

January 30, 2020
Issues of Human Interface Design - Gary M. Berke



ENGR110/210

Perspectives in Assistive Technology



David L. Jaffe, MS
Instructor

14
Years

Questions?



Please notify me of your comments, suggestions, and concerns so I can explain / address / correct them.

Attendance Sheet, Evaluation Form, and Meet with Dave Signup



For all students:

- Attendance Sheet
- Meet with Dave signup

For everyone:

- Class Session Evaluation Form



Use a pen with a legible font	Perspectives in Assistive Technology - 2020 Class Session Evaluation Form		
Lecture #1a Course Overview & Introduction to Assistive Technology - David L. Jaffe, MA			
<p>Are you an enrolled student? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>The purpose of this questionnaire is to help the teaching team assess today's class session. Please rate the following issues.</p> <p>Speaker's use of presentation speaking volume, understandability, use of following concepts and ideas, clarity of explanation, variety of PowerPoint slides, use of supporting visual reference and presentation aids. (Score 0-10 scale: 0=poor, 10=excellent) <input checked="" type="checkbox"/> 10 <input type="checkbox"/> 9 <input type="checkbox"/> 8 <input type="checkbox"/> 7 <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0</p> <p>Presentation content: topic relevance, reference to the broad topic of assistive technology, presentation of topic information, appropriate use of visual and rhetorical contrast, overall value of presented material <input checked="" type="checkbox"/> 10 <input type="checkbox"/> 9 <input type="checkbox"/> 8 <input type="checkbox"/> 7 <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0</p> <p>Submit your comments, questions, and suggestions, especially if you feel portions of the lecture to be particularly 2 or 3. Supply your name if you want a response in the future. Or this form if you need more room.</p> <p>What one thing did you learn, see, or learn that was new, surprising, especially interesting, or provided a new perspective?</p> <p>How much did you learn from today's lecture? <input checked="" type="checkbox"/> a great deal <input type="checkbox"/> a lot <input type="checkbox"/> a moderate amount <input type="checkbox"/> a little <input type="checkbox"/> nothing What is your current stress level? <input checked="" type="checkbox"/> low <input type="checkbox"/> medium <input type="checkbox"/> high How is your stress level functioning? <input checked="" type="checkbox"/> down <input type="checkbox"/> steady <input type="checkbox"/> up <input type="checkbox"/> upward</p> <p>Hand in this form</p>			

2020 ENGR110/210 Enrolled Student Signup Sheet				
Name				
Email				
Year	<input type="checkbox"/> Freshman	<input type="checkbox"/> Sophomore	<input type="checkbox"/> Junior	<input type="checkbox"/> Senior
	<input type="checkbox"/> One	<input type="checkbox"/> Co-term	<input type="checkbox"/> Other	
Department	<input type="checkbox"/> ME <input type="checkbox"/> CS <input type="checkbox"/> EE <input type="checkbox"/> STS <input type="checkbox"/> LDT <input type="checkbox"/> HAMBLIN <input type="checkbox"/> BioE <input type="checkbox"/> Other _____			
Option	<input type="checkbox"/> 1 unit CR/NC <input type="checkbox"/> 1 unit with letter grade <input type="checkbox"/> 3 units - team project			
T-shirt	<input type="checkbox"/> Small	<input type="checkbox"/> Medium	<input type="checkbox"/> Large	<input type="checkbox"/> Extra Large
How did you learn about this course?				
Why do you want to take this course?				
What are your personal expectations for this course?				
Use a pen with a legible font				



Many thanks!



Students working on projects:

- Meeting with me
- Providing updates

Community members:

- Co-designing projects
- Attending class sessions

Guest lecturers:

- Presenting interesting topics

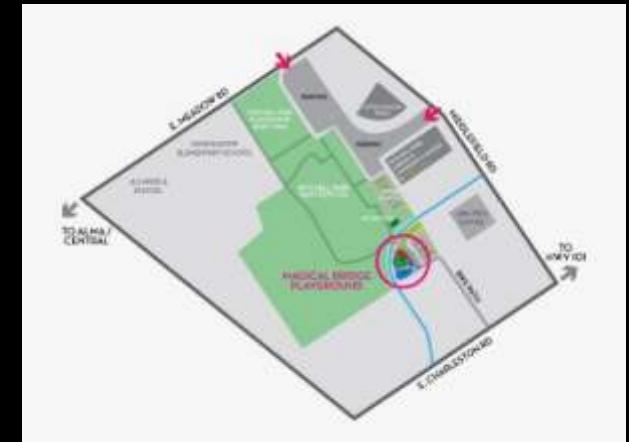
Tuesday, February 4th

Where Everyone Can Play!



