

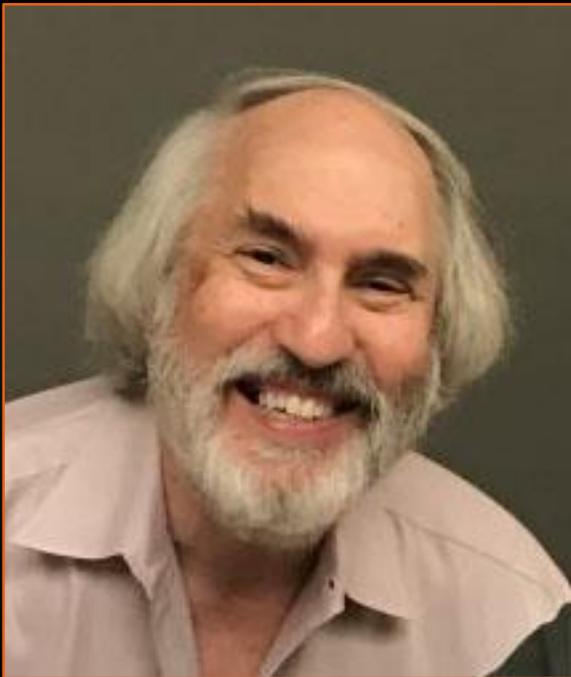
February 22, 2022

The Design and Control of Exoskeletons for Rehabilitation



ENGR110/210

Perspectives in Assistive Technology



David L. Jaffe, MS
Instructor

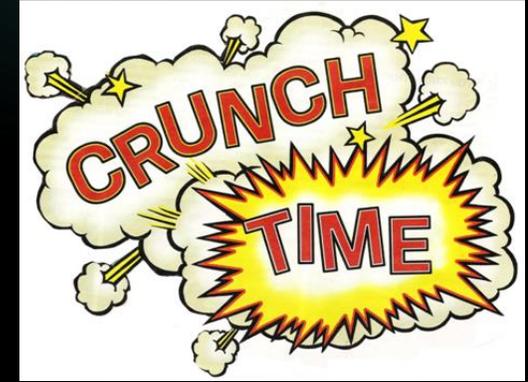
16
Years

Questions, Comments, Suggestions, or Concerns?



Please notify me of your comments, suggestions, and concerns so I can explain / address / correct them before the end-of-term course evaluation.

Week 8



- It's project crunch time
- Brainstorm, Select, Prototype, Test, Analyze, Repeat, Report
- Contingency plan
- Submit progress reports, schedule progress meetings with Bennett or me - **Final Week**



Reminder - Work with Extreme Diligence



- ▶ Time is your most precious resource
- ▶ 14 days until End-of-term Project Presentations - Tue, Mar 8th
- ▶ List remaining activities and assign responsibilities
- ▶ Prepare for end-of-term presentation



Students working on Individual Projects



- ▶ Project presentations:
 - ▶ Schedule for Week 9
 - ▶ Outside of class
 - ▶ By Zoom or in-person

Upcoming class sessions

- ▶ **Designing Exoskeletons and Prosthetic Limbs that Enhance Human Performance** (in classroom)
 - Steven H. Collins, PhD
 - Thu, Feb 24th
- ▶ **Field Trip to the Magical Bridge Playground**
 - Olenka Villarreal
 - Tue, Mar 1st
- ▶ **Wheelchair Fabrication in Developing Countries** (by Zoom)
 - Ralf Hotchkiss
 - Thu, Mar 3rd



Week 10 Class Sessions

- ▶ Tue, Mar 8th
End-of-Term Student Team Project Presentations
- ▶ Thu, Mar 10th
Student Project Demonstrations + Burritos



Other Items



- ▶ RESNA Student Design Competition and Developers Forum
- ▶ Carpool drivers needed for Field Trip to Magic Bridge Playground on Tuesday, March 1st
- ▶ Driver and Passenger Signup Document

Tuesday, March 1st



Virtual Field Trip to the Magical Bridge Playground

Olenka Villarreal

Thursday



*Designing Exoskeletons and Prosthetic Limbs
that Enhance Human Performance*

Steven H. Collins, PhD

Stanford University - Mechanical Engineering

Today



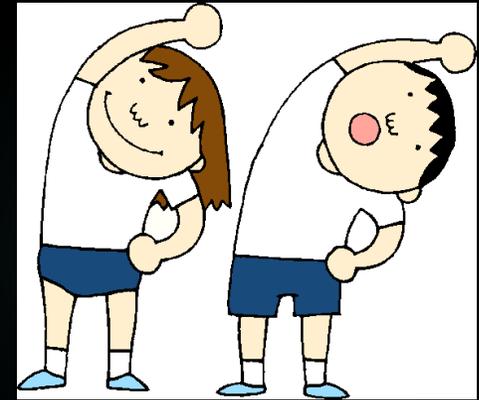
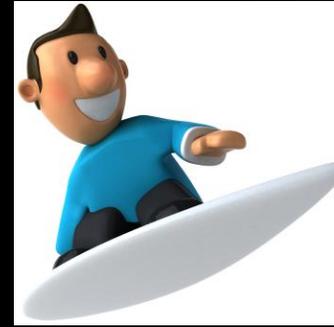
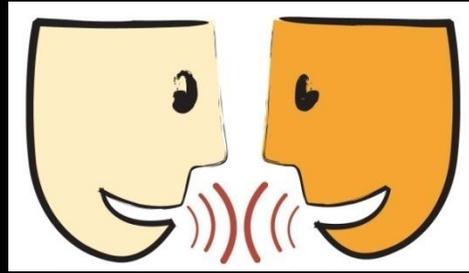
The Design and Control of Exoskeletons for Rehabilitation

Katherine Strausser, PhD

Ekso Bionics - Technical Lead, Exoskeletons

Break Activities

- ▶ Breakout rooms
- ▶ 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



Short Break

