From the Preface of *One L* by Scott Turow, a book about the first year of Harvard Law School:

*In baseball it's the rookie year. In the navy it is boot camp. In many walks of life there is a similar time of trial and initiation, a period when newcomers are forced to be the victims of their own ineptness and when they must somehow master the basic skills of the profession in order to survive. For someone who wants to be a lawyer, that proving time is the first year of law school.*

At Indiana University, for someone who wants to be an interaction designer, that proving time is IDP—Interaction Design Practice.

Welcome to an experience that will change your life!
Interaction Design Practice
Fall 2013 Syllabus

In the varied topography of professional practice, there is a high, hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the application of research-based theory and technique. In the swampy lowland, messy, confusing problems defy technical solution. The irony of this situation is that the problems of the high ground tend to be relatively unimportant to individuals or society at large, however great their technical interest may be, while in the swamp lie the problems of greatest human concern. The practitioner must choose. Shall he remain on the high ground where he can solve relatively unimportant problems according to prevailing standards of rigor, or shall he descend to the swamp of important problems and nonrigorous inquiry?

— Donald A. Schön
*Educating the Reflective Practitioner*

Welcome to “the swamp” (see the Schön quote above) – the place of messy, ill-structured, yet important problems. Here you will recognize that the only way forward is through “the generation of possible solutions and their gradual improvement” (Dorst, 2006). Here you will begin the transformation from non-designer to designer.

From the *HCI/d Program Handbook* (2010): “HCI/d [Human-Computer Interaction Design] is the branch of informatics that studies and supports the design, development, and implementation of humanly usable and socially acceptable information technologies. The goal of the field is to shape new media, tools, artifacts, and systems that will support human use, augment human learning,
enhance communication and lead to more acceptable technological developments at the individual and the social levels” (p. 3).

Historically known as “interface design,” HCI/d becomes increasingly important as computing intelligence and connectivity spread ubiquitously to home, work, and play environments. No longer is content viewed as static, pre-arranged artifacts; rather it is generated and co-created by large social clusters. It is now generally recognized that the nature, quality, and value of human-computer interactions are considerations that should be integral to the entire software and product development process.

This course organizes around a collection of readings and five design projects concerned with applying human-computer interaction principles to the design, evaluation, and experiential use of interactive systems such as web-based sites and tools, social networking, web learning, information portals, security systems, productivity and knowledge management systems, information appliances, entertainment systems, co-created content and tools, etc. Sometimes HCI/d is referred to as “user experience” design or UX.

**Our goal is to teach you to understand “the whole game” of interaction design—how to think and behave like a designer.**

We borrow concepts from other design fields, for example, architecture, instruction, music composition, and business to gain insight about HCI/d strategies.

We also recognize that design is not a solitary discipline; it is a collaborative act. To this end, we shall emphasize protocols for team decision making and work flow.

No programming knowledge is required as a prerequisite for this course. However, a rapid design and presentation tool such as Fireworks, Balsamiq, or Axure may be useful to “mock up,” wireframe, or prototype designs. We would like you to focus on design rather than programming in this course, so do not worry if you cannot use these tools initially. You will master at least one of the wire framing tools before the end of the semester. However, your dominant tools will be your sketchbook, pencils, and pens. Post-it notes will become your friend! ;) If you don’t know about sketchnoting, take a look at this: [http://sketchnotearmy.com/](http://sketchnotearmy.com/) and similar links.
The format of this course is problem-centered. The lectures, blog reflections, discussions, and other resources support the problems you are working on throughout the semester. Successful design will require a collaborative and iterative effort.

The majority of the students will be first year master's students in the Informatics HCI/d Program. Additionally, the course includes four graduate students from the Instructional Systems Technology Department (IST), the School of Public Health (SPH), University Information Technology Systems (UITS), and Health Informatics (HI). All students will meet at the same time and the course will be taught as one class, with high standards for all—as if you were a new interaction or experience designer at Apple, Microsoft, Adobe, Facebook, HP, Autodesk, Yahoo, Google, or Glerb! (I've interacted with all but one of these organizations and worked at two of them.)

Class Times
The class meets on Mondays and Thursdays from 9-11 AM. If you are taking the six credit section (as most of you are), we will meet, in addition, on Thursdays from 7:30-9:00 PM. All classes will meet in room 150 of the Informatics (“connector”) building.

Prerequisites
There are no formal prerequisites, and programming skills are not required. If you have worked with graphic packages or prototyping tools, that is good, but it will not be assumed. In addition, familiarization of Web 2.0 tools such as blogs, Facebook, Google Drive, and Twitter is assumed. Everyone should have a Gmail account.

At this point you may be thinking, “Great! No programming involved. I can relax!” Not so. This course will require you to exercise your brain in a different way. Get ready!

Professor
Martin A. Siegel, Ph.D. (1973, University of Illinois)
Professor of Informatics, Cognitive Science, and Education
Co-Founder, WisdomTools Inc. and Founder, Glerb LLC.

Students often wonder what to call me. “Marty” is fine; “Professor Siegel” is fine too.

Office
Informatics, 3rd floor.

Telephone
812-856-1103 (from a campus phone: 6-1103)

E-mail Address
msiegel@indiana.edu
Office hours

I’m eager to meet with you, and available on most days. Please send an e-mail to make an appointment. Or, just stop by my office.

Mentors and AIs

Graduate student mentors and AIs will help guide you in this course. Their primary role is to assist teams in the development and evaluation of your projects, as well as to help you with team process. The HCI/d 2013 mentors include:

Adam Williams *  riadwill@umail.iu.edu
Angélica Rosenzweig  rosenzwa@umail.iu.edu
Chi Chen  chen349@indiana.edu
Matt Jennex *  mjennex@umail.iu.edu
Michael Stallings  mdstalli@umail.iu.edu
Sarang Borude  sborude@umail.iu.edu
Sijie Yang  sijiyang@umail.iu.edu
Stephanie Louraine  slourain@indiana.edu
Stephen Hicks  schicks@indiana.edu
Stephen Miller  sm67@umail.iu.edu
Tiffany Jen *  tiffjen@umail.iu.edu
Tony Kennedy  ankenned@umail.iu.edu
Vamsi Pasupuleti  vcpasupu@indiana.edu
Wenyang Dong  wenydong@indiana.edu
Yang Ye  yaluye@umail.iu.edu

* Adam, Matt, and Tiffany are Associate Instructors (AIs) as well. They will perform some additional administrative functions.

Note: The large number of mentors for the course plus the professor creates a students to mentor ratio of less than 3 to 1. We do this in order to provide a safe and supportive environment for you to learn interaction design as you navigate through inevitable frustrations and missteps. This is part of the learning process; it’s your time to take risks!

Projects

Throughout the semester, I will assign six design projects (five projects if you’re in the three-credit section). For the first project, you will work in a two-person team. For the remaining projects, you will work in a three- or four-person team.

NOTE: If there is anyone in the class that you do not wish to be your teammate, send me an e-mail before teams are set for project #2 with this person’s name (you are limited to one name). No explanation is required. This information will be confidential. (Do not send names of people you wish to have as teammates; I will ignore these notes.)
At my discretion, teams may or may not persist across some number of projects. There are advantages of having the same team across projects: the team becomes more efficient over time; the team gets to know each person’s strengths and weaknesses; and team bonding can occur. There can be disadvantages too: if there are team disagreements or personality conflicts, they may continue throughout the projects. However, if there are problems, like in “the real world,” these problems need to get resolved. You cannot simply think, “Oh well, this will soon go away and I’ll never have to work with this person again.”

In real companies you do not usually pick your team members; managers do. In real companies, you will need to work with people from different cultures, religions, countries, sexual orientations, body types, and physical abilities. In real companies, managers may remove or reassign colleagues.

**If problems develop, seek help early from the mentors and me.** This is the time to learn how to act as a professional. Our expectations are high. [Read this paragraph again!]