Field trip to Magical Bridge Playground

Olenka Villarreal & Jay Gluckman





Field Trip to the Magical Bridge Playground

Passengers' Signup for Field Trip to Magical Bridge Playground next Tuesday



Driver and Passenger Signup Sheet
Magical Bridge Playground
Tuesday, February 4th
Departure Point and Time: Littlefield Center @ 4:30pm

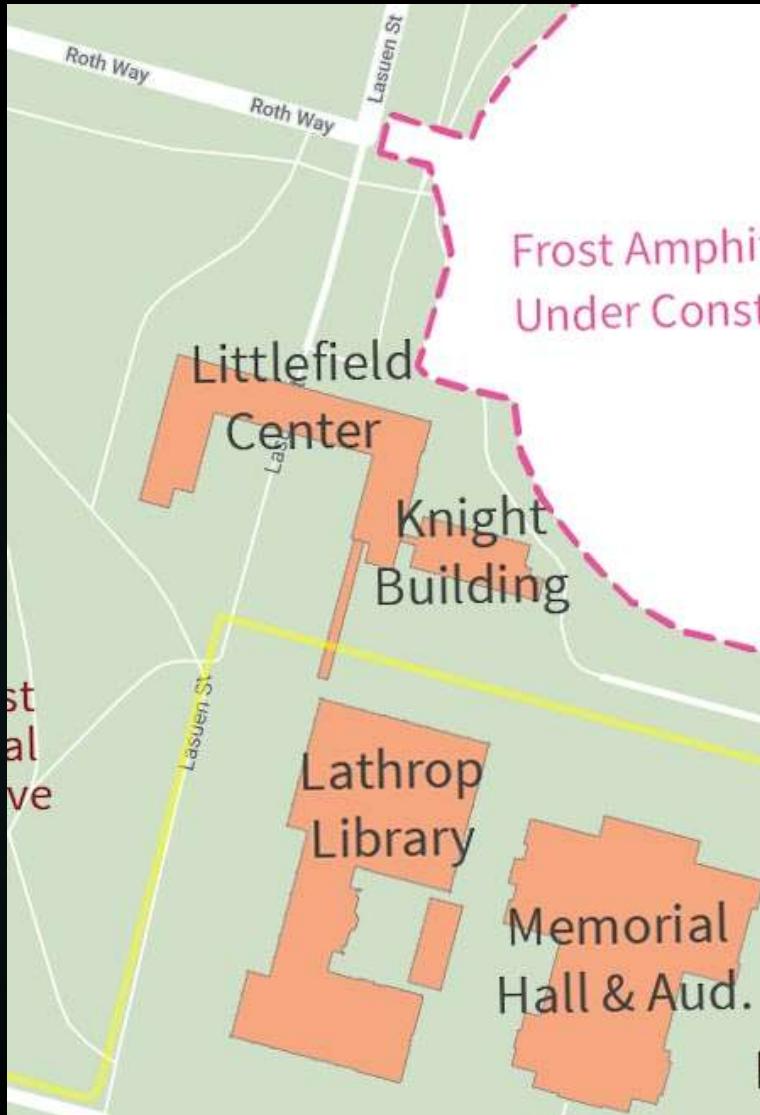
Driver's name, cell & email:	Dave Jaffe	650/892-4464	davejaffe@stanford.edu
Car make, model, color:	Black Honda Civic Si		
Passengers:	1. Name:	Cell:	
	2. Name:	Cell:	
	3. Name:	Cell:	
Driver's name, cell & email:	Dan Hurley		
Car make, model, color:	Tan Chevy Silverado		
Passengers:	1. Name:	Cell:	

Additional carpool drivers and passengers:

