a UX design approach developed by Karen Holtzblatt, which uses field research to develop and foster innovation. It’s typically team-based and as a practice situates products within sociotechnical practices and the larger contexts of computing.

**Required Text(s):**

Title: *Rapid Contextual Design* by Holtzblatt, Wendell, & Wood.  
Available on Amazon.com: [direct link](#).

Title: *Universal Methods of Design* by Martin and Hanington  
Available on Amazon.com: [direct link](#).

Title: *Contextual Design Evolved* by Holtzblatt & Beyer  
Available on Amazon.com [direct link](#).  
Available as a free PDF from Morgan & Claypool [link](#).

**Highly Recommended:**  
Title: *Doing Research in Design* by Christopher Crouch and Jane Pearce.  
Available on Amazon.com: [direct link](#).

**Course Objectives and Learning Outcomes:**

This course enables students to learn in considerable depth and apply methods for the following key areas:

1. **Design Methods.** Each student will acquire knowledge and practice skills related to the following:
   a. Learning how to understand, use, access, and situate formative, generative, and evaluative design methods.
   b. Understanding the limitations, strengths, and fit for a particular method for a conceptual problem in the design process

2. **Contextual Design Methods and Process.** Each student will acquire knowledge and practice skills related to the following:
   a. Conduct formative design research to understand user requirements, problem spaces, and design opportunities. This will include analyzing data to understand existing work flows and
   b. Conduct generative design research to understand what design opportunities exist to generate design into into new opportunities.
   c. Conduct evaluations of their design work to understand how their designed systems did and did not meet their criteria.

**Course Objectives and Learning Outcomes:**

1. Application of formative, generative, and evaluative design methods to the design of interactive systems
2. Mastering the lifecycle of contextual design
3. Ideate, sketch, elaborate, validate and communicate user experiences and interface designs
General Guidelines to Thrive in this Course:

1. **Rigor**: This course will move along at a quick pace, being organized around a collection of weekly readings and design exercises related to HCI theory and application. Though this course is an introduction to the HCI for graduates, it attempts to become as specific as possible about the major models and concepts of interaction design.

2. **Accountability**: Assignments and projects are not merely for learning but also a test of your character whereby diligence and accountability are required.

3. **Cooperation and Communication**: Good cooperation with the instructor is vital for maintaining a high degree of productivity and harmony in weekly assignments and during class time. Oral and written communication is an important part of this course.

4. **Creativity**: This course demands not only a weekly response to assignments, but also some degree of creativity in product design and concept development. This is actually one of the more exciting and dynamic aspects of the course, where students have a chance to develop products where they can apply much of the theory gained during the weekly assignments.

**Required technical/software skills**:

ALL students must be proficient in using (or willing to learn autonomously) any basic user interface editing software (*e.g.* Dreamweaver, Fireworks, Flash, Flex, InDesign, Balsamiq, basic HTML editing, or any other user interface prototyping tool). See list of tools provided at the end of the syllabus for additional resources to use in the project. These basic skills will not be taught in the course, but are important to carry out high-quality projects.

**EXPECTATIONS, GUIDELINES, AND POLICIES**

**Attendance**:

Class attendance is required for classroom-based courses. It entails being present and attentive for the entire class period (including lecture and project meetings). Attendance shall be taken in every class. **Attendance shall be noted by filling out a notecard with your name, date, and any questions or comments you have during class.** Filling out another notecard for another student is prohibited. The instructor is required to submit to the Registrar a record of student attendance, and action shall be taken if the record conveys a trend of absenteeism. Absences must be explained to the satisfaction of the instructor, who will decide whether omitted work may be made up. To protect your privacy, doctor’s excuses should exclude the nature of the condition and focus instead on how the condition affects on your coursework.

Missing class reduces your grade through the following grade reduction policy: **You are allowed two excused or unexcused absences.** Regardless of the reason, a third absence results in a 15-point reduction in your final grade. Every further day of absence will reduce your final grade of 15 points.

**Incomplete**:

Incompletes will NOT be issued except under very extreme personal conditions that have been reviewed by the instructor and in consultation with the Dean. The instructor may assign an Incomplete (I) grade at his discretion and only if at least 75% of the required coursework has been completed at passing quality. All unfinished work must be completed by the date set by the instructor, or it becomes an F.
Deliverables:
All weekly due assignments are the students’ responsibility. If class is missed, the student is still responsible for the assignment, as well as to find out what was covered in class, e.g., any new assignments or variations to an existing assignment. ALL assignment deadlines are outlined in the syllabus or syllabus supplemental documents provided on CANVAS. In the end, each student is responsible to submit the due assignment by the deadline. Also, weekly assignment deadlines should be adhered to, to insure fairness to all students. For the purpose of maintaining an equal and fair evaluation of each student’s work, no student will receive special treatment. As a result, the following rules will apply to this course:

- All assignments must be submitted through CANVAS at the designated time as stated on the project description document, or as communicated via email.
- **Assignments will not be accepted late.** Partial credit will be given for assignments that are turned in on time, but incomplete; so turn in whatever you have by the deadline.

