

AUDIO VISUAL/INSTRUCTIONAL TECHNOLOGY INTEGRATION TECHNICIAN**DEFINITION**

Under general supervision, performs specialized technical duties pertaining to the installation, configuration, and troubleshooting of audio-visual (AV) and instructional equipment, systems, and related cabling.

DISTINGUISHING CHARACTERISTICS

This is the first technical support level class in the AV/Instructional Technology Integration Series within the Yosemite Community College District (YCCD). Incumbents in this class perform the full range of complex technical duties related to the installation, configuration, and troubleshooting of AV and instructional equipment, systems, and related cabling. Incumbents utilize specialized knowledge of AV and instructional technology to make decisions and complete assignments.

SUPERVISION RECEIVED AND EXERCISED

Incumbents in this class work under the general supervision of a manager while working toward a definite objective that requires use of a wide range of procedures. Incumbents plan and/or determine specific procedures or equipment required to meet assigned objectives and solve non-routine problems, referring only unusual matters to a supervisor.

Incumbents do not directly lead or supervise other full-time employees, but may monitor the work of subordinate full time, part time, and/or student employees on a regular, project, or assignment basis.

ESSENTIAL DUTIES

- Installs, terminates, and tests all forms of cabling related to AV and instructional technology, including shielded twisted-pair cable, in accordance with industry best practices
- Installs projectors, projection screens, flat panel displays, speakers, microphones, cameras, and other AV and instructional technology
- Installs and assists with configuration of wireless and wired networked devices.
- Installs and assists with configuration of digital and IP cameras.
- Installs and assists with configuration of telepresence, lecture capture and video systems and endpoints.
- Reads and interprets single-line and schematic drawings and architectural blueprints
- Performs and interprets point-to-point and end-to-end functionality tests of systems
- Resolves problems with communication between AV devices on the LAN
- Installs equipment racks
- Installs equipment within racks
- Performs cable management within and between racks, workstations, IDF's, etc.
- Fabricates mounting and support hardware
- Troubleshoots and resolves issues with audio, video, switching and control devices and systems
- Coordinates work with other District departments as necessary

MINIMUM QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The Education/Experience, Knowledge and Ability requirements are representative of essential duties. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions of the position.

Education and Experience:

• Pattern I

- **Education:** Possession of an associate's degree from an accredited college or university, with major course work in computer electronics or closely related field.
- **Experience:** Two years performing technical level AV installation work.

OR

• Pattern II

- **Experience:** Two years performing technical level AV installation work

Knowledge of:

- Methods, procedures, and techniques necessary for the installation, configuration, troubleshooting and repair of AV and instructional technology equipment, systems, and related cabling
- Methods, procedures, and techniques necessary for the installation, configuration, troubleshooting and repair of RS-232, IR, and IP-based control systems. *(The District currently uses Extron control systems)*
- Operational characteristics of current and legacy AV, instructional, computer, and control systems
- Potential operational impacts of EDID and HDCP and methods of mitigating those impacts
- Methods, procedures, and techniques necessary for distributing HDMI, USB, and other signal types
- Concrete, steel, and wood construction methods and materials
- Slotted channel and accessories (i.e Unistrut)
- Equipment power requirements
- Equipment cooling requirements

Ability to:

- Read and interpret blueprints, single-line, and schematic drawings
- Effectively communicate with employees, end-users, students and colleagues
- Use hand and power tools in a safe and efficient manner
- Work and think independently to meet deadlines
- Maintain a safe on-site work environment
- Applying knowledge of basic signal flow for audio, video and control signals

LICENSES AND CERTIFICATES:

- Depending on assignment, a valid license to drive in California may be required.

DESIRABLE CERTIFICATIONS:

- AVIXA CTS and CTS-I certifications
- AVIXA Microcredentials in Pulling cable, Terminating cables, and Mounting equipment
- OSHA 10-hour Construction Course
- Extron AV Associate Certification

- Comp TIA A+
- Comp TIA Network+
- Comp TIA Security+

PHYSICAL AND MENTAL STANDARDS:

- **Mobility:** ability to ascend and descend ladders, stairs, scaffolding and ramps; walk or stand for extended periods; stand and reach with arms, sit, stoop, kneel, and crouch.
- **Dexterity:** must have manual dexterity to use and operate hand and power tools
- **Lifting:** frequently lift, carry, push, pull or otherwise move objects up to 25 pounds; occasionally lift objects up to 50 pounds
- **Visual requirements:** close vision sufficient to read nomenclature on extremely small components; color vision sufficient to identify color-coded conductors and components; ability to read files, documents, and computer screens; distance vision sufficient to adjust projector fine focus; ability to adjust focus frequently
- **Hearing/Talking:** ability to hear normal speech, speak and hear in person and on the telephone; ability to identify noise, distortion, and frequency response deficiencies in sound systems
- **Emotional/Psychological Factors:** ability to make decisions and concentrate; frequent contact with others; frequent deadlines and time-limited assignments.

TYPICAL WORKING CONDITIONS

- Work is generally performed indoors, but may require working in confined, unconditioned spaces such as attics and crawlspaces. Some exposure to varied weather conditions may be required.

Class Adopted: September 2018

Class Amended: