I’ve made these annotated slides in case you’d like to get a sense of what we’ll be talking about to start off the course. This is not the full set of first-week slides. Regular slides will not have annotations.

While the name of the course is Introduction to Human-Computer Interaction, I’d like you to consider it in the broader context of Human-Technology Interaction as well as a course in which you will explore the user experience, taking inspiration from non-digital examples as well as digital ones. We will consider users and their tasks, and the wide spectrum of types of users, their use of terminology, and their experiences. Ask yourself, “Why do I care about the user?” At a certain level, “Because we want them to buy our product.” is part of the answer but we need to think beyond that. For example, how might a developer’s mindset change if they said “Because we want them to want to buy our product because it has been designed to work well for them, to allow them to accomplish things they want to accomplish.” This is the mindset around which many of our topics will revolve.

Consider a product like Windows. Some worldwide estimates have Windows as 90% of the market. Is Windows the most user-friendly OS out there? Consider reasons why Windows has that market share, as well as how little of that market share is Windows 8 now that Windows 10 is out, and also how much of that market share is still Windows 7. The reality is that many factors, including those of business models and strategies, are important for a product, but our focus will tend towards satisfying the user and supporting their tasks.
One aspect of design that will come into play is the aesthetics of things. Why is this word cloud, created at www.wordclouds.com, here on this slide? Is it to show an example of high-contrast text and background pairings? Do the words and frequencies represented have meaning? Is it just meant to look cool and satisfy someone suggesting that a word cloud can make a slide deck look more interesting? Can you extract meaning from the content that makes the answer apparent?

If the answer is “no” then we have a questionable user experience here.
There is a brainstorming and idea aggregation technique where participants get sticky notes and are encouraged to share ideas about an interface, and the facilitator gathers those notes on a wall and clusters them based on similarity of idea or complaint or compliment, so they can work as a group towards identifying common themes and big ideas.

In this comic strip, Dilbert’s insight is that all of the sticky notes are yellow. There are several lessons about good design sessions crafted into this, but after reading it the best take-away for me was the idea to start using different colored sticky notes during design sessions, and to think about whether to distribute them randomly or to have different subgroups share a color to potentially help identify a different type of pattern among diverse users.
This excerpt from a science fiction novel with a comedic approach was written in the early 1980s and refers to a pocket computer device known as The Hitchhiker's Guide to the Galaxy. The idea was a sort of digital encyclopedia that you could search through on this online computing device that could fit in a bag or backpack. There were many contributors, updates to the software and the data could happen any time and take place wherever you happened to be with your guide, even outside. The quality of the content was inconsistent in terms of accuracy and style, but still good enough for most people. Likely seen by many if not most as wacky sci-fi at the time when computers were big and the idea of an internet not thought of much outside of parts of academia and government and wireless internet-anywhere even less-so. What might we think of it today? Wikipedia on my iPad using the wi-fi network?

What about the concept within this excerpt? What devices do we have around us that don’t have an appallingly stone-aged “off” button? For example, can you turn your phone off? Really off?
As we think about design, users, and their tasks it is also important to think about the value of getting feedback before building something. For example, the shown sign appeared to have been added to a then-recently redesigned intersection to reduce the number of accidents caused by the person in the left-hand turn-only lane not realizing that the person in the next lane over might be going straight or turning right, which the visual design of the intersection suggested, but might also be turning left with them.
Adding signs after the fact can work, but the need for them is often seen as a failure in the design itself. Consider doors that have a push sign stuck to them and how the design of the door could have negated the need for the sign.
In other matters, when we discuss visual representations and iconography interesting questions can arise. Which phone looks like the type you most often use? Which looks like “a phone” in the general sense? Which would have more meaning when scaled down to a 64x64 square?
Now let’s consider the questions “Do you own a computer?” and “Do you own a smartphone?” Is a smartphone a form of computer? Could you imagine someone answering “no” about owning a computer but answering “yes” about owning a smartphone? The way people perceive and discuss their technology can be meaningful. Does it matter to most users that a Mac running OSX could be likened to “a Linux box” when they answer whether or not they’ve ever used a Unix-family machine? Should it?
While comic strips can extract humor by exaggerating situations, as a computer science major it can be useful to have empathy for the users of our creations who might have very different backgrounds than ours. We might not get confused if an instruction says to “click” on something in a mobile app, even though few people would have a mouse connected to their device, and we’d assume the instruction meant to “touch” or “tap” that thing. However, it would not be unheard of for a user to have to ask a friend “what do they mean I need to click on it?” and rather than judge those users, we should strive to understand them and design to include them.
Also, when thinking about our users, we sometimes need to go beyond user-centered and task-centered and consider other motivations and desires. For example, what role does joy play in the motivation of our users? Are there things that you do with a computer that have nothing to do with productivity? What about an interface that doesn’t make you feel like you are in the dark about why you are doing certain things?

How far-fetched does the scenario in the comic strip seem? Pause the video or transcript reading to read the comic strip, then resume.
The direction excerpts on this slide are real. They are from a 360-degree camera that I bought last year. It has one button. These are the directions from the manual on how to turn the camera on and off and how to start recording a video. I hope you can see why I started to wonder things like “Just how precise do I need to be with the timing to turn this on or off?” and why my first thoughts when I couldn’t get the camera to turn off was that I wasn’t doing it right, not that the device was defective, which in the end it was.
As a final thought for this preview slide set, as part of this course we will be exploring how human psychology plays a role in the design and use of technologies. This course used to have a PSYC100 prerequisite, but we transitioned to instead presenting the key concepts from that course within this course. We will see it come up in several contexts, in hopefully interesting ways.

See you on Tuesday!