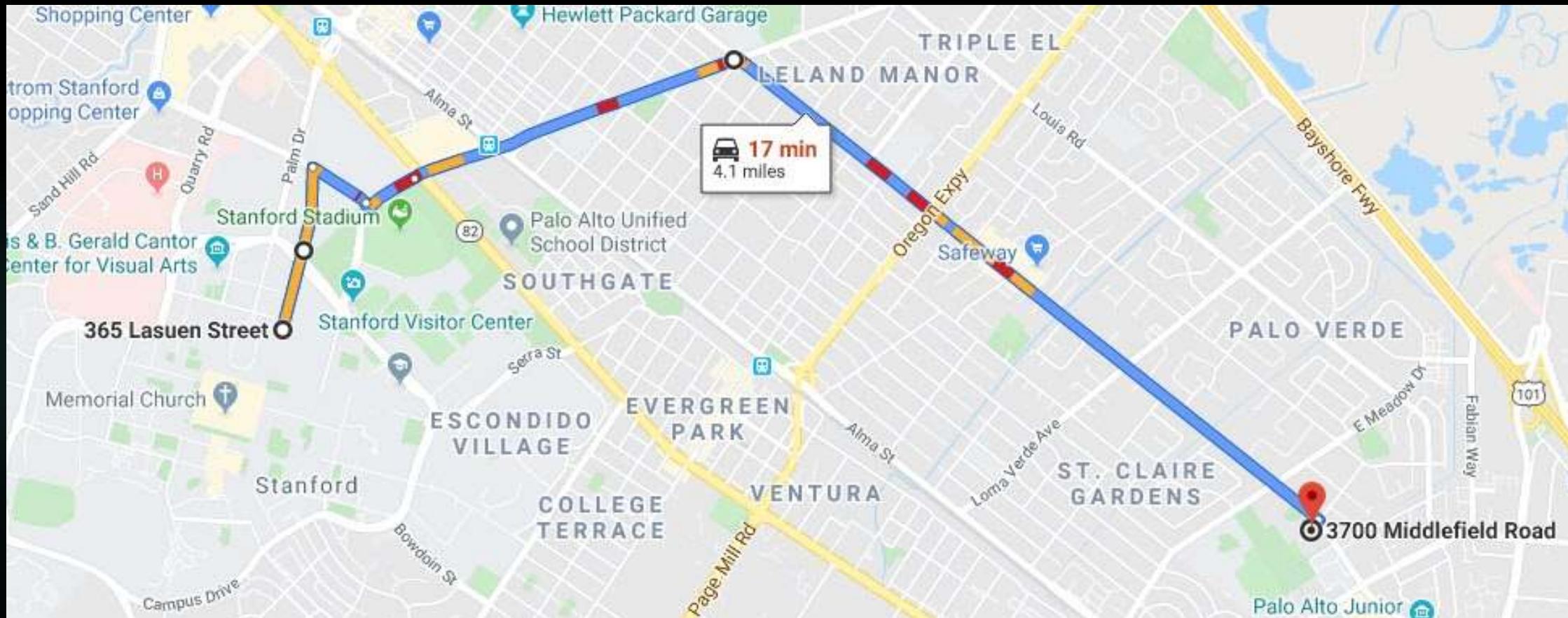
Driver's name, cell & email:	Name:	Cell:
Car make, model, color:		
Passengers:	1. Name:	Cell:
	2. Name:	Cell:
	3. Name:	Cell:
	4. Name:	Cell:

- ▶ Please sign up with a car pool driver. Unless otherwise arranged, the departure point from Stanford is the Littlefield Center.
- ▶ Let me know if you are biking, a solo driver, or driving with specific classmates so I can send you a map and directions.
- ▶ Please make your best effort to arrive at the Littlefield Center at 4:30pm.