Grading Structure:

1. **Class Participation (individual)** 20%
2. **Design Method Case Study (individual)** 25%
3. **Design Team Presentation** 20%
   - Project Presentation (individual contribution) (10%)
   - Project Presentation (group) (10%)
4. **Team Design Project Reports** 35%
   - Project Reports (individual contribution) (17.5%)
   - Project Reports (group) (17.5%)

---

*Final class grade (individual) 100%

Grade Scale:
A+ 97 - 100 [outstanding achievement]
A 93 - 96.99 [excellent achievement]
A- 90 - 92.99 [very good work]
B+ 87 - 89.99 [good work]
B 83 - 86.99 [marginal work]
B- 80 - 82.99 [very marginal work]
C+ 77 - 79.99 [unacceptable work]
C 73 - 76.99 [unacceptable work]

Description of Grade Components and Expectations
1. **Class Participation (individual).** The participation grade is based on the evaluation of the performance of the following activities:

   a. Completeness and punctuality of **weekly written discussion points.** Each week, each student needs to study the **reading assignments** and post a reading response on CANVAS. These Reading responses are meant to help you synthesize and reflect on the assigned readings. They are also meant to be an opportunity for you to reflect on your own opinions in the context of the class.

   b. These readings are a good place to ask yourself some big questions about design! What is the work of design? What are the limitations of design? What are the different components of the dialogue that Kolko talks about? What does the beginning quote in the Bill Buxton reading (i.e., "the only true voyage of discovery is not to go to new places, but to have other eyes") have to do with design? Also, it's ok to end your reading response with questions that the readings open up for you.

   c. I expect your responses to be a reasonable length (about 4 paragraphs or 300+ words). I would expect you would spend one paragraph synthesizing the readings and the rest of your response would be dedicated to opening up how these readings help you understand design practice. You can relate it to the things you are doing in your own coursework or to experiences you may have as a professional.

   d. The discussion points should **demonstrate original, intellectual elaboration on the subject** and that you have studied and master the entire content of the reading. For example, discussion points can pertain: a relevant example of a practical application, a connection with an HCI topic or event of particular relevance, a reference (with explanation) to a related resource found, a supportive argument or a counter-argument to the topics discussed in the readings.

   e. **Discussion points must be HIGH QUALITY!** NO: “I find this interesting” or just rephrasing in your own words what you read. **Avoid reading at the last minute and posting superficial comments. This will easily result in a lower Participation Grade.** Comments must be salient and demonstrate an articulate and mature perspective on the topic. Your discussion may come from your professional / personal experience, curiosity/interest or lack of clarity regarding some theory or practice. They may also challenge the class with a problem derived from the theory and/or best practice that would force the class to reflect on the application of the theory. In each case, you MUST note at the conclusion of the question, where in the text the question or problem is derived from.

   f. **Discussion points must be posted on CANVAS by 6pm the day before class.**

   g. **Each discussion point must be posted as a “REPLY” to the weekly posted thread ”Week X - Discussion points”**

   h. **Weekly readings** (book chapters and other articles) are indicated in the weekly schedule (last section) of this syllabus and are made available either as web links from the Weekly Schedule or as resources in CANVAS/Resources.

      i. Each week, each in class student is expected to come prepared in class in relation with the entire reading assignments (ENTIRE CHAPTER, for example, even if only one section has been assigned for discussion), to
support the discussion points raised and to engage in purposeful discussion.

i. Demonstrated weekly reading preparation, proactive participation in class discussion, quality of questions posed during project presentations.

2. **Design Method Case Study (individual).**
   a. This grade is based on the evaluation of the deliverables Research Method Case Study outlined on canvas.

3. **Design Team Presentation**
   a. This grade is based on the evaluation of the performance of the following activity:
      i. Individual contribution and participation to the team presentation of the midterm project. Evaluation criteria: organization/structure of the presentation, timing, richness/saliency, clarity, cohesiveness, and delivery.
      ii. Quality of the team presentation as a whole. Evaluation criteria: organization/structure of the presentation, timing, richness/saliency, clarity, cohesiveness, and delivery.

