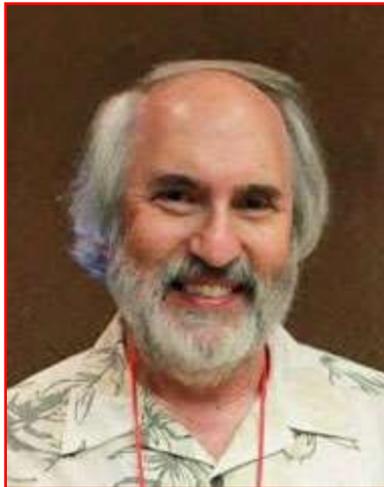


February 11, 2016

# ENGR110/210

## Perspectives in Assistive Technology



David L. Jaffe, MS

Instructor

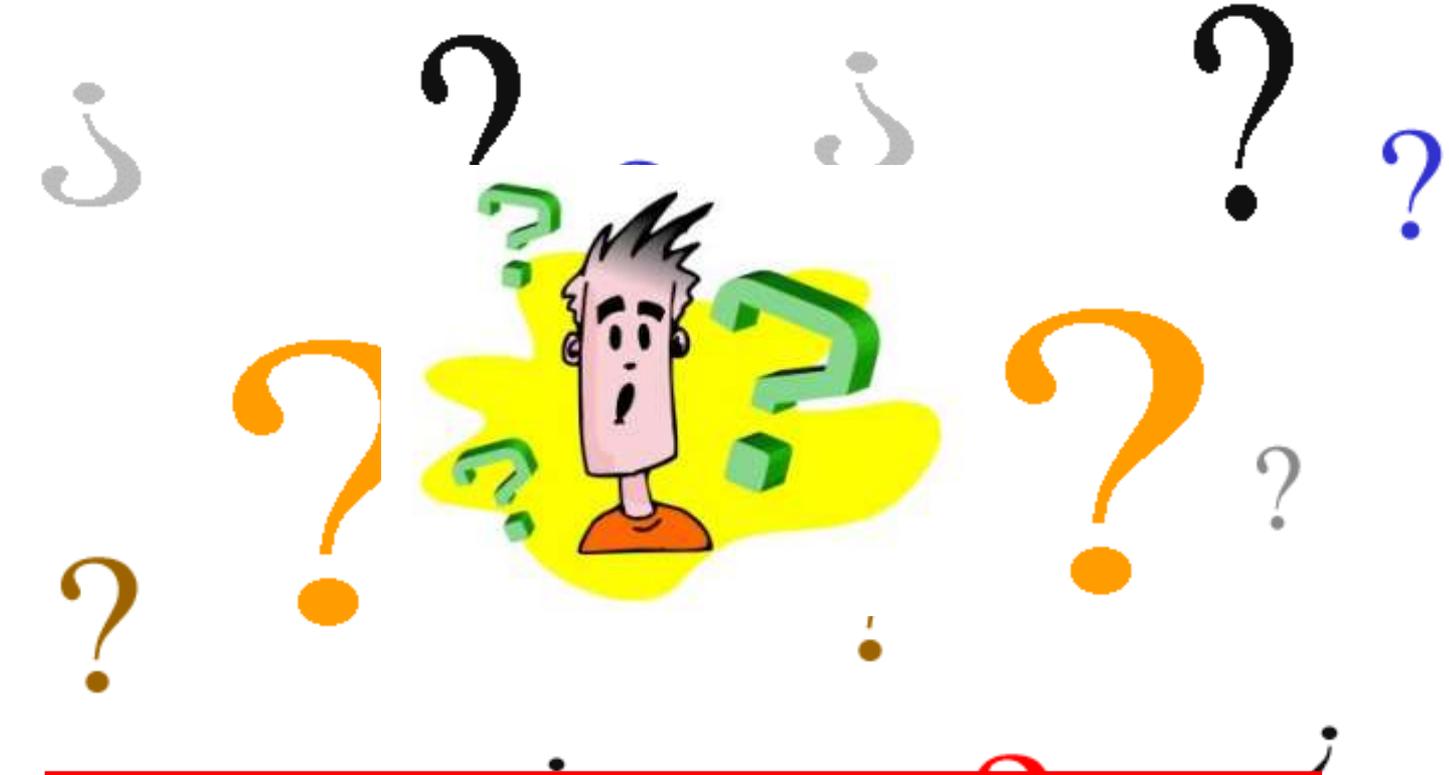
**NO TECH-ZONE**



**NO CELL PHONES, TABLETS, LAPTOPS,  
OR SMART DEVICES PERMITTED  
VIOLATORS SUBJECT TO \$300 FINE**

SAN FRANCISCO RECREATION & PARK DEPARTMENT

# Questions, Comments, Suggestions, or Concerns?



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

# Attendance Sheet and Evaluation Form

For all students:

