

January 19, 2010

# ENGR110/210

## Perspectives in Assistive Technology



David L. Jaffe, MS



Professor Drew Nelson



Susan Nourse

# Questions, Comments, Thoughts?



# Administrative Issues

Enroll on Axxess

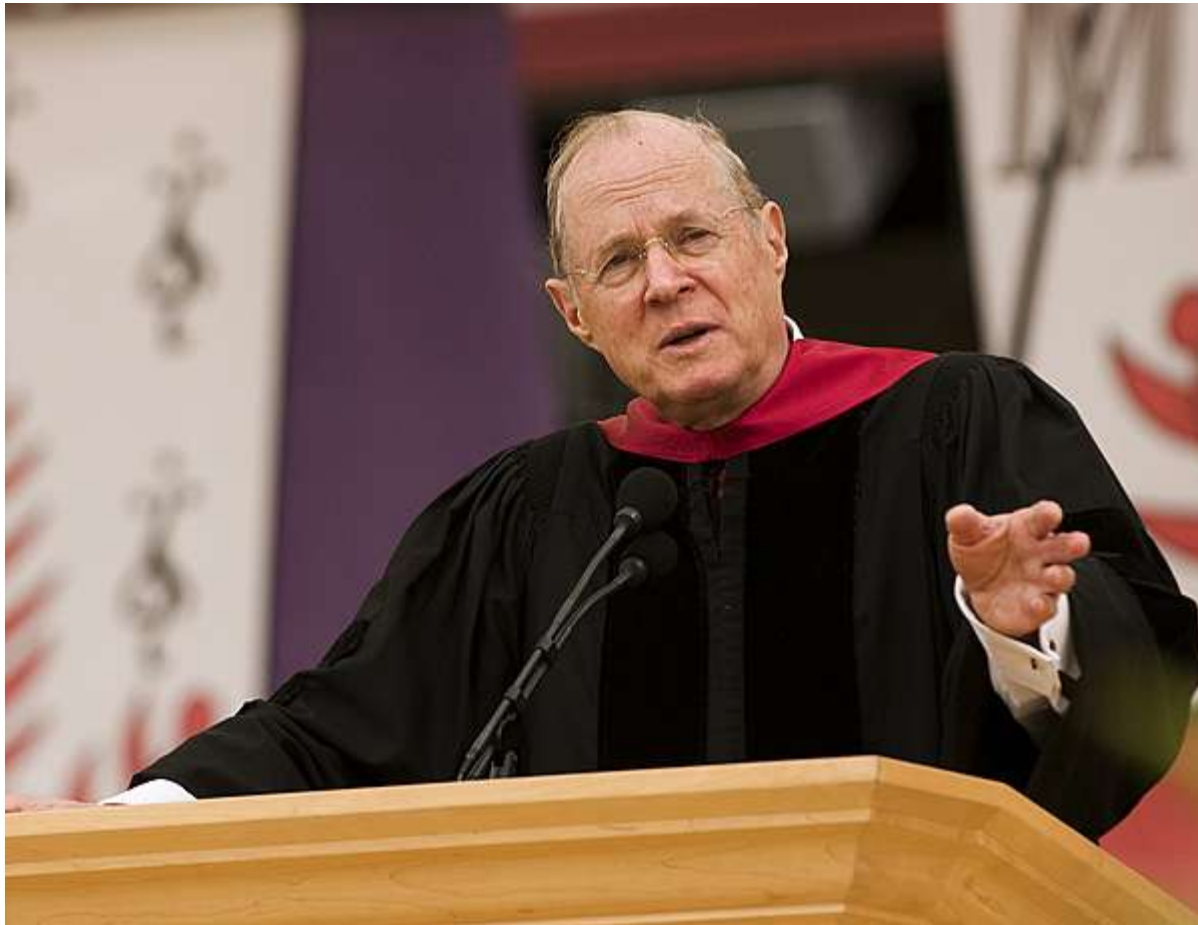
ENGR110 is one of the classes that satisfies the optional course requirement for the BSME degree.

Contact me if you desire to get a letter grade for the lecture-only one-credit enrollment option.

See me if you are missing a handout.

# Another situation where good communication skills would be beneficial

When you are giving Stanford's commencement address



# Who is Disabled?

- An individual with ALS cannot walk, talk, or personally perform any of the usual activities of daily living. He has only very limited volitional control of one finger.
- This individual employs a powered wheelchair for his mobility.
- This individual employs a speech output communication device to facilitate his communication.
- The individual is Stephen Hawking, often described as the smartest person alive.



# Who is Disabled?

- A runner is not good enough to compete in the Olympics.
- The runner, Oscar Pistorious, has a double lower limb amputation.
- He wears Cheetah Flex-Foot carbon fiber transtibial artificial limbs made by Ossur that enables him to run faster than his able-bodied competitors.
- He has been disqualified from competing in the Olympics because his artificial legs give him an unfair advantage.



# Who is Disabled?

- A grade school child has an accident that severs the tip of his index finger on his right hand.
- Because of this, he cannot continue playing his piano.
- An artificial fingertip is fabricated that enables him to continue to enjoy playing.



# Thursday, January 21st



Douglas F. Schwandt, MS  
**Design Challenges in Assistive  
Technology**



Owen R. Edwards, MEng  
**Motion-sensing Devices in the  
Assistive Technology Arena**



# Today



Laura C. Martini

## **Universal Design: A Student's Perspective**

Stanford University - Joint Program in Design

# Adjourn