**Ghosts of IDP**

These are messages to you from former students of this class – some of the graduates of the HCI/d master’s program. They are the “ghosts of IDP.” It reminds me of a segment of the Dead Poets Society, a wonderful movie from 1989, with Robin Williams playing English teacher John Keating. Mr. Keating asks his high school students to look closely at the photographs of past students, some from the distant past:

> They’re not that different from you, are they? Same haircuts. Full of hormones, just like you. Invincible, just like you feel. The world is their oyster. They believe they’re destined for great things, just like many of you. Their eyes are full of hope, just like you. Did they wait until it was too late to make from their lives even one iota of what they were capable? Because, you see gentlemen, these boys are now fertilizing daffodils. But if you listen real close, you can hear them whisper their legacy to you. Go on, listen in. Listen, you hear it? – Carpe – hear it? – Carpe... carpe diem, seize the day, boys.

**Make your lives extraordinary.**
I really thought it would be different. I'm living the 'dream' working at a highly respected design agency in San Francisco. I thought things would be easy and awesome, and that everyone would know all the wonderful things that I learned while in graduate school. Just a week into my job, I knew I was wrong. The things I had taken for granted after 2 years of graduate school are absolutely eye opening to the people with whom I work. On a daily basis I use methods and practices that I learned in IDP. I see how important each and every meeting can be, even if it's a casual conversation in the hallway. Everything I do comes down to a decision, a decision that I have to make and that I have to justify and explain; a decision that I have to fight for every hour, every meeting, but be completely willing to give it up at a moments notice. To me, design is about decisions. I make decisions every day that will affect our culture in some way or another. A tiny detail here or there, a new function the client wants thrown in, all have major repercussions that they've never thought about. It's been my job, and a very tough one, to fight for what I believe to be the right decisions. The choices I make daily will echo throughout the next
10-20 years in ways that I can't even imagine. IDP taught me how to think about those things, how to get towards the right design, and how to fight for and explain that design in the toughest conditions. Everyday, every single day, I am designing the future.

– John Wayne Hill
Interaction Designer
Punchcut

Hi Marty,

I hope all is well, and it’s great to hear from you. I’ve been at Adaptive Path for almost two months now, and the experience has been intense beyond my imagination. I have managed to find myself on the two most challenging client projects we have going on at the company right now, pitching in wherever possible and running to catch up with these project teams. My tour of duty on one project wrapped up last week, and this week I’ve been helping with the second one. I can’t say much, except that it’s a project for a company known for its consumer electronics and meticulous attention to detail.

I’ve learned a lot over the last two months, and I’m still going through a hazing period so it’s difficult yet for me to see the forest for the trees. However, a few valuable insights have bubbled to the surface.

For one, the intense conversations you have with the other members of your design team *are* the design process. They are not something to be avoided, but navigated. Respect is paramount. This is about the design, not you as a designer. Not the other members of your team as designers. The importance of being able to coolly articulate your reasoning for a particular approach to the design, or a certain feature or component, cannot be underestimated.

This is not to say that argumentation is the natural state of the design process, but rather intense, lively discussion is. If your team is not getting worked up over something, if you’re not disagreeing with your team members, you’re probably not doing anything worth doing. Granted, arguing with a fellow design student is different than talking with a lead designer who has 10+ more years of industry experience than you, but the format is still recognizable.
The designers at Adaptive Path are wonderful because for all their talent, they rarely exhibit ego. As professionals, we recognize it’s about producing the best design possible. As modest individuals who are nonetheless at the top of our games, we realize in each other that every member of the team brings a unique and informed viewpoint. Though we all consider ourselves “designers” we rarely all agree. When we disagree with one another we disagree with a fury, but a fury that is elevated above personal attacks and other pettiness.

I make it sound like we fight all the time, which certainly isn't the case. But, what one outside the design industry may find surprising, is that even (perhaps especially) extremely talented designers often disagree with one another on what is the best approach to a particular design problem.

For two, the importance of being able to articulate and rationalize the reasoning behind your design decisions cannot be underestimated. Both of the clients I have worked with have been extremely detail-oriented, and will often challenge the smallest, most innocuous part of your design.