4. **Team Design Project Reports**
   a. See *Project Description Document* for details on project DELIVERABLES DUE week by week and evaluation criteria.
   b. **Weekly Project Parts must be submitted on CANVAS / respective Team Folder by class time (5:30 PM)**

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Readings &amp; Themes</th>
<th>Work Time, Meetings, and Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WK 1</strong> Jan 11</td>
<td>Welcome &amp; Introduction to HCI 2 &amp; Design Process Review</td>
<td>Fill out the team survey.</td>
</tr>
<tr>
<td><strong>WK 2</strong> Jan 18</td>
<td>Martin Luther King Jr Holiday <em>(No Class)</em></td>
<td>Design Project: Teams Formed.</td>
</tr>
<tr>
<td><strong>WK 4</strong> Feb 1</td>
<td>Portfolio For your reading discussion, this week, I want you to find and read 2-3 relevant professional oriented articles about UX portfolios. Link to the articles in your discussion. Additionally, find five portfolios of people who have the jobs you want. Critique them. Articulate what works and what doesn’t about the portfolios. Also, list and link the portfolios you reviewed. Finally,</td>
<td>Project Meeting: None. Get to know your teams; exchange preferred contact methods, etc. Pick a topic! As nothing is explicitly due this week, I would highly recommend selecting a topic space <em>(e.g., health and wellness for runners; sociality for college students, transportation experiences for urbanites, etc.)</em> before</td>
</tr>
<tr>
<td>WK 5</td>
<td>Feb 8</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>Introduction to Contextual Design</strong>&lt;br&gt;Rapid Contextual Design. Chapter 1 &amp; 2&lt;br&gt;Contextual Design Evolved. Pp1-10</td>
<td><strong>Project Due:</strong> Nothing is explicitly due this week, but I would highly recommend selecting a topic space (e.g., health and wellness for runners; sociality for college students, transportation experiences for urbanites, etc.) before coming into class. And deciding how you'll get access.</td>
<td></td>
</tr>
<tr>
<td><strong>Research Method Case Study:</strong>&lt;br&gt;Phase 2 Craft a Research Plan Due</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WK 6</th>
<th>Feb 15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contextual Inquiry Interviews</strong>&lt;br&gt;Rapid Contextual Design. Chapter 3 &amp; 4&lt;br&gt;Contextual Design Evolved. Pp11-17</td>
<td><strong>Project Meeting:</strong> Create a plan to conduct contextual Inquiry interviews</td>
</tr>
<tr>
<td><strong>Research Method Case Study:</strong>&lt;br&gt;Phase 3: Apply Method Due</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WK 7</th>
<th>Feb 22</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent Research Presentations.</strong>&lt;br&gt;(no discussion section due)</td>
<td><strong>Research Method Case Study:</strong>&lt;br&gt;Phase 4: Pecha Kucha Presentations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WK 8</th>
<th>Feb 29</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Making Sense of Data &amp; Affinity Diagrams</strong>&lt;br&gt;Rapid Contextual Design. Chapter 5 &amp; 8&lt;br&gt;Contextual Design Evolved. Pp 18-24&lt;br&gt;Kolko, Jon. &quot;Managing Complexity.&quot; Thoughts on Interaction Design.</td>
<td><strong>Project Meeting:</strong> Making sense of your data; (i.e., what are existing “pain points”; what’s the problem and for whom is it a problem?).</td>
</tr>
<tr>
<td><strong>Research Method Case Study:</strong>&lt;br&gt;Phase 5: Final Report Due</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WK 9</th>
<th>Mar 7</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>WK 10</th>
<th>Mar 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPRING BREAK Mar 14 - Mar 20 (No Class)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WK 11</th>
<th>Mar 21</th>
</tr>
</thead>
</table>
**MISSION STATEMENT**
The Mission of IUPUI is to provide for its constituents excellence in
- Teaching and Learning;
- Research, Scholarship, and Creative Activity; and
- Civic Engagement.

With each of these core activities characterized by
- Collaboration within and across disciplines and with the community;
- A commitment to ensuring diversity; and
- Pursuit of best practices.

IUPUI’s mission is derived from and aligned with the principal components—Communities of Learning, Responsibilities of Excellence, Accountability and Best Practices—of Indiana University’s Strategic Directions Charter.
STATEMENT OF VALUES

IUPUI values the commitment of students to learning; of faculty to the highest standards of teaching, scholarship, and service; and of staff to the highest standards of service. IUPUI recognizes students as partners in learning. IUPUI values the opportunities afforded by its location in Indiana’s capital city and is committed to serving the needs of its community. Thus, IUPUI students, faculty, and staff are involved in the community, both to provide educational programs and patient care and to apply learning to community needs through service. As a leader in fostering collaborative relationships, IUPUI values collegiality, cooperation, creativity, innovation, and entrepreneurship as well as honesty, integrity, and support for open inquiry and dissemination of findings. IUPUI is committed to the personal and professional development of its students, faculty, and staff and to continuous improvement of its programs and services.

