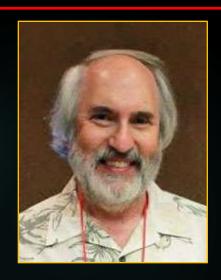
January 17, 2019

Bridging the Gap between Consumers and Products in Rehabilitation Medicine - Deborah E. Kenney, MS, OTR/L

# ENGR110/210 Perspectives in Assistive Technology



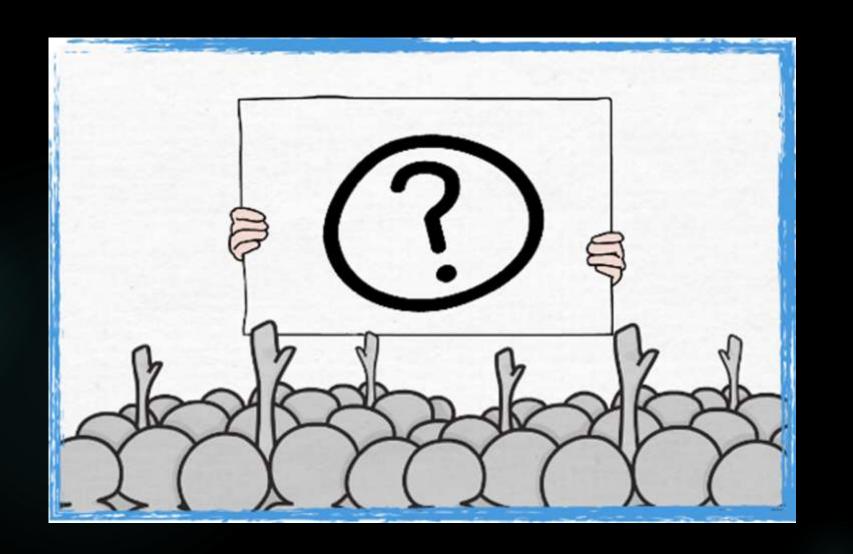
David L. Jaffe, MS Instructor





# Questions?







# Attendance Sheet, Evaluation Form, and Meet with Dave Signup

#### For all students:

- Sign Attendance Sheet important to verify your attendance
- Sign up to meet with Dave for lecture makeup and Individual Project approval

#### For everyone:

Fill out Class Session Evaluation Form

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Lecture 01x:	Course Overview & I	ntroduction to	Assistive Tec	tusology - Des	til L. Jathe, M	13.
Are yo	un enrolled student?	☐ - Yes	III - No			
The purpose of	this questionnaire is to	help the teach	ensors most get	today's class	espire. Plan	on rate the following leasure:
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	n Thornton 110 son Building, Room 113
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#### Miscellaneous



- Use a pen to fill out evaluation forms
- Weblinks and photos linked from lecture webpages
- Meet with Dave Signup Sheet
  - Individual project approval
  - Project updates
- Microphone used with camcorder





#### Engineering Design Process

IMPROVE COLLECT
TO TO THE PROPERTY OF THE PROP

- Understand the problem
  - ▶ Interview the user / project suggestor
  - Realize that the user / suggestor may not have all the answers
  - ▶ Research what has already been done: articles, research, and products
  - ▶ Consult with experts
  - ▶ Determine why current devices haven't adequately solved the problem
  - Survey technology
- Determine the need (a judgment)
- Brainstorm many possible design concepts
- Select top concepts
- ► Fabricate, test, analyze, redesign, quickly repeat
- Work closely with user / suggestor in testing phase
- Report and demonstrate your results
- ▶ Reflect on your project experience

#### Work with Diligence

- ▶ Time is your team's most precious resource
- ▶ 7 weeks of class left to work on your projects
- Mid-term team presentations in 4 weeks
- Get your PRL Safety Training & Shop Pass





#### Discussion Topic Preferences Results



- 22 Ethical / Moral Dilemmas Related to Disability
- 22 In the News New Assistive Technology products and research
- 20 Assistive Robotics Robotic technology benefitting people with disabilities and older adults
- 15 Overview of Accessibility How this design feature relates to products, with many examples
- 15 Ten Commandments of Making Adam Savage's Maker Faire video
- 15 Video Theatre Watch and discuss videos of new products and prototypes
- 12 Vintage Assistive Technology Products and devices from the past
- 12 The Upside of Failure Learning from prototypes that didn't work
- 12 Who is Disabled? Making a determination with limited information
- 12 Innovative Marketing Metrics How we use words to measure and advertise
- 9 Famous people with disabilities Focus on TV characters





#### Student Suggestions:

- Disabilities in sports
- What kind of jobs / companies are out there for assistive tech engineers and the education level needed
- Connecting with companies that do great work in the space of assistive design or notable company profiles

- ▶ The Hide-Away Lap Tray
- The First Team with No Name
  - ▶ Tita Kanjanapas
  - Ashley Lau
  - ▶ Lynee Turek-Hankins





- Elevator Button Pusher
- Elevator Pitch
  - ▶ Lindsie Jeffries
  - Jessica Hsueh
  - ▶ Jenny Park





- Lap Extender
- ► The PRL Tray-Iblazers
  - ► Andrea Banuet
  - Marissa Luna
  - ► Annie Sinclair





- Lap Tray for Danny
- Travola
  - Arkira Chantaratananond
  - ▶ Tony Hua
  - ▶ Jenny Kim





- WHILL Recharging
- Mean Machine
  - Jack Barber
  - ► Ryan Dudzinski
  - ► Cameron Scarlett





- Harness for Nathan
- The Sixth Team with No Name
  - Chloe Evans
  - Winston Liao
  - Axelle Talma





DEFINE

IMPROVE

COLLECT

CONTROL

DEVELOP

COLLECT

COLL

- Wheelchair Storage & Backpack Projects for Abby
- The Seventh Team with No Name
  - Ariana Ortigas
  - Amanda Spyropoulos
  - ▶ Anna Usadi



DEFINE

IMPROVE

IMPROVE

BRAINSTORM

OFFICE OF SOLUTIONS

BRAINSTORM

OFFICE OF SOLUTIONS

DEVELOP

SOLUTIONS

DEVELOP

- Magical Bridge Playground Along the Fence Project
- The Eighth Team with No Name
  - Vanessa Ibarra
  - Sheetal Ramsurrun
  - ▶ Jessica Rivera

- Pickup Project with Danny
- ► The Big Three
  - ▶ Brian Chaffin
  - Jack Dreyer
  - Austin Maihen





#### Social Model Animation





<u>Play</u> <u>video</u>

## Tuesday, January 22nd









Perspectives of Stanford Students with a Disability





David Stentiford, Trisha Kulkarni, Zina Jawadi, Rachael Wallach, and Evan Feinberg,

# Today





Bridging the Gap between Consumers and Products in Rehabilitation Medicine

Deborah E. Kenney, MS, OTR/L
Stanford University
VA Palo Alto Health Care System
Foothill College

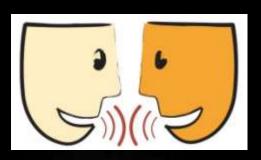
#### Short Break







#### Break Activities







- Stand up and stretch
- ▶ Take a bio-break
- ▶ Text message
- Web-surf
- Respond to email
- ▶ Talk with classmates
- Reflect on what was presented in class







