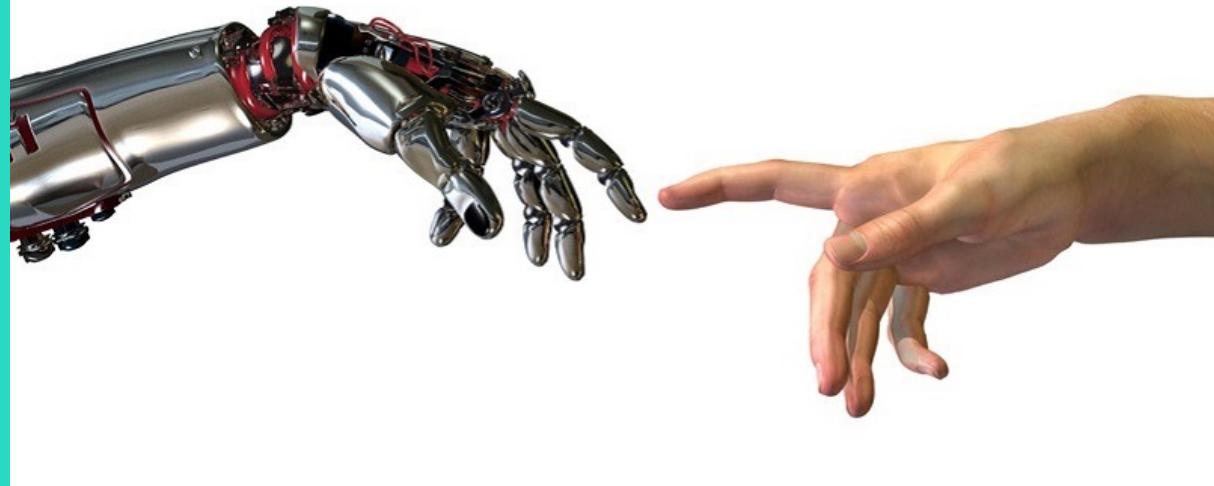


HCI - Human Computer Interaction

OBJECTIVES:

1. HOW THE CLASS WILL FLOW
2. HOW TO CRUSH THIS COURSE



What is this course about?



Who am I?



Logistics/Syllabus



---WELCOME---

Your course format
questions answered,
(hopefully 😎)!

"IF YOU KINDA
SORTA TRY,
THEN YOU
KINDA SORTA
GET RESULTS."

Lecture Objectives

- What is the lecture format?
- What's the course about?
 - Understand what is required of you in this class
 - Understand what you will be doing in this class
- Who is Dr. Stanley?
- What books (if any) do I need?
 - Spoiler-you don't, but there are optional books listed in syllabus if interested in reading more about the topic.
- Other typical class "stuff"...

How and when are we meeting? How do lectures work?

By student demand and feedback from previous semesters -- this class will be delivered in a “flipped classroom” manner, where a series of ”short and sweet” 15-20 min lectures will be delivered online via D2L asynchronously.

- Many studies show going beyond the 20-minute mark learners become fatigued, distracted, less engaged, etc. and negatively impacts meeting learning outcomes.
- There are several studies on why this format can be quite effective in terms of providing you a flexible and meaningful learning experience
 - And many believe (including myself), believe your future life long learning pursuits will be done outside of the "traditional classroom". This means the use of videos, online certificates, use of virtual/augmented reality, etc.

Physical class time will be reserved for time to ask me any questions
(more on this to come)...

What do I need to do?

- Which means -- each week you will need to watch all lectures and review the posted lectures notes provided for that week, you can watch/review these at any time during that week.
- By following this plan, you will ensure you don't get left behind and are **prepared for your assignments that line up** with the lecture content.

Do we meet physically in classroom with this “flipped classroom”?

- **Physical attendance in class is **OPTIONAL**, here's how this works:**

- On Tuesdays and Thursdays, I will be in the classroom ready to answer your questions (this is student driven questions to help you as much as you need)! And gives you the face time you may need with me and/or your classmates.
 - This time is for you to get your questions answered about any lecture content, HCI course-related assignments, HCI career-related questions, interest in research and/or graduate school, share powder ski/boarding stories ;-)
 - This is primarily to give you extra time to get personalized attention to that week's questions as needed ... so if you decide to come, **please come ready with questions!**
 - Please come prepared after watching and reviewing the lecture notes from the previous week.
- No bonus points given for attendance, but you also do not get penalized for not attending class.