Do you have a parent item that can be clicked to reveal the children it contains? If so, how do you visually indicate that functionality? Do you use a triangle or a plus sign? If you use a triangle, does the triangle point down when it’s closed, indicating the action that will happen when the user clicks on it, or does it point down when it’s open, as a visual indication that it is currently open?

The answer is not obvious, and one that is not easily settled by referring to existing interactions. Indeed, OS X and iTunes use a downwards triangle to indicate that a parent is currently open and revealing its children. Meanwhile, Gmail uses a downward triangle to indicate that a parent is closed, and that clicking on it will reveal its children.

These contradictions are frequent in design, which is why you may find your team arguing about triangles for an hour. It’s up to you to judge whether that’s the most important conversation you could be having, but know that even professionals have similar arguments with one another. The triangles are just an example, but in our case, given the high-fidelity at which we were working at this late stage in our project, and given the client’s attention to detail, it was an important conversation to have.
For three (and this is one you might want to keep to yourself), the absolute mess that is the IDP forum, with confusing threads and frustrating inconsistencies and no clearly-stated appropriate usage pattern, is a stroke of brilliance. At one point I recall one of us mentors challenging you on the forum, musing that perhaps we should find a different program, or delete stray threads, or at least do something to help the students find what they needed to find. And your response, which I thought was, ahem, bullshit at the time, was, "Perhaps the mess is by design."

And, after reading portions of Schon’s Reflective Practitioner, and experiencing first-hand the clusterfuck that is 37Signals’ Basecamp, and living the challenges (even at the level of the professional consultancy) of monitoring, tracking, referencing, managing and responding to client feedback, I think I’m beginning to see the truth to your words. Information comes at you from all sides in this industry; it sucks, but it’s kind of unavoidable. The onus is on you, the designer, to come up with a good way to manage it. Even at the professional level, at one of the top consultancies in the world, managing the numerous threads of communication with the client, as well as with fellow team members, continues to be an intense challenge waiting for a solution.

So yeah. Keep the forum a fucking mess. Because that’s actually the reality.

– Dane Petersen
Adaptive Path
It is extremely valuable to have the opportunity of jumping right into design practice in IDP. It is not only a great way to start the two-year journey of the HCI/d program, but also a great preparation for future work. It is hard to believe how much you can learn and grow in this class. Teamwork, handling pressure, giving and receiving critiques, framing problems, articulating a rationale, presentation skills, communication skills... the list can just get longer and longer, and I find everything I learned from IDP is so useful in my work at Ooyala.

When I look back at my IDP experience, I find the end designs, which I cared about the most at that moment, turned out to be unimportant at all. So what is the important part? It is the process where you try your best, you struggle, you fail, and you reflect, together with your team and cohort.

– Yujia Zhao
UX designer
Ooyala

Heart. Listening. Transforming. Teamwork. These are all fundamental aspects of the human condition. They are your most powerful allies through any tough design problem. But how can you develop these fundamental tools? You’re experiencing your first step to becoming in-tune with your inner designer, and also with your fellow humans: it’s IDP. With any journey, there will be ups and downs: think of any movie, book, or video game you’ve ever been a part of. Has the hero just simply walked up to the villain and wiped out evil in one easy swoop? No. And the same journey you’ll experience to becoming your own design hero.

So this may make the class seem dreadful - but it is anything but that. This will become your designerly toolkit that you’ll draw upon for the rest of your life. Have fun building yourself and your skills - it’ll pay off in the end. From this class, and the rest of the classes you’ll end up taking at IU during your journey. These skills have enabled me to overcome my own design challenges and also get me a position at Lexmark, where every day I’m being challenged to design experiences I’ve
never been accustomed to before. I sketch - a lot; I read - a lot; I talk to others and listen intently to what they have to say and are feeling - a lot; I present - a lot; I critique - a lot. How do you get these skills? Practice - a lot: and through Interaction Design Practice, you’ll get this practice to give you the abilities to take your first steps as a designer. If you stumble - don’t crawl into a shell. There’s so many good people there that are willing to help. Keeping my mouth shut was my mistake that I want you to learn from.

