

March 14, 2017



# ENGR110/210

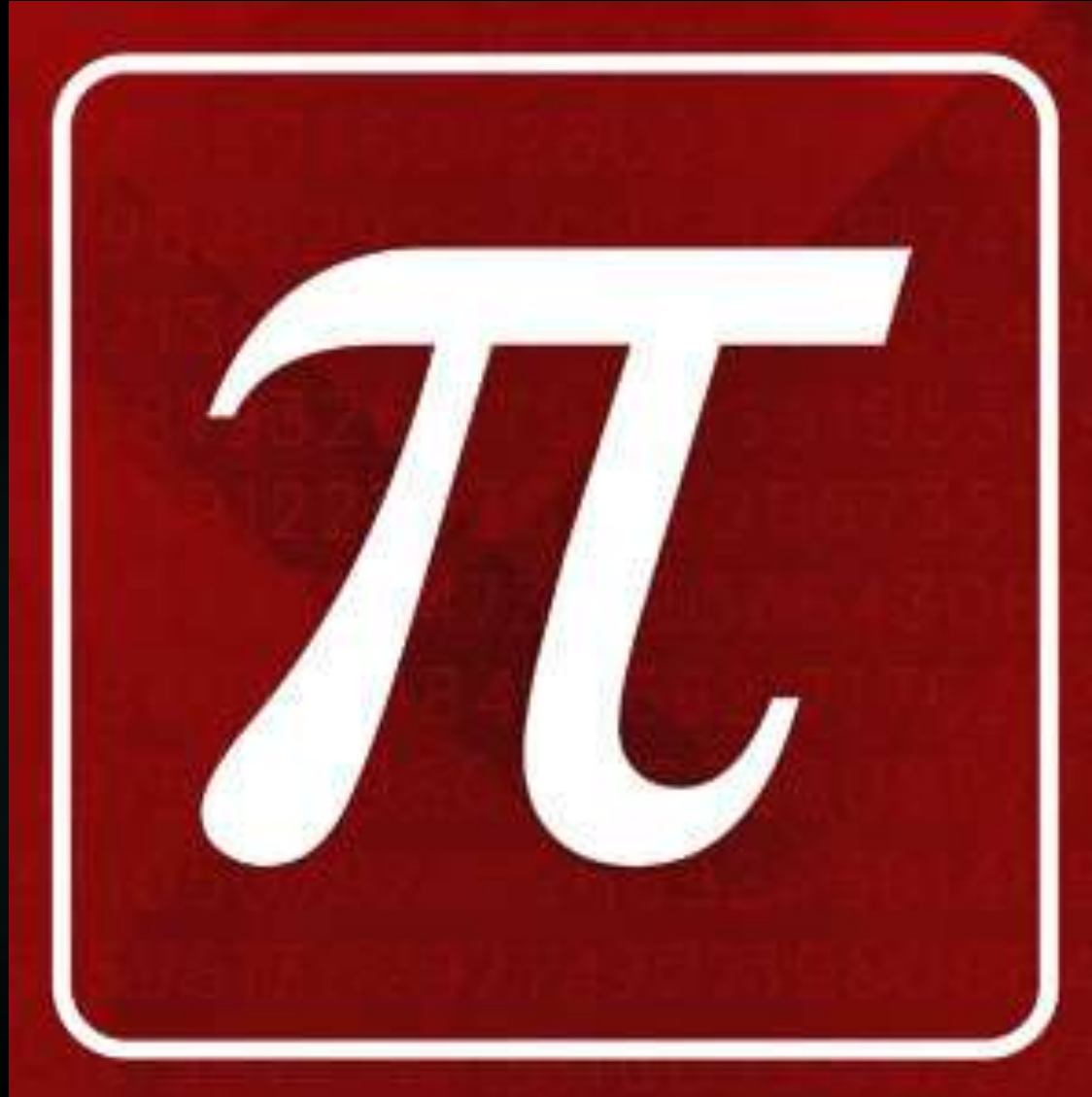
## Perspectives in Assistive Technology



David L. Jaffe, MS  
Instructor



Happy Pi Day!



