

KIRKWOOD HEALTHCARE SIMULATION CENTER KIRKWOOD COMMUNITY COLLEGE

Cedar Rapids, Iowa

Cost:

Construction: \$3,400,000 MEP Const: \$1,100,000

Owner:

Kirkwood Community College Cedar Rapids, Iowa Mick Starcevich, President

Kirkwood Community College Cedar Rapids, Iowa Tom Kaldenberg Director of Facilities 319.398.5561 tkalden@kirkwood.edu

Team:

Principal in Charge: Dwight Schumm, PE, LEED AP BD+C

Project Manager: Kelly Harrer PE, LEED AP

Mechanical: Kelly Harrer, PE, LEED AP

Electrical: Marc A. Foster, PE, LC

Architect: OPN Architects Cedar Rapids, Iowa Steve Knierim, AIA 319. 363-6018 sknierim@opnarchitects.com



This 10,700 sqft facility was added to the west end of Linn Hall to serve the expanding Nursing program. The facility has an OR/ER, ICU, a nurse's station, four exam rooms, ambulance garage, and office space. Each of the medical spaces has an adjacent room with mirrored glass in which students and instructors can observe. The facility was constructed to mimic a medical environment with an added focus on teaching and learning. The medical mannequins provided for the ER/OR and ICU are connected to medical air and a central computer system. This advance system allows an instructor the ability to test students in real world emergency scenarios using life like patients.

The facility has a medical air compressor, medical vacuum pump and a fire rated gas distribution room for nitrogen, oxygen, and carbon dioxide tanks. The medical gases are distributed to medical head walls in each room. The gas line pressures are monitored and alarmed at the nurses' station.

The HVAC consists of terminal heat pumps connected to a vertical ground heat exchanger. The HVAC is designed for a classroom environment not a clean room.

The use of the facility required lighting design to replicate patient care rooms, ER/OR, and ICU areas of a hospital. Both exam lights and multi-level fluorescent troffers were controlled at bed side and at the room entrances.

Power layouts in the treatment rooms also mimic those of a real hospital with normal working outlets and "red" emergency power outlets connected to a normal power source.

Nurse Call systems and Code Blue lighting were installed to enhance the learning environment along with a functioning nurse's station equipped with these head end devices.