Pickup at Littlefield Center



Directions to Magical Bridge Playground



Directions to Magical Bridge Playground



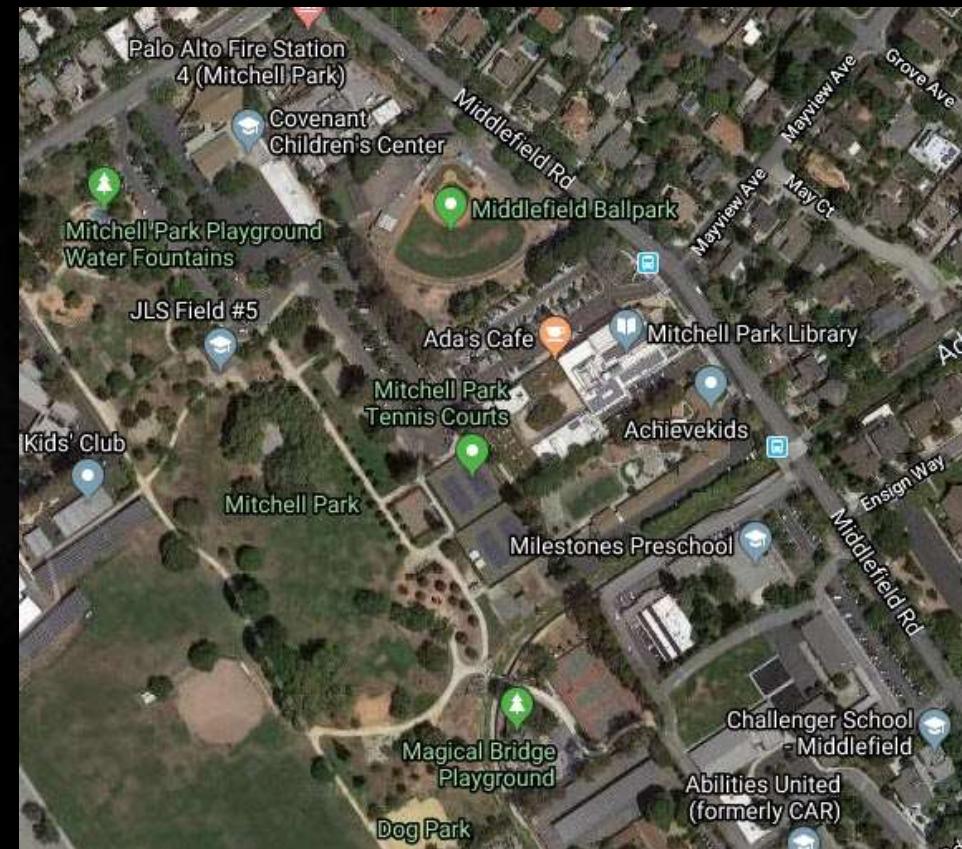
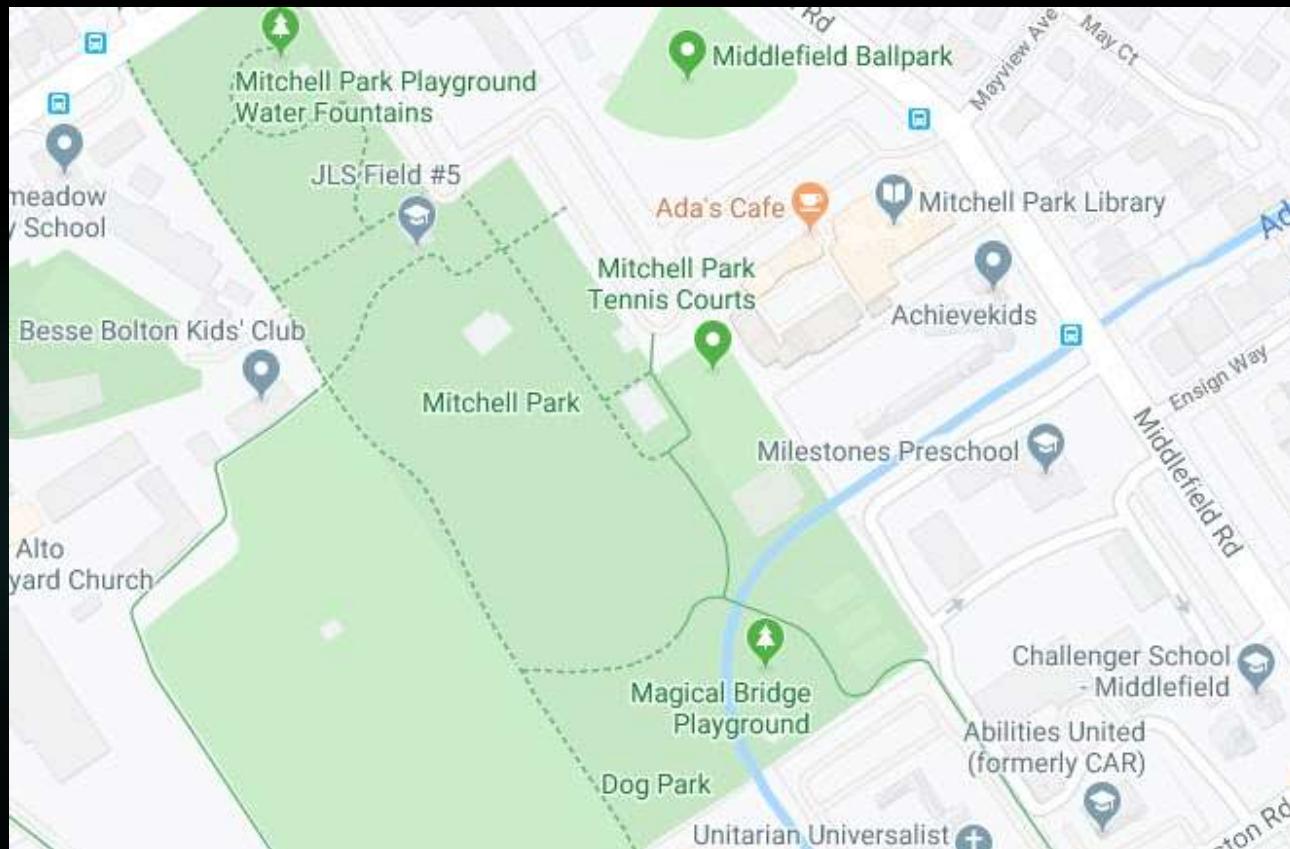
1. Take Lasuen to Galvez, turn right
2. Cross El Camino Real - becomes Embarcadero
3. Right turn onto Middlefield Rd.
4. Right turn at Mayview into Mitchell Park Library & Community Center - 3700 Middlefield Rd., Palo Alto
5. Park in lot
6. Meet in front of Ada's Cafe