# Final 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.







# End-of-term Student Team Project Presentations

## Please fill out this form legibly with a pen



Don't  
evaluate your  
own team

**Final Student Team Project Presentations**  
ENGR110/210: Perspectives in Assistive Technology

Please fill out with a pen. Please write legibly.  
Tuesday, March 14, 2017

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

Thank you for attending this year's end of the quarter student team project presentations for ENGR110/210. Student teams have been addressing challenges experienced by individuals with disabilities or older adults and have been working to understand, research, brainstorm, design, fabricate, and test prototype devices or software to meet the identified problems. 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:
  - Introduction to project and team members
  - Background, problem statement, and magnitude of problem
  - Interviews with project suggestors and users who would benefit from a solution
  - Identification and determination of need
  - Research on existing solutions and discussion of their limitations
  - Description and visualization of design concepts considered and prototypes built
  - Discussion of selected design: technical and engineering elements, estimated cost, user acceptance functionality, performance, safety considerations, tradeoffs, etc.
  - Visualization of final prototype: photographs and/or video of operation with a user
  - Plans for the future: improvements and challenges for continuing the project
- Judge the overall quality of the presentation, design process, and fabricated prototypes 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; and design concepts brainstormed, fabricated, tested, and analyzed

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

Design: (What the team fabricated) - creativity, originality, functionality of the design concept(s), and the likelihood they will meet the user's needs (Please note that the devices are not meant to be ready for market)

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%)
- Team Presentation order:
  - Ranger Stick - Pickup Sticks Project
  - All of the Lights - Magical Bridge Playground Project
  - Nearpod X - Life Skills Lesson
  - Reflex - Orthotic Rebound Shock Project
  - Robotikids - Art Tools Project
  - Le Joy Masters - Magical Bridge Playground Project
  - Plug & Play - Plugs for Molly Project
  - Sock It to Me! - Add a-sock Project
  - Dancing Our Way to Health - Dance Therapy Project
- Students - provide honest comments and evaluation scores & do not evaluate your own team
- Please provide your comments and suggestions about the course, this mid-term presentation, and the overall evaluation process. Thank you for your participation!



Use a pen that doesn't  
bleed through the  
paper & print legibly

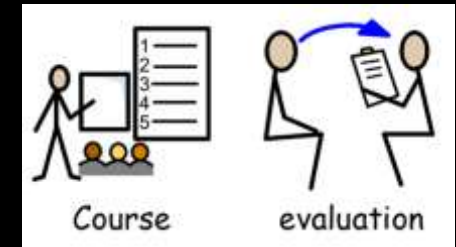


# Course Evaluations



1. Dave's in-class evaluation on Thursday
2. VPTL's evaluation – now available on Axess

VPTL encourages you to complete the course and instructor evaluations and values your opinions