Have fun, and always practice and get better. It makes for epic epicness. ^_^V

– Casey M Addy
Lexmark International

The most important design principles that have helped me be a successful UX designer at Adobe were acquired in I541. It was in this class that I learned how to both take criticism from others and manage ideas in a co-creative environment. Seek out insight from everyone around you and open your mind to understanding those ideas that aren’t your own. Designing isn’t glamorous. It’s dirty hard work that is filled with unexpected twists and turns. Embrace the unexpected, reflect upon your struggles, and set the foundation for becoming the type of designers that truly understand what it means to design."

– Matt Snyder
UX Designer
Adobe

Postscript. I hope the paragraph above is useful. I was talking to my nephew who entered the University education system this last year. He was telling me about his classes (and about how much they sucked), and it dawned on me how awesome the program at IU really is. I was reflecting upon that environment and how rich it really was.

1. Mentors: surrounding us with those who just recently went through what we did.
2. Learning from experience: it doesn’t matter if you know how to do it; go try to do it.
3. Critiques: learning from others going through the same thing.
I wish I would have taken better notes. I wish I would have gone to lunch more with my mentors. I wish I would have reached out more to my classmates. Anyways... for what it's worth, don't change a thing in your class. It's awesome. Most students probably have never been exposed to that kind of learning environment. I think the thing I took away from your class was conviction. Keep up the good work.

Matt

Team play is a core part of teamwork. If you're out to work as a team and focus only on the work part, you're not inching toward building relationships. Go out, play - enjoy your team - it is then that you get to know the people, the thinkers, the points of view that are part of the ideas we bring to fruition. You quickly go from the I to the we. You see bigger pictures, blend to form better ideas, and begin to realize the power of the collective. Eventually you will see beauty in these different points of view, sometimes beginning to feel lost without them.

− Apurva Pangam
   Consultant
   Deloitte

Facilitators

Each team for projects #2-6 should designate a facilitator for each project; however, no student should take on the role of facilitator more than once. The facilitator coordinates the activities of the team, develops the timeline, assists team discussions, insures that all points of view are heard, creates a meeting agenda and a list of “to dos” at the end, records decisions, and submits the final documents and files. Most importantly, the facilitator ensures that team decision-making protocols are followed.

A project that is turned in late will not receive a grade higher than B. Moreover, the last date for turning in a project is the start of the next class session.

Team Collaboration

Collaboration is at the heart of interaction design. Professionally developed designs are developed by a project team. Learning collaborative, interpersonal skills is critical to your success. This is
Unlike many school experiences where individual work is valued most.

Upon completion of projects #2-6, you will evaluate each team member, including yourself, along six dimensions:

- **Attendance**: Did this person attend every meeting from beginning to end?

- **Participation**: Within cultural expectations, did this person speak up when necessary, consider other points of view, and help bring debate to a resolution?

- **Load**: Did this person do more or less work than the average person in the team? (Ideally, everyone in the team will do an equal share of the work.)

- **Dependability**: Did this person deliver all that was promised on time?

- **Accountability**: Did this person implement team protocols to insure individual and team success? (These protocols will be described later in the semester.)

- **Overall**: What are your overall comments on this person?

These evaluations will comprise a little over 20% of your grade. Unlike other team projects you may have experienced, where one or two people tend to “carry the load” for the entire team, HCI/d designers will hold you accountable for your participation.

There is a natural tendency that occurs when teams work hard; they begin to compete with one another – “our design is better than the other team’s.” **Resist this temptation.** This class is not a competition. IDP is about learning to become a designer. We’re all riding in “Zen Dog’s boat!” Help each other. Share ideas. Let’s all get smart about interaction design – **within** teams and **among** teams.
Required Reading's

Four books are required for the course:

Steve Krug. *Rocket Surgery Made Easy*

Jeff Johnson. *Designing with the Mind in Mind*

Bill Buxton. *Sketching User Experiences*

Saul Greenberg, Sheelagh Carpendale, Nicolai Marquardt, and Bill Buxton. *Sketching User Experiences: The Workbook*

Supplies

Hand-written note-taking is required. In particular, learn to take notes as sketchnotes.