What if I don't like watching learning videos? And how will I make sure I know what and when assignments are due?

NOTE: If you prefer courses taught in a traditional manner and don't like watching short videos then I encourage you to NOT take this course. However, please keep in mind I will be available on Tuesdays and Thursdays to answer any questions from the video-based lectures, assignments, etc.

Each week I plan to make weekly announcements via D2L on happenings regarding the course. There may occasionally be multiple announcements in one week, but I try my best to limit the number of announcements as I am empathetic to how challenging it can be to manage all your courses.

Lastly, I ask for your patience...as I try to meet you where you are!

- Lastly, I ask for your patience as we move through this course this semester. I am trying to meet students where they are at with their learning needs. This chosen classroom format is based on past student feedback, which was generally very positive!
- Some have asked if the course can be completely online so I made that happen. But if you want to meet with me and/or your peers that is also possible every Tuesday and Thursday.
- Also, some of you have a conflict with another major CS course offering so this may help you to take both courses.
- My motto is derived from other “forward thinkers” -- I wanted to make that point because a lot of people think that for an institution, you need buildings — and you definitely need buildings — but you also need to be able to now project the university to a student anywhere, anytime. Because otherwise we’re still being restricted by the constraints that we *had in the 19th and the 20th centuries*. **So we have to do both provide online as it fits and in person as it fits.**

What is this course about? (taken from syllabus)

- *This course provides an introduction to human computer interaction for innovation in technologies. Students will explore the core principles, methodologies, and applications of human-centered design computing practices.*
- *Example topics include: conceptualizing interaction, universal principles of design, persuasive technology, dark designs (addiction, habit forming, persuasion), human perception and cognition, immersive interaction (virtual/augmented/mixed reality), artificial emotional intelligence, experimental design and statistical analysis, empathy and bias in interaction design, gamification, social interactions, and human-robot interaction. Applications in manufacturing, transportation, and healthcare will be discussed. Explores course content through a variety of case studies, assignments and discussions.*

Prerequisites

- One year of computer science education or equivalent software development experience.
- However, we will not be programming per se in this course.

Here's our challenge (beyond just the post-pandemic era)

- This is the third-time HCI is being taught at MSU with the materials, course structure, and deliverables represented in this syllabus.
 - It is intentionally about 80-90% “complete”, not only because it’s new but because I intend to always have it be “mostly done” to allow room for adaptation and co-design with each student cohort.
 - **If this degree of ambiguity makes you uncomfortable, you should reconsider whether this is the right class for you.**
 - Recognizing that we live in a world of uncertainty where there are rarely “right answers” is at the core of design thinking.
- **And again, if this course format is not right for you, you might want to reconsider whether this is the right class for you.**



OK NOW, LET'S CHAT ABOUT THE SYLLABUS/ASSIGNMENTS



...



About the Course Assignments

- I emphasize Quality over Quantity
 - Limited number to keep things simple + to allow you to show off what you have learned, discovered, and can do!
- Assignments will posted one week before due date, therefore you will have at least 5 days to complete the assignment.
 - All due dates have been posted in D2L (they are approximately due every 2-3 weeks throughout the semester).

Course Requirements

Case Study Assignments (70%): The purpose of the case study assignments is to allow you to apply the human centered design principles learned over the course of the semester and to utilize the tools and concepts. These assignments are intended for you to use, develop, and perfect your problem solving and critical thinking skills. A description of the case study assignments will be given at least 7 days prior to their due date.

Final Exam (30%): This will be a take-home exam posted via D2L during the last week of exams, you will be given 3-5 days to complete the exam.

Course + E-mail Communications

(Please no last-minute e-mails you risk me not getting to them in time!)

E-mail Questions & Office Hours*:

Regarding any email exchange, I will get back with you within 24-48 hours; please no last-minute requests or questions as likely I will not respond in time to help you!

Course Communications:

All communication will be done via D2L, I try to keep the number of announcements to a minimum (as I know you are managing several other course announcements). To make sure we are communicating and clear on course expectations, each week I will post a weekly announcement regarding due dates and general course news. My hope is this helps you stay organized ☺!