# Final Report



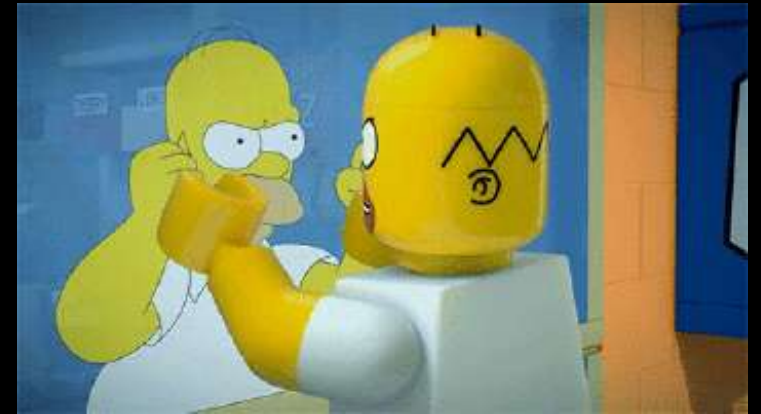
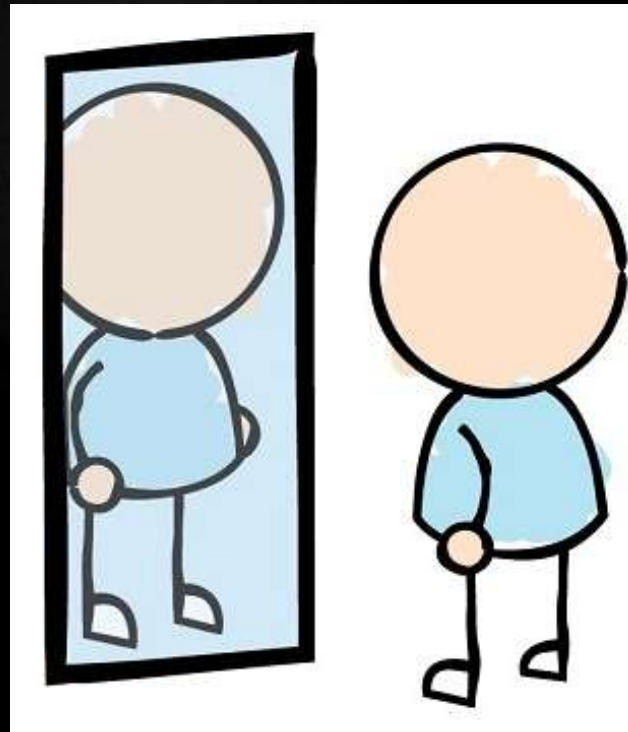
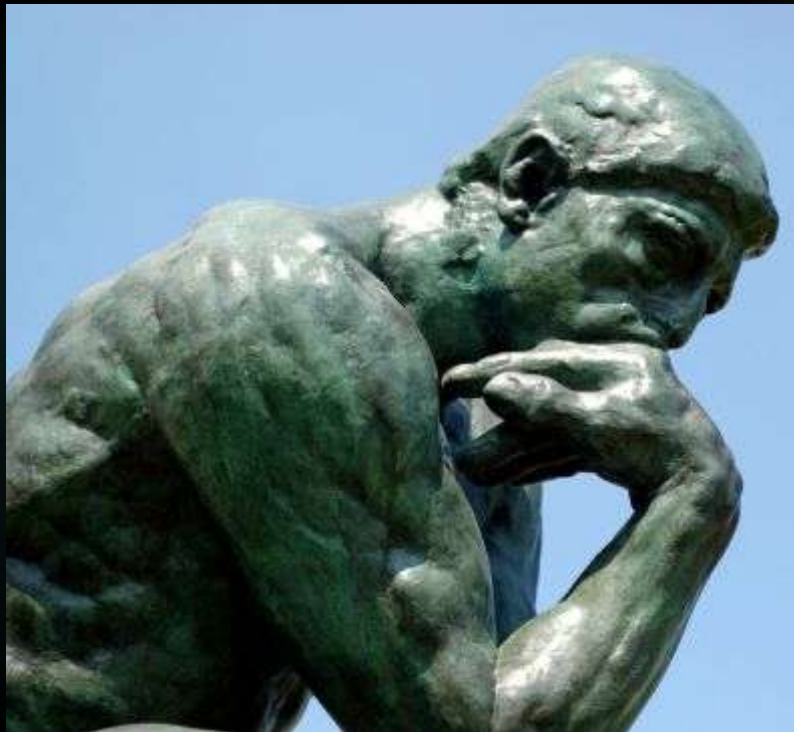
- ▶ Cover your entire quarter's work
- ▶ Expand on material from mid-term report
- ▶ Consider mid-term report mark-ups
- ▶ Due week of March 20th





# Individual Reflection

- ▶ How you felt about your course, project, team experience
- ▶ Due week of March 20th



# Project Reimbursements



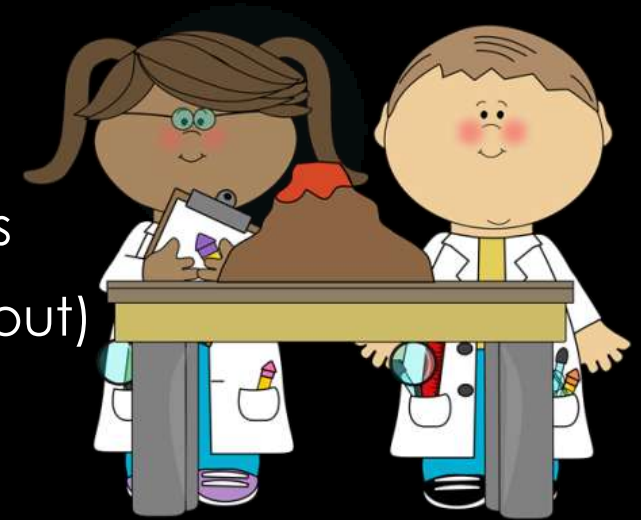
- ▶ Save all receipts
- ▶ One team member will be reimbursed for each team
- ▶ Mileage is not reimbursable
- ▶ Detailed instructions will be emailed