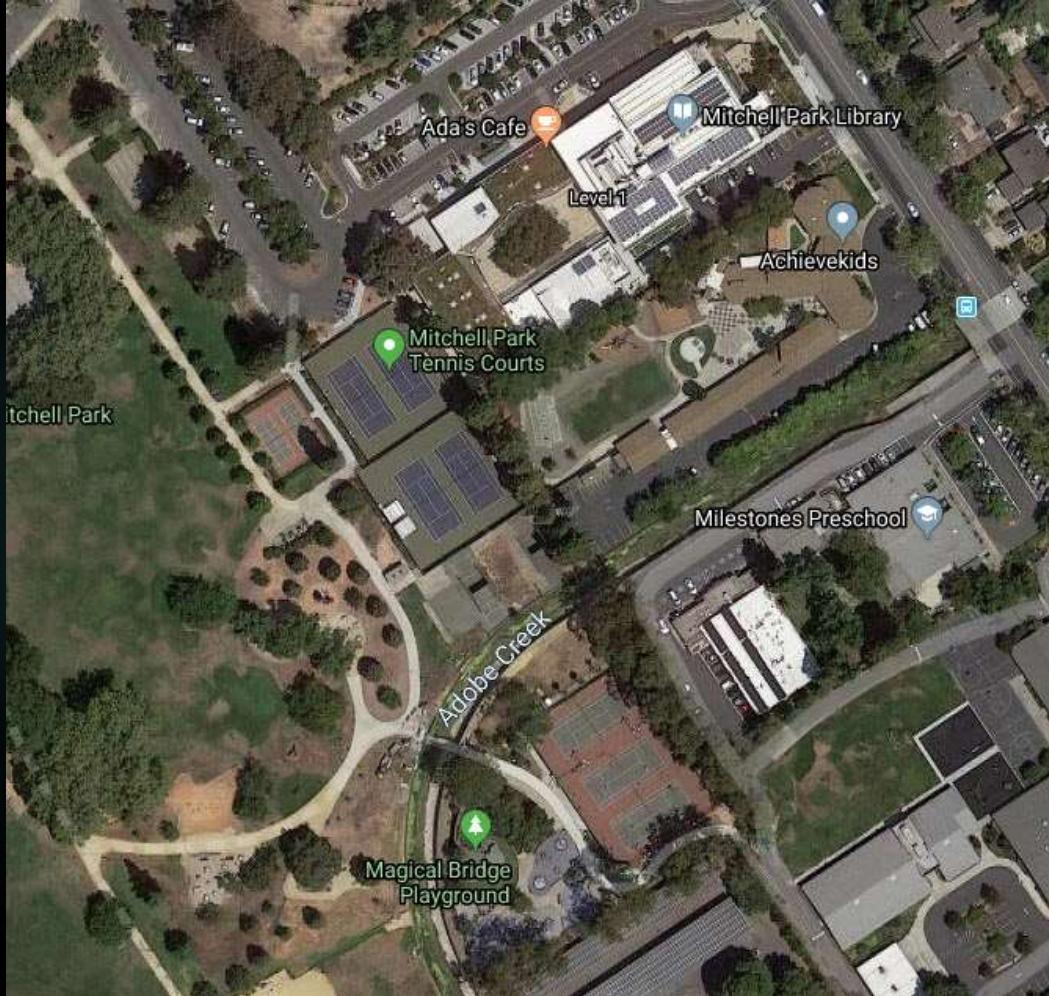
Park in lot



Aerial Terrain View



Magical Bridge Playground



Meet in front of Ada's Cafe



Upcoming class sessions



- ▶ Field Trip to the Magical Bridge Playground – Olenka Villarreal - Tue, Feb 4th
- ▶ The Design and Control of Exoskeletons for Rehabilitation - Thu, Feb 6th
- ▶ Mid-term Student Team Project Presentations - Tue, Feb 11th



Reminder - Work with Diligence



- ▶ Time is your team's most precious resource
- ▶ 1.5 weeks until Mid-term Student Team Presentations - Tue, Feb 11th
- ▶ It is not too early to outline your presentation & report



Discussion Topic Preferences



33 - Assistive Robotics - Robotic technology benefitting people with disabilities and older adults

28 - In the News

24 - Ten Commandments of Making - Adam Savage's Maker Faire video

23 - Ethical / Moral Dilemmas Related to Disability

22 - ~~Product Pricing~~

21 - Overview of Accessibility - How this design feature relates to products, with many examples

21 - The Upside of Failure - Learning from prototypes that didn't work

16 - Vintage Assistive Technology - Products and devices from the past

16 - Video Theatre - Watch and discuss videos of new products and prototypes

14 - Who is Disabled? - Making a determination with limited information

10 - Innovative Marketing Metrics - How we use words to measure and advertise

7 - Famous people with disabilities - Focus on TV characters

Ethical / Moral Dilemmas Related to Disability



Formerly titled
“Fun with Ethics”

Ethical / Moral Dilemmas Related to Disability

1. Would it be wrong for a “normal” couple to abort a fetus diagnosed with dwarfism or Down Syndrome?

Wrong Not wrong Don't know

2. If two parents with Achondroplasia - an inherited form of dwarfism - wanted a child who looked like them, would it be wrong for them to terminate a normal-sized fetus?

Wrong Not wrong Don't know

Making Decisions



1. Everyone evaluates situations and makes decisions everyday
2. As one gets older, these decisions more frequently involve and affect others
3. Tough decisions are often made using a complex combination of upbringing, economics, religion, law, individual notion of what is right, politics, and personal experience



Situation 1



Would it be wrong for a “normal” couple to abort a fetus diagnosed with dwarfism or Down Syndrome?



