

## DENTAL CLASSROOM

### SPACE DESCRIPTION

The Dental Classroom is designed to instruct students in the dental sciences. Here they gain knowledge and skills in anatomy, procedures, safety, and sterilization, while learning to care for patients and assist dentists in a professional setting.

While similar to a standard Classroom, these spaces are only used for dental training. Two dental chair stations shall be located at the front of the room for demonstration. Each dental station must provide all tools, resources, and storage needed for instructional use. In addition, direct access to a Storage and Sterilization room is required.

### SPACE ACCREDITATION

This space must meet the requirements of the “Commission on Dental accreditation”.

### SUCCESS FACTORS

**Infrastructure:** The classroom contains a significant amount of equipment with specific utility needs that must be carefully coordinated before construction begins to ensure the correct utilities are provided to the correct location.

**Health and safety features:** Handwashing stations and other sanitary measures are required. A dedicated Sterilization Room must have utilities for all necessary equipment including autoclaves and ultrasonic cleaners.

### SPACE FREQUENCY

Plan for 2 dental chairs per each classroom.

### GENERAL

All perimeter walls shall extend full height to deck.

Classrooms should be designed as square as possible to allow for the most flexibility, with a width to length ratio no more than 3:4.

### ACOUSTICS

A nearby mechanical space will contain the air compressor and suction/ vacuum equipment which will need to be acoustically separated from the surrounding area.

Acoustic ratings for Classroom 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 / PLUMBING

Provide sinks and drains as indicated in the space plan. Some sinks will require a plaster trap. Confirm locations with faculty. Water and drains are required for sterilization equipment.

The medical grade compressed air and suction/ vacuum equipment should be housed in a dedicated dental mechanical room and run to each exam station. The desired make and model of dental equipment should be selected by the faculty and provided to the design team before design begins, so the infrastructure needs can be properly coordinated. For some equipment, the location of utilities must be coordinated within a very tight tolerance. Equipment suppliers may need to be involved in both the design and construction of the space to ensure proper coordination.

## ELECTRICAL & DATA

Electrical power requirements shall be based on selected dental equipment. 120/208V service typical.

Provide data outlets for selected equipment and at staff workstations.

### Classroom

- Place wall outlets at no more than 6' intervals or as necessary to allow for 30% coverage. 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 1 (+/-) 75" smart TV and camera on the rear wall for virtual classes
  - 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.

## 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
- Individual overhead exam lights with adjustable swing arm.
- 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.
- Coordinate equipment for Learn Anywhere technology package, per Ivy Tech specification.
- Provide data outlets at same interval as power in coordination with classroom type.

## ACCESSORIES AND EQUIPMENT

The following built-in equipment is required. To ensure proper coordination of infrastructure, the specific make and model of equipment should be selected by the faculty before the design process begins.

- Power-operated dental chair(s) for treating patients in a supine position
- Air and water syringe
- Adjustable dental light

All Classrooms:

- On side walls, provide 8'-0" Tack Strip Mounted 72" A.F.F. and 8'-wide white board 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.
- Two 75" touch screen TVs with web cam and soundbar speakers could be used as potential alternatives to whiteboard with projectors.

## FURNITURE

Classroom furniture shall be selected for flexibility and mobility. Provide tables and chairs on casters, coordinating caster type with flooring material.

## FINISHES

Walls: Epoxy Paint system. 6" Vinyl wall base

Countertops: Epoxy Resin or solid surface, typical. Stainless steel countertops are required in the Sterilization Room.

Ceiling: Acoustical Panel Ceiling

Floor: Hard surface, easily cleanable flooring is required. Skid-proof medical flooring is preferred, but skid proof mats may be used as a substitute.

## DOORS AND WINDOWS

Wood Doors with Hollow Metal Frame

Classroom doors shall be minimum STC 30 with 6" x 30" Window Lite preferred for most Classrooms.