Late Assignments (taken from Syllabus)

Late Policy

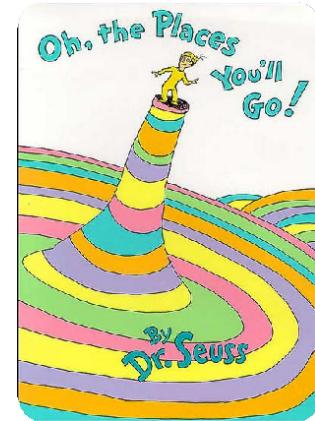
Assignments will be submitted through D2L unless instructed otherwise, and **late assignments will be deducted 10% each day it is late.** Exception will only be given to extreme cases, like a student being sick with a Dr's note. In this case, the student must contact me or the TA before the due date/time in order to get a delay in the assignment.

Contents of the Course D2L Site

- A quick run through....

The screenshot shows the D2L course site interface. At the top, there is a header bar with icons for navigation, a search bar, and user information (Laura Stanley). Below the header is a dark blue navigation bar with links for Calendar, Content, Discussions, Assignments, Grades, Quizzes, Course Resources, and Course Admin. The main content area is titled "Syllabus". On the left, a sidebar lists course modules: Overview, Bookmarks, Course Schedule, Table of Contents (13 items), Syllabus (1 item, currently selected), Lectures w/Videos (3 items), Case Study, and Assignments (5 items). The main content area displays the "Human Computer Interaction_Spring 2022" syllabus, which is a PDF document. It includes fields for adding dates and restrictions, a description, and buttons for Print, Settings, Upload / Create, Existing Activities, and Bulk Edit.

Who am I ... my (crooked) journey to getting here.



B.S. – Va Tech
IBM



M.S. – MSU Engineer



PhD – Engr.
MSU



Professor at
Montana State
University 2008-
2017



Program
Officer-
Public
Official
Security
Clearance



Professor at
Clemson
University
2017-2019



From Industry, Academia, to Government... back to Academia.



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Associate Professor, Gianforte School of Computing, Montana State University
Director of Human Interaction Research Group, Gianforte School of Computing, Montana State University

Adjunct Associate Professor Faculty, Industrial Engineering Department, Clemson University
Clinical Associate Professor, Clemson University School of Health Research, Clemson University

Former Program Director - National Science Foundation, CISE Directorate, Cyber-Human Systems Program

Research Interests include:

- Human-Computer Interaction
- Virtual Reality & Augmented Reality
- Affective Computing
- Human-Robot Interaction
- Human Factors

Education:

BS - Industrial & Systems Engineering, Virginia Tech
MS - Industrial & Management Engineering, Montana State University
Ph.D. - Engineering, Montana State University

Funding:

National Science Foundation, Montana Department of Transportation United States Department of Transportation, National Highway Traffic Safety Administration, Murdock Charitable Trust, General Motors, Volvo, Federal Motor Carrier Safety Administration, National Institute of Child Health and Human Development, National Science Foundation



Home About Us Projects AMELIA(NSF Project) iPAL(NSF Project) Publications For Students NSF Advice



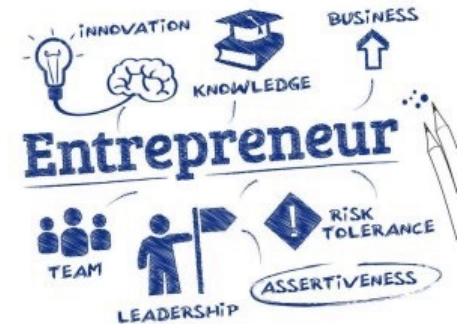
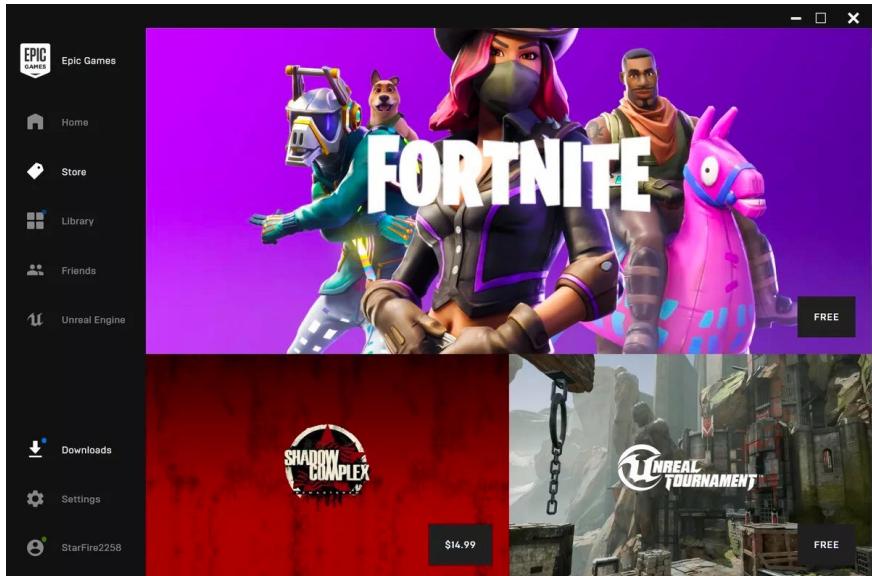