- Attendance Sheet - important to verify your attendance

For everyone:

- Mid-Term Student Team Project Presentations Evaluation Form

ENGR110210 Enrolled Student Attendance List  
January 5, 2016

Enroll number (Student ID#)	Name of Enrolled Student	Email address (@utk.edu)	Name of Enrolled Student
1000000000	Adams, Sam	adams0001@utk.edu	Adams, Sam
1000000001	Adams, Sam	adams0001@utk.edu	Adams, Sam
1000000002	Adams, Sam	adams0001@utk.edu	Adams, Sam
1000000003	Adams, Sam	adams0001@utk.edu	Adams, Sam
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1000000007	Adams, Sam	adams0001@utk.edu	Adams, Sam
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1000000009	Adams, Sam	adams0001@utk.edu	Adams, Sam
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1000000100	Adams, Sam	adams0001@utk.edu	Adams, Sam

**Mid-Term Student Team Project Presentations**  
ENGR110210: Perspectives in Assistive Technology

Please fill out with a pen Thursday, February 11, 2016 Please write legibly

Talk  Student  Faculty member  Community member  Other

Thank you for attending this year's mid-semester team project presentations for ENGR110210. Student teams have been addressing problems experienced by individuals with disabilities or older adults and have been working to research, brainstorm, design, fabricate, and test a prototype device or software to meet an identified problem. The teaching team would appreciate your assistance in judging the quality of the students' project and presentation efforts. Please read the criteria below and submit your scores, responses, and comments. Use a pen and your insights as your comments will be disseminated to the project teams.

- The student/team presentations should include the following elements:
  1. Introduction to project and team members
  2. Background, problem statement, and magnitude of problem
  3. Interview with project supporters and users who would benefit from a solution
  4. Identification and demonstration of need
  5. Research on existing solutions and discussion of their limitations
  6. Research activities, description and visualization of design concepts considered and prototypes built
  7. Description of final design, technical feasibility, engineering difficulty, estimated cost, user acceptance, functionality, performance, safety considerations, hazards, etc.
  8. Current project activities and status, prototypes built, and challenges encountered
  9. Plans for the remainder of the quarter
- Judge the overall quality of the presentation, design process, prototyped concepts in the following areas:
 

**Delivery** (How the team presented) - professionalism, enthusiasm, conviction, confidence, energy, volume

**Clarity** (How the team addressed the problem) - problem information, background research, design concepts introduced & prototyped, testing & evaluation

**Preparation** (What the team presented) - clarity, organization, and completeness of the information presented

**Design** (What the team produced) - creativity, originality, feasibility of the design concepts, and the likelihood it will meet the user's needs

**Overall** (Overall score) - combined impression of presentation and project

• Please use these ratings:  = Excellent  = Very Good  = Good  = Fair  = Poor

Feb. 11th, 2016      Name      Section 000      Section 000

# Mid-Term Student Team Project Presentations

**Please fill out this form legibly with a pen**

## Mid-Term Student Team Project Presentations

### ENGR110/210: Perspectives in Assistive Technology

Please fill out with a pen.

Thursday, February 11, 2016

Please write legibly.

I am:  - a student,  - faculty member,  - community member,  - other: \_\_\_\_\_

Thank you for attending this year's mid-term student team project presentations for ENGR110/210. Student teams have been addressing problems experienced by individuals with disabilities or older adults and have been working to research, brainstorm, design, fabricate, and test a prototype device or software to meet an identified problem. The teaching team would appreciate your assistance in judging the quality of the students' project and presentation efforts. Please read the criteria below and submit your scores, suggestions, and comments. Use a pen and print legibly as your comments will be disseminated to the project teams.