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You are required to purchase the following supplies at Pygmalion’s, 108 N. Grant Street, Bloomington, IN. The supplies will be bundled for you:
• Maruman Mnemosyne Inspiration Notebook-A5 (5.8 x 8.3) 5mm x 5mm Graph, 70 Sheets
• White Plastic Soft Eraser
• Tombow Dual Brush Markers, N65 Cool Gray 5 and N89 Warm Gray
• 3 Faber Castell Graphite pencils, 2B, 3B, 4B
• Sharpener (with 2 holes)
• Prang Colored Pencil Set, 12 colors
• Pitt India Ink Pens, Black: F, B
• Plastic triangle, 4 inch, 30/60/90
• Utility bag/ Pencil case (zippered pouch that will hold pencils and markers)

If you already own these or something of equivalent quality, then you can eliminate one or more items from the list. But using high quality supplies is important.

Course Blog
The course blog, http://www.interactiondesignpractice.com/, contains several parts:

• Marty’s blog. I will use this blog for my reflections throughout the course. I encourage you to respond to anything I write.

• The Week # Reflection. Each week I will post a short reading to act as a prompt for your weekly reflection. Read the prompt and then enter your group to reflect on the prompt; include in your reflection thoughts about what’s happening in your learning—in lecture and in your projects. Do this each week throughout the semester. Take some time to read what other people are writing and comment on their posts too.

• Projects. In this section you may raise questions about each of the project assignments. I may post important information about the project here, so do not ignore the content of this section.

• Mentors. In this section the mentors will write additional posts giving insights to project work and design thinking. Read these posts too.

See Project #1 for more directions on logging into the blogs and your first reflection. Also, it’s a good idea to set up a RSS feeder so you don’t miss any blog posts.
Attendance

Class attendance is expected and noticed. We will start promptly and end on time. It’s your responsibility to be on time. Arriving late or not at all will have negative impact on your final grade (see below).

Sleeping in class or reading non-class materials is not allowed. Come into class ready to work. You need to be “checked in” not “checked out.” If you find yourself feeling drowsy, then quietly leave the room and drink some coffee or splash cold water on your face and then return quietly to the room (make sure that the door closes quietly behind you).

Laptops are not allowed during the lectures except for note taking, and even then I would prefer that you take notes using your sketchbook. During class you may not read e-mail or engage in texting, Facebook, Twitter, etc.

Note: If you are unable to attend class or a team activity because of a religious observance, it is your responsibility to alert your team members and me prior to your absence. Give notice early so we can help you make up the work. IU rules governing religious observance can be found here.

Music

Music plays an important role in this class. Each lecture session begins with a different musical selection, sometimes reflecting the day’s content. Once the music begins, stop talking, stop reading, stop texting, etc. Listen to the design! Enter into design space!

Class Format

During the first part of the semester, most class sessions will follow a lecture and demonstration format. On occasion we’ll create in-class mini-designs. Moreover, upon completion of each of the four major design projects (project #2 – 6), class time will be devoted to project presentations and critiques. The critiques will approximate a critique that a first year designer might receive at any serious software design company or agency.

From time to time, we will have guest speakers. Some will be from outside the world of HCI/d, but they will share design perspectives from their field.

SIGCHI 2014

The 4th and 5th projects will be the CHI 2014 Student Design Competition. “This year’s conference theme ‘One of a CHInd’ focuses our SDC challenge on the one of a kind diversity that is made up of the individual selves that create our community. The
The growing design domain of the Quantified Self has been made possible through the integration of low-cost sensing technologies with proliferating applications available through mobile and internet technologies. There is a context of sensory-rich data from biometric, health, neo-analog, DIY culture and geophysical sensing that expands our ability to augment or shift our perspectives and our knowledge. Self-tracking, self-management and self-awareness are activities that promote agency and transformation of our own growing accumulation of bodydata. How can we transform this overwhelming incoming bodydata into self-knowledge?" (http://chi2014.acm.org/authors/student-design-competition) The competition will take place in Toronto, Canada, April 26 – May 1, 2014. More about this later.