Situation 2

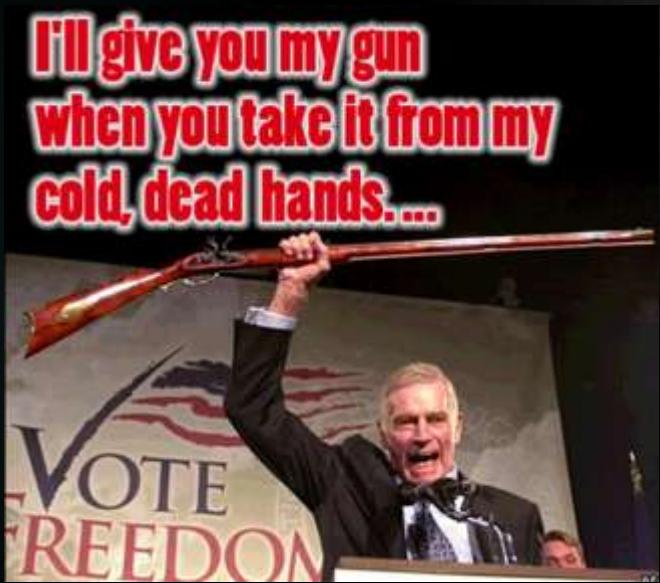
If two parents with Achondroplasia - an inherited form of dwarfism - wanted a child who looked like them, would it be wrong for them to terminate a normal-sized fetus?



Situation 3



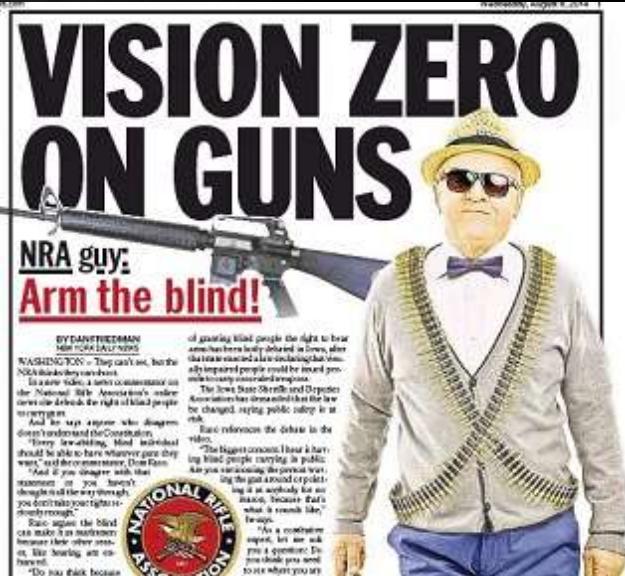
Should everyone have a right to bear arms?



Situation 3



Should someone **who is blind** have a right to bear arms?



Situation 4



You are a biomedical engineer working in a spinal cord injury ward. An occupational therapist approaches you with a patient's request. The patient, an individual with quadriplegia, wants a device that would enable him to independently smoke a cigarette.

What do you do?



Situation 5



You are a sign language interpreter for a deaf woman. Her communication includes a lot of obscenities which causes you a lot of embarrassment and distress.

What do you do?



Situation 6



As a surgeon, would you approve a heart transplant for someone with a disability?



Situation 7



As a concerned citizen, would you condone the marriage and subsequent parenthood of a couple, one or both with developmental disabilities?



Tuesday, February 4th



Field Trip to the Magical Bridge Playground

Olenka Villarreal

Founder & CEO

Today



Issues of Human Interface Design

Gary M. Berke, MS, CP, FAAOP

Stanford Medical Center

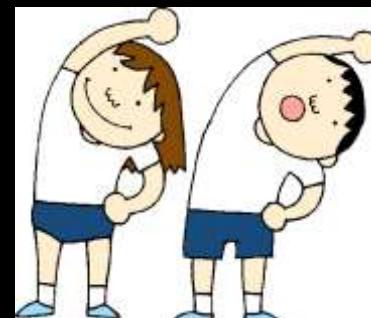
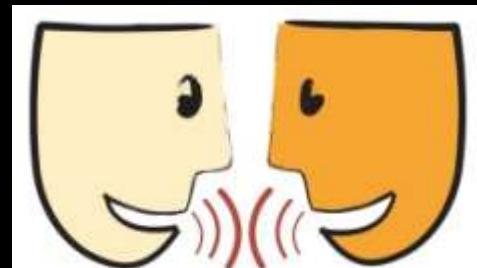
Berke Prosthetics & Orthotics