National Institutes
of Health



CLEMSON
UNIVERSITY

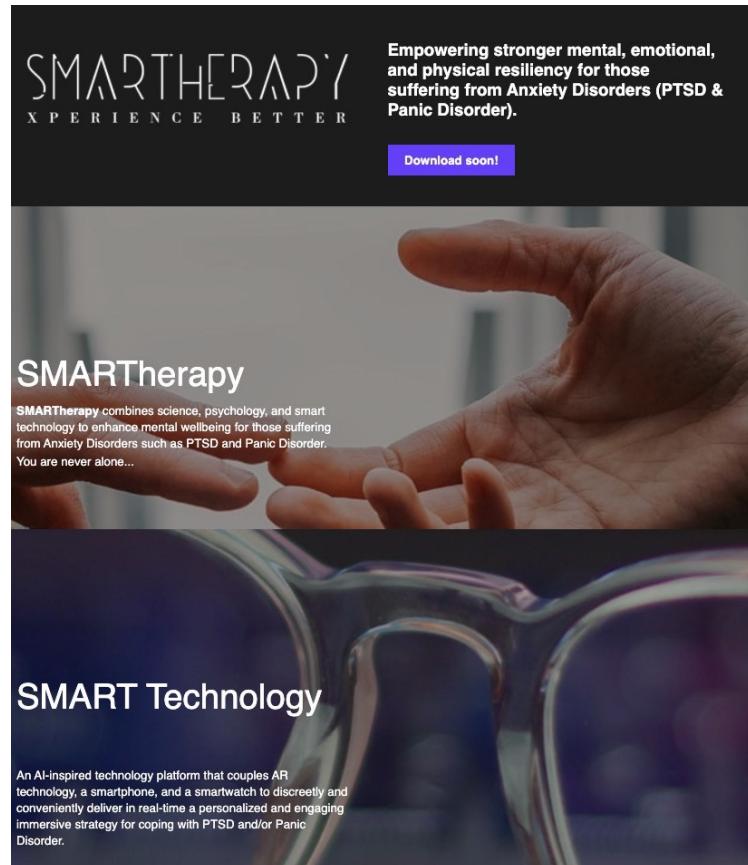




HCI and UX Design—at my core I have an entrepreneurial spirit

- In any project where there is a user.
- I will bring in my own current projects (academic and business) as it relates to HCI and UX Design needs.

My current entrepreneurial pursuits outside of MSU...



The image shows the user interface of the SmartTherapy mobile application. At the top, the logo "SMARTHERAPY" is displayed with the tagline "XPERIENCE BETTER". Below this, a dark banner contains the text "Empowering stronger mental, emotional, and physical resiliency for those suffering from Anxiety Disorders (PTSD & Panic Disorder)". A blue button labeled "Download soon!" is visible. The main content area features a photograph of two hands reaching towards each other, symbolizing support. The text "SMARTherapy" is overlaid on the photo, followed by a description: "SMARTherapy combines science, psychology, and smart technology to enhance mental wellbeing for those suffering from Anxiety Disorders such as PTSD and Panic Disorder. You are never alone...". At the bottom, the text "SMART Technology" is displayed above a blurred background image of a smartphone.



The image shows the homepage of the IntelligHealth website. The header includes the IntelligHealth logo, a navigation menu with links to "Home", "Solutions", "The Buzz", and "Contact", and social media icons for Facebook and LinkedIn. The main headline reads "Intelligent Remote Healthcare is Here". Below the headline, there is a photograph of a medical clipboard with a tablet displaying a graph, a stethoscope, and a laptop. A section titled "Prediction of Medical Adverse Events using Remote Patient Monitoring Systems" is shown, featuring a close-up of a computer keyboard and a hand. The text in this section states: "We better facilitate clinician's decisions to provide life-saving healthcare." Another section at the bottom is titled "Artificial Intelligence Inspired Remote Patient Health Monitoring", with the subtext "Using AI-driven data analytics to predict the early onset of pneumonia."