Lecture 8 Outline

**Reading:** White, §32, 33, 20, 21

**Assignments due:** Term paper progress report due Jan. 27 at 9:00AM
Lab #4 (“Microsoft Powerpoint”) due Feb. 1 at 11:55PM

*Question for the Day:* Web sites often ask you to register and supply a password. Do you think it is a good idea to use the same password for all your accounts, including the one on home, school, and work computers? Why or why not?

1. Greetings and felicitations!
2. Colors
   a. Additive colors: RGB
   b. Subtractive colors: CMYK
   c. Print density: dots per inch; “dithering”
3. Printers
   a. Dot matrix printer
   b. Color ink-jet
   c. Photo printer
   d. Laser printer
   e. Color laser printer
4. Making multimedia sound
   a. Sound cards
   b. Musical instrument digital interface (MIDI)
   c. FM synthesis
5. How digital sound tricks your ear
   a. Dolby 5.1
   b. Just noticeable difference and audio compression
6. 3D audio
   a. How you locate source of sound
   b. Illusion of sound coming from specific directions
7. iPods
   a. Classic
   b. Shuffle, Nano, Touch memory
8. Multimedia video
   a. Films, TV
   b. .avi (audio/video interleave) files
   c. MPEG (motion pictures expert group)
   d. Video conferencing
9. TiVo and AppleTV
   a. TiVo: MPEG-2 based digital video recorder (DVR)
   b. AppleTV: MPEG-4 based storage unit and output
10. Brief history of computer games