Center for Learning and Technology
AV Needs, Designs, and Specifications

- **Process**
  - Departmental focus groups
  - Design drafts
  - Feedback incorporation, consultant review
  - Design, budget adjustments
  - Prototype instructor’s console: A-101

- **Design Criteria**
  - User needs paramount
  - Modular and adaptable
  - Using instructional objects
  - Student comfort and accessibility

- **Key Design Areas**
  - Instructor’s console
  - Display and acoustic geometry
  - Lighting and controls
  - Electrical and conduit requirements
  - Production connectivity for videoconferencing

AV Design Web Site: http://www.plu.edu/~dmc/protected/CLT
Videoconference/Web Streaming-Ready Rooms

- 7 rooms; various sizes
- Up to 4 ISDN videoconferences at 128kbps
- Web Streaming
- Conference/Event Production
Horizontal Screen Safe Cone (8’ Screen) & Acoustic Model

- Close View = 1 x screen width = 8’
- Farthest Viewer (4x inspection) = 24’
- Farthest Viewer (6x Reading/Detail) = 36’

Safe Viewing Area based on Inspection Viewing

“Too Close” Zone Avoid Seating

Projected = 2x screen width back = 16’

Horizontal Head/Eye Movement
Adapted from Andrew Faunce (2001)
Vertical Angle of View, Line of Sight, Projector Light Paths
(10’ Screen - 11’ Ceiling)

Example: A-101 Front Wall

Screen Width.Length (feet) 10/10
Screen Height (4:3, video) 7.5
Screen Height (16:9, HDTV) 5.63
Screen Bottom from Floor 4
Screen Top from Floor (4:3, video) 11.5
Closest Viewer 10
Farthest Viewer (8x General) 60
Farthest Viewer (6x Reading/Detail) 45
Farthest Viewer (4x Inspection) 30
Projector top below ceiling 0

Portions adapted from Andrew Faunce (2001)
Public Events Room 103
58 seats; 15 sq.ft./student; 864 sq. ft.; 27’w x 33’d x 11’h
Classroom 124

40 students; 23 sq.ft./student; 952 sq. ft.; 34’w x 28’d x 11’h

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**Equipment**
- 7' Screens and Mounts
- 1 VCR
- 1 CD/DVD
- 1 Overhead Projector
- 1 Cart for Overhead
- 1 Sound System
- 1 Computer Projector
- 1 Instructor’s Console
- 1 Desktop Computer
- 1 System Interface

**Screen Calculations**
- Wall: West
  - Room Depth: 30’
  - Room Diagonal: 28’
  - Screen Width: 2.7’
  - Min. Room Height: 9.25’

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Last tables: screen visibility problems
Instructor/Presenter Console (A-101 Prototype)

- 32” and 54” widths
- Flexible 19” Rack(s)
- Common User Interface
- One-button Switching
- Info Outlet for Interfacing External Equipment

Info Outlet Provides Access to:
- Power
- Video Display
- Audio System
- Cable System
- Network