# Project Demonstrations - Thursday



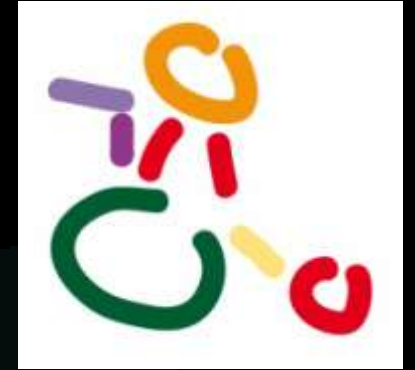
- ▶ Bring all prototypes to class
- ▶ Meet in classroom to fill out a course evaluation form
- ▶ Gibbons Grove (if not raining) - tables and picnic benches
- ▶ No posters or handouts - informal “trade show” presentations
- ▶ Demonstrate prototype’s functionality (make sure I check it out)
- ▶ Check out other teams’ projects
- ▶ Burritos & drinks
- ▶ Community members attending
- ▶ Invite project suggestors, users, friends who contributed to your project’s success
- ▶ Bring laptop to show additional videos and images of your process (charge laptop, no AC available)





# Project Considerations

- ▶ Your prototype should be functional, but not necessarily ready for market
- ▶ Contingency plans if things don't work out
- ▶ Add a team or Stanford logo
- ▶ Never apologize for what you did or what you were not able to achieve
- ▶ Mention future plans
- ▶ Remember “Everything is a prototype”



# Today – End-of-term Project Presentations



- ▶ Thank you for attending this year's final student team project presentations for ENGR110/210.
- ▶ Student teams have been addressing challenges experienced by individuals with disabilities or older adults
- ▶ They have been working to understand, research, brainstorm, design, fabricate, and test prototype devices or software to meet the identified problem.
- ▶ The teaching team would appreciate your assistance in judging the quality of the students' project efforts.
- ▶ **Please note that this was a seven-week team effort and the prototype is not intended to represent a commercial offering.**
- ▶ Read the criteria on the Scoring Sheet and submit your scores, suggestions, and comments.
- ▶ **Students: Do not evaluate your own team**
- ▶ Use a pen and print legibly as your comments will be disseminated to the project teams.



# Presentation Order



## End-of-term Student Team Project Presentations

1. **Ranger Stick** - Pickup Sticks Project
2. **All of the Lights** - Magical Bridge Playground Project
3. **Nearpod X** - Life Skills Project
4. **RefleX** - Orthotic Rebound Shock Project
5. **Robotikids** - Art Tools Project
6. **Le Joy Masters** - Magical Bridge Playground Project
7. **Plug & Play** - Plugs for Molly Project
8. **Sock It to Me!** - Add-a-sock Project
9. **Dancing Our Way to Health** - Dance Therapy Project





# Wireless Slide Presenter



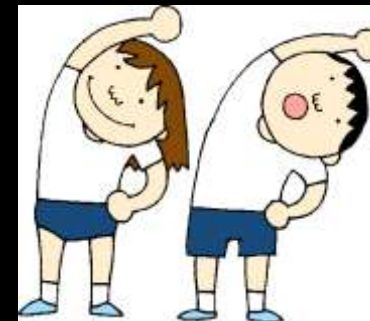
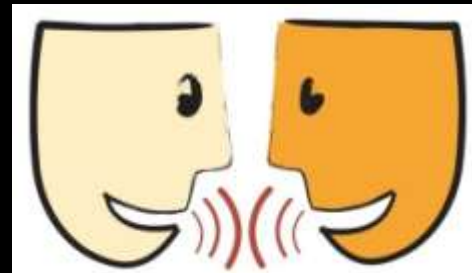
# Short Break



# 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

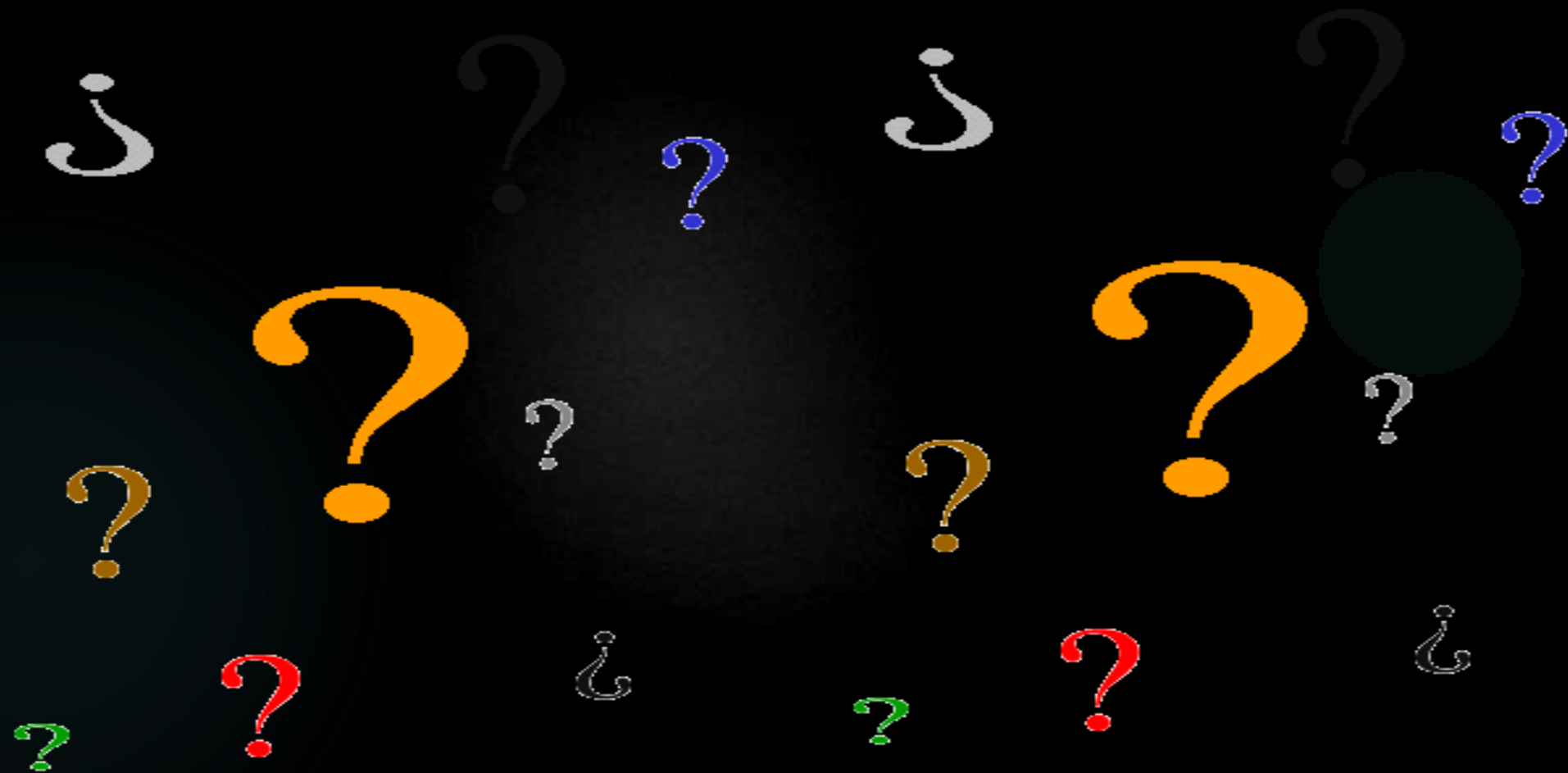




Class  
Dismissed!



# Questions?



Adjourn



class dismissed





# Laptops Galore

