

ELECTROCARDIOGRAM (EKG) LAB

SPACE DESCRIPTION

The Electrocardiogram (EKG) Lab is a dedicated, combined classroom and skills lab for lectures and hands-on training in performing EKGs and assisting with stress testing for cardiovascular care. EKG Labs are similar to other Health Sciences labs, but require equipment and space planning specific to the program.

The layout shown is illustrative of basic concepts and spatial needs. Specific requirements may be accommodated on a project by project basis, according to each campus' needs.

As all programs in the Healthcare field quickly evolve and advance with technology, so too, must the space they occupy. The Lab shall be planned with flexibility and reconfiguration in mind.

SUCCESS FACTORS

Combined space: Training is most successful when instructors and students can move back and forth between lecture and skills practice.

Experiential: Students in the EKG program are learning anatomy, procedures and equipment for EKGs and stress testing. They require all the necessary resources including a treadmill and EKC machines in order to experience and simulate real-life cardiovascular testing and care.

GENERAL

All perimeter walls shall be full height to deck.

ADJACENCIES

Ideally, EKG Labs adjoin other programs in the healthcare sciences for efficiency in shared spaces and cross-training between programs. EKG Labs shall be located within close proximity to faculty offices.

ACOUSTICS

Acoustic ratings for EKG Lab perimeter walls: STC 50. Special accommodations may be required due to location in the building.

Maximum recommended HVAC Background Noise: 40dBa

Follow the recommended methodologies and best practices for mechanical system noise control in ANSI Standard S12.60; the 2015 ASHRAE Handbook-- HVAC Applications, Chapter 48, Noise and Vibration Control (with errata); and AHRI Standard 885-2008.

Maximum NC Level for VAV's shall be less than 30 at maximum CFM

MECHANICAL

Window or room unit systems are not acceptable in EKG Labs due to poor acoustic performance.

Verify specific needs on a project-by-project basis while planning for flexibility in the future. Provide the following, at minimum:

- Provide handwash sinks with foot pedals or sensors.

ELECTRICAL & DATA

Electrical power requirements are based on selected equipment. Provide 120/208V 3-phase, typical.

Place wall outlets at no more than 6' intervals or as required based on the bed workstation layouts.

When laptops are a requirement for learning, special consideration is necessary. Coordinate with data requirements.

- Provide power and data for standard Learn Anywhere technology package:
 - o 2 (+/-) 75" touchscreen TVs on the front teaching wall
 - o Instructor station with PC
 - o Audio/ sound system to include instructor microphone, soundbars and wireless connection to student headsets as needed.
- ALTERNATE: Provide power and data in ceiling for 2 projectors at the front wall, in lieu of touchscreen TVs.
- Provide Power and data for student laptops at each patient bed.

Provide power and data at 6' intervals along perimeter walls at locations which may be used for desktop computer workstations and/or lab equipment.

LIGHTING

- Provide LED lighting system with appreciable indirect component and good diffusion for maximum visibility from all directions.
- Provide controls for zoning and dimming. Front row shall be switched separately with three preset dimmable levels: low, medium, high. Provide a dimmer switch at the Instructors Station.
- Provide task lighting at treadmill workstation and patient beds.
- Provide low-brightness luminaires with high visual comfort probability (VCP) in all viewing directions. Average 40fc at 30" A.F.F. Min CRI 80.
- Lighting watts per square foot and controls shall meet the latest requirements of ASHRE 90.1

TECHNOLOGY

- Provide Wireless capability throughout EKG Labs.
- Coordinate equipment for Learn Anywhere technology package, per Ivy Tech specification.
- Provide data outlets at same interval as power.
- Provide telephone service.

ACCESSORIES AND EQUIPMENT

Equipment needs include:

- On side walls, provide 8'-0" tack strip mounted 72" A.F.F. and 8'-wide whiteboard with marker tray. Rolling whiteboards may also be used.
- In ALTERNATE layout: On front teaching wall, provide 16' wide projectable whiteboard with marker tray. Whiteboard shall be matte white, low-glare, 4.0 gain; and must support 16:9 projection dimensions.
- (2) Patient beds with over the bed tables and privacy curtains
- (1) treadmill
- (4) EKG machines
- (4) blood pressure machines

- Wall-mounted glove dispensers
- Wall-mounted hand sanitizer dispensers

FURNITURE

Furniture shall be selected for flexibility and mobility. Provide the following standard furnishings for EKG Labs:

- Tables and chairs on casters for flexibility and mobility, coordinating caster type with flooring material.
- Workstations shall have integral power and data connections.
- Wall and base cabinets with locks.
- Rolling stools.

FINISHES

Ceilings

Recommended Height: 9' to 10', with special consideration to acoustics when greater than 10'.

Ceilings shall have an NRC of .70 to .85.

In renovations, classrooms without full height perimeter walls shall have ceilings with high CAC (Ceiling Attenuation Class) values.

Floors

Hard surface, no-wax flooring is required.

Countertops

Solid surface required for all wet and chemical areas.

DOORS AND WINDOWS

EKG Lab doors must allow the movement of hospital beds. Provide 5'-0" clear, minimum.

Doors shall be minimum STC 30 with 6" x 30" Window Lite preferred.

Provide locked entry door. Key fob access preferred.