- The student teams' presentations should include the following elements:

0. Introduction to project and team members
1. Background, problem statement, and magnitude of problem
2. Interviews with project suggestors and users who would benefit from a solution
3. Identification and determination of need
4. Research on existing solutions and discussion of their limitations
5. Brainstorm activities: description and visualization of design concepts considered and prototypes built
6. Description of top designs: technical feasibility, engineering difficulty, estimated cost, user acceptance, functionality, performance, safety considerations, tradeoffs, etc
7. Current project activities and status, prototypes built, and challenges encountered
8. Plans for the remainder of the quarter

- Judge the overall quality of the presentation, design process, prototyped concepts in the following areas:

Delivery: (How the team presented) - professionalism, enthusiasm, conviction, confidence, energy, volume

Process: (How the team addressed the problem) - problem information, background research, design concepts brainstormed & prototyped, testing & evaluation

Presentation: (What the team presented) - clarity, organization, and completeness of the information presented

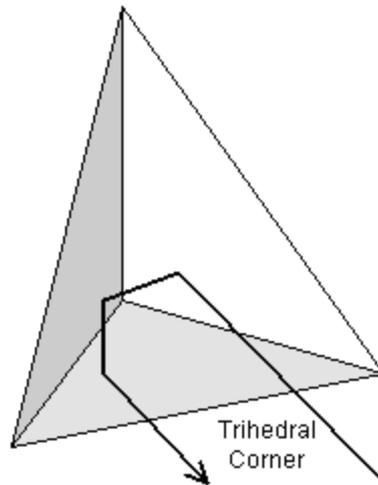
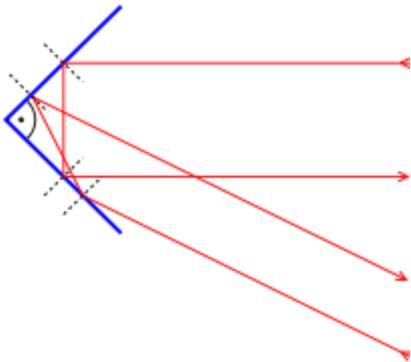
Design: (What the team produced) - creativity, originality, functionality of the design concept(s) and the likelihood it will meet the user's needs

Overall: (Overall score) - combined impression of presentation and project

- Please use these metrics: ⑤ = Excellent (Top 10%)   ④ = Very Good (Top 25%)   ③ = Good (Middle)   ② = Fair (Bottom 25%)   ① = Poor (Bottom 10%)

# Corner Reflector

A **corner reflector** consists of three mutually perpendicular, intersecting flat surfaces, which reflects waves back directly towards the source.



This property is called **retroreflectivity**.



# Miscellany



## Mid-term Team Project Presentations and Reports

1. 5 minutes (from Dave's laptop)  
4 minutes (from team's laptop)
2. Mid-term Team Reports due  
Tuesday, February 16<sup>th</sup>
3. Refer to Mid-term Team Assignment Handout for details  
<http://engr110.stanford.edu/assignment1.html>

# Wireless Slide Presenter



## English

### Features

1. Laser pointer
2. Slide forward and back
3. Black screen (in some applications)
4. Launch slide show
5. Timer play/pause
6. Timer set

# Tuesday, February 16th



Katherine Strausser, PhD

**The Design and Control of Exoskeletons for  
Rehabilitation**

# Today



## Mid-term Student Team Project Presentations

1. **One More Mile** - Jogging and Running Aid for the Blind and Visually Impaired
2. **Sachi-on-the-Ko** - iPhone and Me Project
3. **Engineering Empathy** - Support System to Destigmatize Mental Health in the Black Community
4. **Brace for Impact** - Knee Brace Project
5. **Game Plan** - Improved Walker Project
6. **Team Supreme** - Power for Veterans Project
7. **Walkabout** - Improved Walker Project
8. **Team Memori** - Designing Your Afterlife
9. **Swift Engineering** - Aesthetic Brace Fairing Project
10. **Magic Makers** - Magical Bridge Playground Project
11. **Fairing Well** - Aesthetic Brace Fairing Project
12. **Team Magicians** - Magical Bridge Playground Project

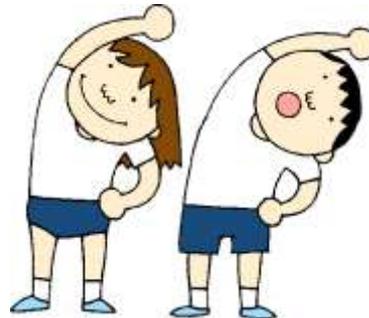
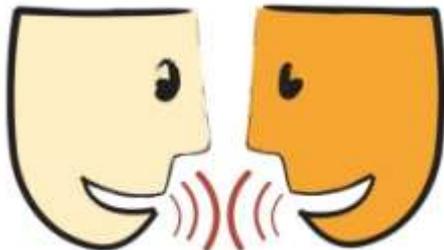
# Short Break



# 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



Class  
Dismissed!

