NURSING SIM LAB

SPACE DESCRIPTION

The Nursing SIM Lab is a suite of labs for clinical training in the nursing sciences. In this setting, students have an opportunity to practice technical and patient care tasks in a space designed to mimic a real-life hospital or clinic. Every Nursing SIM Lab will require mock patient rooms, a control/ observation room, debriefing rooms, and support spaces.

The labs require specific training equipment, support utilities, and space planning and must comply with all applicable accrediting standards. Nursing Labs must follow the National League for Nursing Commission for Nursing Education Accreditation (NLN CNEA) and Indiana State Board of Nursing.

The layout shown is illustrative of basic concepts and spatial needs. The number of patient rooms and control stations may vary depending on program size and shall 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 in mind.

SPACE ACCREDITATION

Nursing Labs must follow the National League for Nursing Commission for Nursing Education Accreditation (NLN CNEA) and Indiana State Board of Nursing.

SUCCESS FACTORS

Experiential: Students in the Nursing program are learning to support healthcare practitioners and provide services to real patients. They require all the resources and equipment to experience and simulate real-life situations.

Technical Support: A robust technology package shall be provided for observation, intercom feedback, SIM scenario creation, and recording capabilities. It is crucial to provide A/V for recording and playback in video-assisted debriefings.

Support space: Ample space is needed for processing and storing supplies and equipment.

GENERAL

All perimeter walls shall be full height to deck.

ADJACENCIES

Space is required for the following: **Patient Rooms, Observation Room, Debriefing Rooms, and Storage.**

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

ACOUSTICS

Acoustic ratings for Nursing SIM 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 Nursing 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:

- Hospital Bed Headwalls shall be equipped with Power, Oxygen/ Compressed Air, and Suction.
- Provide power and data for student laptops and devices at each patient bed.
- Provide handwash sinks with foot pedals or sensors.
- Provide connections for washer and dryer in adjacent Storage Room, or nearby.

ELECTRICAL & DATA

Verify equipment specifications and utility requirements prior to design.

Provide power and data for student laptops and devices.

Provide program-specific power and data in the Patient Rooms, Corridors, Observation Room, and Storage that simulate a typical patient suite in a hospital or clinic.

Provide power and data for recording devices for video-assisted debriefing system.

Provide power and data for nursing mannequins, trainers, and equipment. Verify specific requirements with program while planning for future equipment upgrades.

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

In Debriefing Rooms, provide floor outlets for power and data.

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 task lighting at 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.
- Provide program specific lighting and controls in the Patient Rooms, Corridors, Control Room, and Storage that simulate a typical patient suite in a hospital or clinic.
- Lighting watts per square foot and controls shall meet the latest requirements of ASHRE 90.1.

TECHNOLOGY
- Provide Wireless capability throughout Nursing SIM Labs.

- Coordinate A/V system with camera for recording and playback in video-assisted debriefing system.
- Coordinate technology for nursing mannequins, trainers, and equipment. Verify specific requirements with program while planning for future equipment upgrades.
- Provide Conference TV, web cam, sound bar, microphone, docking station and/or wireless technology in Debriefing rooms.
- Provide wall-mounted screens in each patient room and debriefing room.
- Provide data outlets at same interval as power.
- Provide telephone service.

ACCESSORIES AND EQUIPMENT

Provide equipment as required by accrediting standards.

Verify equipment specifications and utility requirements prior to design. Review equipment at intervals throughout design.

Provide the following equipment:

- Patient beds with the following:
  - Headwall with utilities
  - Over the bed tables
  - Small whiteboard with marker tray
  - Bedside tables
  - Privacy curtains
  - Ceiling- or wall-mounted IV hooks
  - Patient bed lighting
  - Wall mounts for ophthalmology scopes and blood pressure cuff
- Wall-mounted glove dispensers
- Wall-mounted hand sanitizer dispensers
- Lockable cabinets
- Sharps containers
- Automatic soap dispensers

Debriefing equipment needs include:

- On side walls, provide 8'-0" tack strip mounted 72" A.F.F. and 8'-wide whiteboard with marker tray.

In the Storage room or nearby, provide a Refrigerator, Washer, and Dryer.

FURNITURE

Furniture shall be selected for flexibility and mobility. Provide the following standard furnishings for Nursing SIM Lab suites:

- 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.

- Cabinets for mannequin storage. Storage shall be horizontal drawers with integral power.
- Stretchers
- Instrument tables and mayo stands
- Stainless steel storage cabinets

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.

Provide washable acoustical ceiling tile in Patient Rooms.

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

Nursing 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.

Provide viewing windows between Observation Room and Patient Rooms.

PATIENT ROOM

SPACE DESCRIPTION

Patient Rooms provide realistic space for technical and clinical skills training. This space shall mimic a real-life patient room with equipment and supplies that would be available in a hospital setting. Coordinate A/V system with cameras for recording and playback in video-assisted debriefing system.

ACCESSORIES AND EQUIPMENT

Provide infrastructure for the following:

- A/V for Video-assisted debriefing system
- Patient bead headwalls with Power, Oxygen/ Compressed Air, and Suction.
- Provide Power and data for student laptops and devices at each patient bed.
- Viewing monitors (wall-mounted)
- Provide handwash sinks with foot pedals or sensors.
- Instrument tables and mayo stands

-   Stainless steel storage cabinets
-   Wall-mounted glove dispensers
-   Wall-mounted hand sanitizer dispensers

OBSERVATION ROOM

SPACE DESCRIPTION

The Observation Room is a small space adjoining the Patient Rooms, designed for physical observation, mannequin control, and recording. Provide a viewing window between the Observation Room and Patient Rooms. A counter with workstations shall be provided with power and data connections. Coordinate power and data for connections to video-assisted debriefing system and mannequins.

ACCESSORIES AND EQUIPMENT

Provide the following:

-   A/V for recording and playback in video-assisted debriefing system.
-   Task lighting
-   Telephone

DEBRIEFING ROOM

SPACE DESCRIPTION

Within close proximity to the Patient Room, the Debriefing Room provides a location for instructors and students to review their performance. Provide connections to the video-assisted debriefing system.

See Conference Room standard for basic requirements.

ACCESSORIES AND EQUIPMENT

Provide the following:

-   Conference table with seating for 4-6 people
-   Power and IT for video conferencing
-   TV screen, camera and soundbar
-   Whiteboard with marker tray

PREP ROOM

SPACE DESCRIPTION

Adjacent to the Patient Rooms, a Prep Room provides an easily accessible location for processing and storage of medications, equipment, and supplies.

Provide the following:

-   Wall and Base cabinets with solid surface countertop
-   Lockable cabinets for sensitive materials
-   Utility sink with foot pedal or sensors

STORAGE

SPACE DESCRIPTION

Adjoining the Nursing SIM Lab, the Storage Room provides a secure location for the storage and processing of equipment and supplies.

Provide lockset door hardware.

Provide for the following:

- Washer and Dryer
- Refrigerator
- Storage racks