SALT LAKE TECH | SLCC

TELV 2200 *Audiovisual (AV) Technology I*

Instructor: TBD
Phone: TBD
Email: TBD

TEXTBOOK AND SUPPLIES:
- Electronic Systems Technician, Level 4, 4th Edition, ISBN-13: 9780136844150

PREREQUISITE: BICSI Technician Certification or instructor approval

OTHER REGISTRATION RESTRICTION(S): It is highly recommended that students be registered with DOL by their Sponsor (employer)

COURSE DESCRIPTION: In this course, stduents will be introduced to to basic audio and video theory and the skills needed to install, integrate, maintain, and troubleshoot both systems. In addition, an exploration of media management systems (MMS) components, system types, network infrastructure, and how MMS video and content are stored, retrieved and played. AVIXA CTS industry certification prep.

Upon successfully completing this course, students should be able to:

1. Perform tasks like mounting a speaker, connecting equipment and speakers, using testing equipment, and conducting acceptance testing
2. Connect Wi-Fi-based video presentation systems
3. Terminate a compression connector used with a video system
4. Pass the Audiovisual and Integrated Experience Association (AVIXA) Certified Technology Specialist (CTS) industry certification

COURSEWORK:
- **Weekly Homework:** You are expected to come to class prepared with your weekly readings and assignments.
- **Pre-Post Assessments, Weekly Quizzes:** Take and submit online in Canvas.
  - A pre- and post-assessment will be taken on the first and last day of class to measure progress
  - Weekly quizzes will be taken online in Canvas. You are allowed two attempts with the higher score recorded.
- **Attendance/Participation:** Attendance is expected and crucial to understanding the material and participating in classroom activities. Attendance and participation will be recorded daily and included as part of your coursework grade. 95% attendance is required, which means you are allowed one excused absence.
- **Final Exam:** The final exam is comprehensive.
- **Lab Projects:** Completion of related lab projects will be required. Missed projects must be coordinated with the instructor and made up.

GRADES: Final grades will be calculated using the following scale and weights.

A	93% and above	C	73% – 78.9%
A-	90% – 92.9%	C-	70% – 72.9%
B+	87% – 89.9%	D+	67% – 69.9%
B	83% – 86.9%	D	63% – 66.9%
B-	80% – 82.9%	D-	60% – 62.9%
C+	77% – 79.9%	E	below 60%

Homework	20%
Pre-Post Assessments, Quizzes	20%
Final Exam	25%
Weekly Projects	25%
Attendance/participation/in-class work	10%

Schedule (Subject to change)

WEEK	DAY 1	DAY 2	ASSIGNMENT/ACTIVITY

1	1. Audio Systems (EST Level 4)
	  a. What is sound?
	    i. Volume, pressure, and speed
	    ii. Audio systems applications
		1. Audio Systems (Cont'd)
		  a. Sound Reinforcement Systems
		    i. Microphones
		    ii. Pickup patterns
		    iii. Speakers
		    iv. Speaker systems
		    v. Equalizers
		    vi. Amplifiers for sound reinforcement
			TBD

2	1. Audio Systems (Cont'd)
	  a. Sound Reinforcement Systems
	    i. Applications of sound reinforcement systems
		1. Audio Systems (Cont'd)
		  a. Sound Reinforcement Systems
		    i. Paging systems
		    ii. Noise masking
			TBD

3	1. Audio Systems (Cont'd)
	  a. Instrumentation and Test Equipment
	    i. Audio instrumentation
	    ii. Audio test equipment
	    iii. Post-installation testing for a sound reinforcement system
		1. Audio Systems (Cont'd)
		  a. Sound System Installation
		    i. Installation Process
		    ii. Speaker Arrays and Rigging
		    iii. Troubleshooting Audio Installation
		2. Soft skills
		  a. Customer service (external)
		  b. Interpersonal interaction (internal)
			1. Activity: troubleshooting
			2. Activity: cut speaker, holes, mount back boxes, install speakers
			3. Activity: pull cable
			4. Activity: break the system (group activity)

WEEK	DAY 1	DAY 2	ASSIGNMENT/ACTIVITY
		c. Clear and specific communication (Internal)	

4	1. Audio Systems
	 a. System Commissioning
	  i. Commissioning Activities
		1. Video Systems (ESL Level 4)
		 a. History and Technology
		  i. Video History and Basic Components
		 b. Analog Video
		  i. Analog Signals
		  ii. Composite Video
			TBD

5	1. Video Systems (Cont'd)
	 a. Digital Review
	  i. Video Compression
	  ii. HDTV Benefits, Signaling, and Color Space
	  iii. Interfaces and Connectors
	  iv. Reality Technologies
		1. Video Systems (Cont'd)
		 a. Displays, Projectors, and Projection Screens
		  i. Display Attributes
		  ii. Display Types
		  iii. Projectors and Projection Screens
		  iv. Projection Screen types
			1. Activity: Interfaces and connectors activity
			2. Demo: kinds of video signals
			3. Share the calculation book with students
			4. Activity: Least favored viewer calculation resolution

6	1. Video Systems (Cont'd)
	 a. Video Processing and Distribution
	  i. Video Processing Equipment
	  ii. Cabling and Connectors
	  iii. Fiber Optic Cabling
		1. Media Management Systems (EST Level 4)
		 a. Media Management Systems
		  i. MMS Basics
		  ii. System Types
			TBD

7	1. Medical Management Systems (Cont'd)
	 a. Video Display Components
	  i. Video Equipment
	  ii. Video Projectors
		1. Media Management Systems (Cont'd)
		 a. File Storage, Retrieval, and Playback
		  i. Digital File Formats and Conversion
		  ii. File Formats
		  iii. Digital Data Storage
		  iv. Content Players and Broadcast Sources
			TBD

8	1. Media Management Systems (Cont'd) a. Network Infrastructure b. Video transmission	1. Wrap-up 2. Final	TBD

WITHDRAWAL POLICY: The College's withdrawal schedule is followed. No withdrawals will be approved beyond the drop date.

COMMUNICATION and FEEDBACK EXPECTATIONS: Email is the best way to communicate with your instructor through the Canvas Inbox. You can expect to receive responses to emails within 24 business hours. In addition, you can expect that projects and exams will be graded and recorded within one week of when the assignment was submitted. Keep the line of communication open to avoid any misunderstandings.

ELECTRONIC DEVICES IN THE CLASSROOM: No video or audio recording in the classroom is allowed without written authorization from the instructor. Cell phones and other electronic devices should be silent and off the desk during class except to take notes if it is not distracting to classmates. In an emergency, exit the classroom to use your cell phones. Disruptive behavior will cause you to be excused from class and lose participation points. Please let your instructor know of any special circumstances at the start of the semester.

SAVE YOUR WORK: In case of human or computer errors, it is recommended that you save all coursework until you have received a final grade.