Short Break

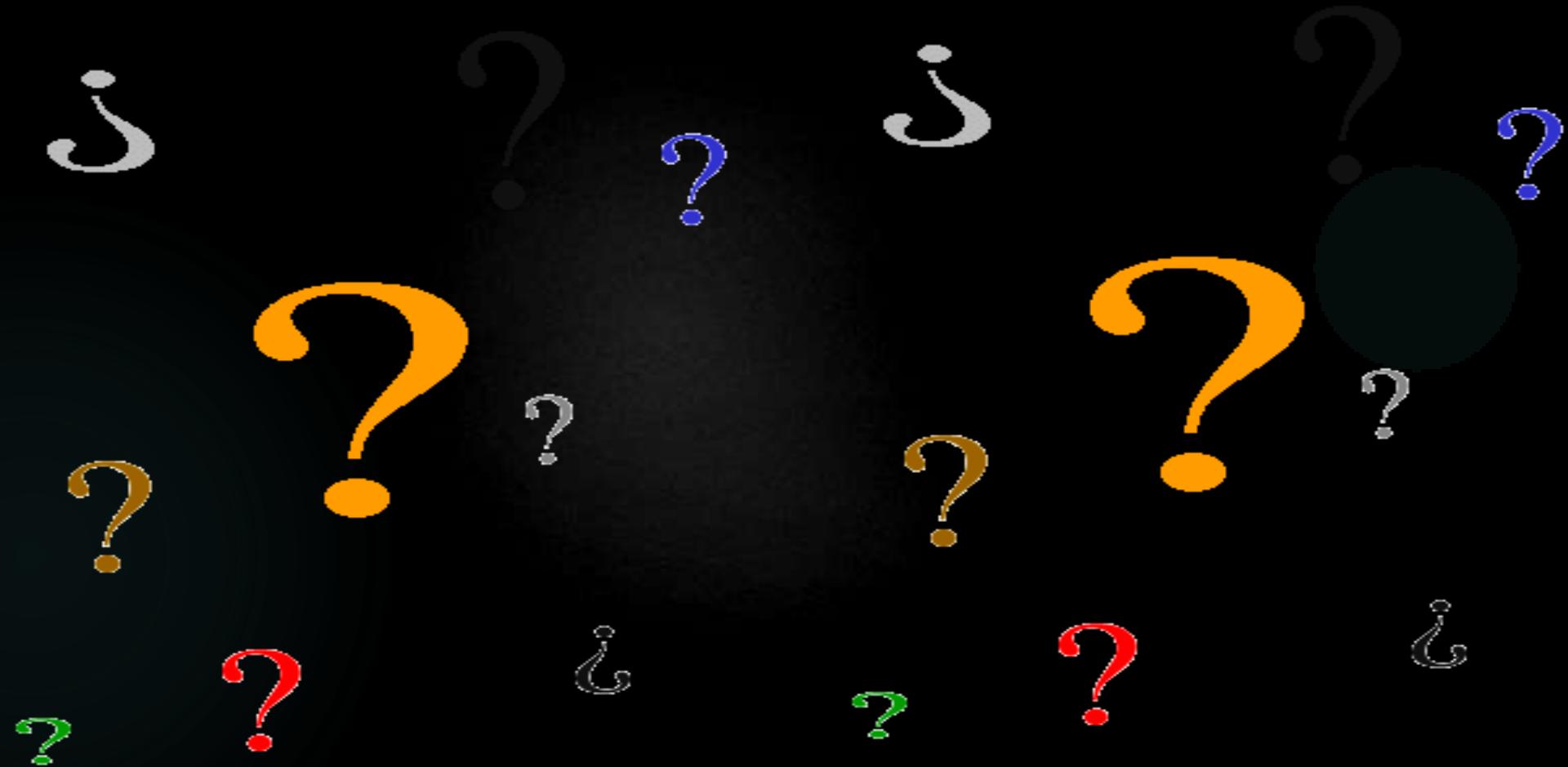


Break Activities

- ▶ Sign attendance sheet
- ▶ Grab a cookie
- ▶ Stand up and stretch
- ▶ Take a bio-break
- ▶ Text message, web-surf, email
- ▶ Talk with classmates
- ▶ Reflect on what was presented in class



Questions?



Adjourn



class dismissed



Laptops Galore



Time for Questions?



End the class