**Grades**

Final course grades **for the six-credit section** will be determined according to the following formula (note that progress is rewarded, with later projects weighted more than earlier projects): *Each score varies from 0 to 100 points.*

<table>
<thead>
<tr>
<th>Project #1</th>
<th>= pscore1 x 0.50 or 50 possible points</th>
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</thead>
<tbody>
<tr>
<td>Project #2</td>
<td>= pscore2 x 0.70 or 70 possible points</td>
</tr>
<tr>
<td>Project #3</td>
<td>= pscore3 x 0.80 or 80 possible points</td>
</tr>
<tr>
<td>Project #4</td>
<td>= pscore4 x 0.90 or 90 possible points</td>
</tr>
<tr>
<td>Project #5</td>
<td>= pscore5 x 1.00 or 100 possible points</td>
</tr>
<tr>
<td>Project #6-Phase I</td>
<td>= phase I x 0.40 or 40 possible points</td>
</tr>
<tr>
<td>Project #6-Phase II</td>
<td>= phase II x 0.40 or 40 possible points</td>
</tr>
<tr>
<td>Project #6-Phase III</td>
<td>= phase III x 0.50 or 50 possible points</td>
</tr>
<tr>
<td>Project #6-Phase IV</td>
<td>= phase IV x 0.45 or 45 possible points</td>
</tr>
<tr>
<td>Project #6-Phase V</td>
<td>= phase V x 0.75 or 75 possible points</td>
</tr>
<tr>
<td>Collaboration #2</td>
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</tr>
<tr>
<td>Collaboration #3</td>
<td>= cscore3 x 0.40 or 40 possible points</td>
</tr>
<tr>
<td>Collaboration #4</td>
<td>= cscore4 x 0.40 or 40 possible points</td>
</tr>
<tr>
<td>Collaboration #5</td>
<td>= cscore5 x 0.40 or 40 possible points</td>
</tr>
<tr>
<td>Collaboration #6</td>
<td>= cscore6 x 0.50 or 50 possible points</td>
</tr>
<tr>
<td>Blog Discussions (1st half)</td>
<td>= bscore1 x 0.75 or 75 possible points</td>
</tr>
<tr>
<td>Blog Discussions (2nd half)</td>
<td>= bscore2 x 0.75 or 75 possible points</td>
</tr>
<tr>
<td>Total</td>
<td>= 1000 possible points</td>
</tr>
<tr>
<td>Unexcused Absences (for n&gt;0)</td>
<td>= – 2^n points</td>
</tr>
<tr>
<td>Magic Points (m)</td>
<td>= + m points</td>
</tr>
</tbody>
</table>
For students in the three-credit section, you will not participate in Project #6 (highlighted above in gray). To calculate your total score, multiply each score by \((\frac{1000}{700})\) or \((\frac{10}{7})\) or \((1.4286)\).

You can access your grades on Oncourse.

**Magic Points**

From time to time, I will award a “magic point” upon the completion of a special activity. We will add this point to your overall score. These points can positively affect your grade.

**Final Grade**

Any fractional point in the overall total is rounded up to the next integer; for example, 934.1 is rounded up to 935:

<table>
<thead>
<tr>
<th>≥ Total Points</th>
<th>Final Grade</th>
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I want you to work hard in this class, but I do not want you to obsess about grades. Often on the first few assignments, grades are quite low; just keep improving. Note: some grades are a function of your team members (everyone on the team gets the same grade); thus it’s important to help weak team members perform better and to improve their attitude! You will learn how to do this as the semester proceeds.

**Help: Read this!**

Questions are encouraged during each class session. If an explanation is unclear, ask for a better explanation. There are no stupid questions. And it’s particularly important for non-native speakers to ask questions. Leaving a lecture confused is not a good way to learn!