CODE OF CONDUCT

All students should aspire to the highest standards of academic integrity. Using another student’s work on an assignment, cheating on a test, not quoting or citing references correctly, or any other form of dishonesty or plagiarism shall result in a grade of zero on the item and possibly an F in the course. Incidences of academic misconduct shall be referred to the Department Chair and repeated violations shall result in dismissal from the program.

All students are responsible for reading, understanding, and applying the Code of Student Rights, Responsibilities and Conduct and in particular the section on academic misconduct. Refer to The Code > Responsibilities > Academic Misconduct at http://www.indiana.edu/~code/. All students must also successfully complete the Indiana University Department of Education “How to Recognize Plagiarism” Tutorial and Test. https://www.indiana.edu/~jstd You must document the difference between your writing and that of others. Use quotation marks in addition to a citation, page number, and reference whenever writing someone else’s words (e.g., following the Publication Manual of the American Psychological Association). To detect plagiarism instructors apply a range of methods, including Turnitin.com. http://www.ulib.iupui.edu/libinfo/turnitin

OTHER POLICIES AND INFORMATION

1. IUPUI course policies: A number of campus policies governing IUPUI courses may be found at the following link: http://registrar.iupui.edu/course_policies.html

2. Classroom civility: To maintain an effective and inclusive learning environment, it is important to be an attentive and respectful participant in lectures, discussions, group work, and other classroom exercises. Thus, unnecessary disruptions should be avoided, such as ringing cell phones engagement in private conversations and other unrelated activities. Texting, surfing the Internet, and posting to Facebook or Twitter during class are generally not permitted. IUPUI nurtures and promotes “a campus climate that seeks, values, and cultivates diversity in all of its forms and that provides conditions necessary for all campus community members to feel welcomed, supported, included, and valued” (IUPUI Strategic Initiative 9). IUPUI prohibits “discrimination against anyone for reasons of race, color, religion, national origin, sex, sexual orientation, marital status, age, disability, or [veteran] status” (Office of Equal Opportunity). Profanity or derogatory comments about the instructor, fellow students, invited speakers or other classroom visitors, or any members of the campus community shall not be tolerated. A violation of this rule shall result in a warning and, if the offense continues, possible disciplinary action.
3. **Bringing children to class:** To ensure an effective learning environment, children are not permitted to attend class with their parents, guardians, or childcare providers.

4. **Disabilities Policy:** In compliance with the Americans with Disabilities Act (ADA), all qualified students enrolled in this course are entitled to reasonable accommodations. Please notify the instructor during the first week of class of accommodations needed for the course. Students requiring accommodations because of a disability must register with Adaptive Educational Services (AES) and complete the appropriate AES-issued before receiving accommodations. The AES office is located at UC 100, Taylor Hall (Email: aes@iupui.edu, Tel. 317 274-3241). Visit [http://aes.iupui.edu](http://aes.iupui.edu) for more information.

5. **Administrative Withdrawal:** A basic requirement of this course is that students participate in all class discussions and conscientiously complete all required course activities and/or assignments. If a student is unable to attend, participate in, or complete an assignment on time, it is the student’s responsibility to inform the instructor. If a student misses more than half of the required activities within the first 25% of the course without contacting the instructor, the student may be administratively withdrawn from this course. Administrative withdrawal may have academic, financial, and financial aid implications. Administrative withdrawal will take place after the full refund period, and a student who has been administratively withdrawn from a course is ineligible for a tuition refund. Contact the instructor with questions concerning administrative withdrawal.

6. **Electronics & Digital Devices:** Before class begins, please turn off all phones, pagers, gramophones, or other devices that may cause disruption. No laptops in lecture. You should bring your laptops to class for work time. I am going to experiment with having a “no laptop” rule for lectures. You may use them in discussion as that time will be used, in part, for group work. Given that this is an experiment, I will periodically assess and seek feedback on this rule. Any student who feels he or she may need an accommodation to the “No Laptops in Lecture” based on the impact of a disability or need should contact me privately to discuss his or her specific concerns.

7. I reserve the right to update this course throughout the semester.

**Syllabus & Course Design Credit**

This syllabus and course materials are modified from several UX-related course, including Ellie Harmon and Davide Bolchini’s course.