Often students ask me questions immediately before or after the lecture. Note that my mind is likely to be focused on preparing for the lecture or “coming down” from the lecture. Finding a time to
meet where I can focus on you and your needs will work best for both of us. Just send me an email with some times you are available and I will get back to you quickly.

Mentors have the experience of this course and other related courses. Thus, they are in an excellent position to answer questions about the projects and to provide guidance to your design team. However, you should not feel compelled to ask the mentors first; there is no “chain of command” in this course! Also, mentors are instructed to guide teams, not to reveal “the answers.” For serious interpersonal team problems, consult with your mentor and me as soon as possible.

**Feedback**
You will be getting a lot of feedback from us. However, we value your feedback too. Please let us know how to make this a more productive learning experience for you. **If you wait until the end of the semester to tell us what you didn’t like, it will help the next group of students but it won’t help you.** Sometimes instructors encourage students to meet with them, but students get the impression that they don’t really mean it. I do wish to meet with you!
First Step

Paul Heckel (1984) in The Elements of Friendly Software Design, an early book on human-computer interaction, reminds us that “Movies did not flourish until the engineers lost control to artists—or more precisely, to the communications craftsmen.”

Similarly, this course represents a “first step” in learning to be an interaction designer, a kind of high tech communications artisan. Like learning any complicated skill, it will take time and practice—lots of it. Nevertheless, by the end of this semester you will be thinking like an interaction designer and problem-solving in new ways.

We expect you to work hard, think hard, and have fun.

We will too!

Le voyage des mille milles commence avec la première étape.

Bin millik bir yolculuk, atılan ilk adımla başlar.

El viaje de mil millas empieza con el primer paso.

Uma caminhada de mil milhas começa com um primeiro passo.

हज़ार कदाँको का सफर एक कदम से शुरू होता है।

천리길도 한 걸음부터

The journey of a thousand miles begins with the first step.
It seems rather strange that professors talk about covering topics. Would it not be more appropriate to talk about uncovering topics?

The following topics are listed in approximately the order they will be “uncovered”—

- Overview of course
- From the design of everyday things to the design of software
- Playing the whole game of HCI design
- From sketching to high fidelity prototypes
- Wireframing
- Seven themes of good design, presented as a whole and then individually throughout the semester
- Good moves and bad moves for starting your design
- The “protocol” for team accountability
- Personas: Your first tool
- Usability testing
- Thinking like a graphic artist
- Guidelines for critiquing designs
- Thinking like an instructional designer
- Thinking like an architect
- Tools for accelerating insight
- Design affect and design ethics
- Thinking like a (composer, lighting designer, playwright, and/or choreographer)
- Interactive instruction: a case for computer imagination
- Sustainability
• Post-mortem analysis
• The designer's (addictive) life

**Throughout the course, these topics will be interspersed:**

• Case Studies: a variety of web, web 2.0 and wireless products
• Critiques of Design Projects #1-6
• Project management
• Life in the “trenches” as a real interactive designer
• Professionalism
• Personal elaborations of the “Whole Game”
• The philosophy of design
### Timetable

**Interaction Design Practice • Fall 2013**

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<th>Week</th>
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<th>Assigned</th>
<th>Project Due</th>
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* Note: All digital materials must be submitted using the *Oncourse* drop box by 5:00 PM on this date. All paper materials submitted by the team must be delivered by the team’s facilitator at the start of the next class (unless the due date is a class date). Work received after this time will be marked “late.” I will announce in class any exceptions.
** Each wire framing team should arrange to meet with its wire-frame mentor to discuss and grade your project. This should occur before the next phase begins (or shortly thereafter).

NOTE:

K = Steve Krug. *Rocket Surgery Made Easy*

J = Jeff Johnson. *Designing with the Mind in Mind*

B = Bill Buxton. *Sketching User Experiences*

G = Saul Greenberg, Sheelagh Carpendale, Nicolai Marquardt, and Bill Buxton. *Sketching User Experiences: The Workbook*

Workbook readings will be made within the project assignment briefs.