

SIMULATION LABORATORY SPECIALIST

DEFINITION

Under general supervision, performs integration of simulation systems and equipment for registered nursing and other healthcare program laboratories; assists with development of scenario-based instruction; provides technical assistance, support, and training to faculty, staff, and students; provides recommendations to the Health Careers Resource Center (HCRC) team for the evaluation of simulation implementation strategies; and assists in overseeing the operation of the simulation lab. The incumbent also performs complex technical work in an instructional learning environment for a highly technical or complex subject area.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the assigned managerial personnel. Provides technical and functional direction and training to employees.

CLASS CHARACTERISTICS

This is a specialized classification responsible for providing systems and equipment management for high fidelity simulations and adapting emerging technologies to meet the educational needs of the Registered Nursing Department and other healthcare program departments. Responsibilities include supporting the technological aspects of realistic, highly complex clinical scenarios, using sophisticated equipment and software. Assists and supports faculty in operating clinical simulation that meets curriculum goals and produces measurable outcomes. Maintains and repairs complex high and low fidelity simulation equipment, as well as the identification and troubleshooting of problems with the equipment, in collaboration with the equipment manufacturer. Ensures the appropriate video recording and playback equipment is available and operational for debriefing after simulations. Ensures that the Simulation Laboratory has required equipment and supplies to meet faculty and student needs for objectives and content for courses that use high fidelity simulation and standardized patients.

EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only)

1. Maintains, troubleshoots, repairs, and trains on complex high and low fidelity clinical simulators.
2. Programs software to model simulators' physiological responses in complex scenarios developed with faculty and the Health Careers Resource Center.
3. Researches and adapts emerging technologies to meet the educational needs of students and faculty.
4. Supports the technological aspects of realistic, highly complex scenarios using sophisticated hardware and software.
5. Collaborates with faculty in the use of simulation; assists faculty with high fidelity simulations; serves as a resource for faculty utilizing simulation.

6. Ensures instructional media equipment such as video cameras, multimedia computer systems, and audio and video distribution systems are appropriate and functional at all times.
7. Works with Coordinator to maintain equipment and supplies from vendors that are needed for high and low fidelity simulations.
8. Maintains current knowledge of simulation equipment and operation manuals.
9. Correctly and efficiently set up laboratory equipment and materials used in exercises and experiments; maintains a safe and secure learning laboratory environment.
10. Maintains inventory of supplies and equipment; makes recommendations for budgeting and purchase of equipment, supplies, and materials.
11. Participates in public relations duties including tours and demonstrations in the simulation area.
12. Serves as the liaison with the equipment manufacturers as it relates to simulation.
13. Coordinates work to develop and implement a simulation evaluation program; provides input on simulation program policies and procedures.
14. Promotes an environment of belonging as it relates to diversity, equity, inclusion, social justice, anti-racism, and accessibility.
15. Provides quality customer service when interacting with the public, vendors, students, and College staff, including individuals from minoritized groups.
16. Supports and abides by federal, state, and local policies, and Board Policies and Administrative Procedures.
17. Participates on committees, task forces, and special assignments, including, but not limited to Screening and Selection Committees and mandated trainings as required.
18. Prepares and delivers oral presentations related to assigned areas as required.
19. Performs other related or preceding classification duties as assigned.

QUALIFICATIONS

Knowledge of:

1. Principles and practices of supporting a diverse, equitable, inclusive, socially just, anti-racist, and accessible academic and work environment.
2. Operational characteristics of simulation laboratory apparatus, equipment, and materials.
3. Advanced theories and applications of simulation technology.
4. Advanced principles and practices of laboratory operations.
5. Anatomy and physiology.
6. Operational characteristics of electromechanical and pneumatic equipment and devices.
7. Parts, tools, equipment, and methods used in the diagnosis, installation, and maintenance of computer hardware and software.
8. Basic medical terminology and abbreviations.
9. Operational characteristics of ancillary equipment and machines related to simulation.
10. Applicable federal, state, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
11. Methods, materials, practices, and tools used in equipment maintenance and repair for simulation equipment.

12. Modern office practices, methods, and computer equipment and applications related to the scope of responsibility.
13. Occupational hazards and standard safety practices.
14. Techniques for effectively representing the College in contacts with governmental agencies, community groups, and various business, professional, educational, regulatory, and legislative organizations.
15. Techniques for providing a high level of customer service by effectively interacting with the public, vendors, students, and College staff, including individuals of various ages, disabilities, socio-economic, and ethnic groups.

Skills and Abilities to:

1. Advocate for and communicate the College's vision and commitment to creating a diverse, equitable, inclusive, socially just, anti-racist, and accessible academic and work environment.
2. Participate in addressing gaps in diversity, equity, inclusion, social justice, anti-racism, and accessibility in the recruitment and retention of staff.
3. Participate in providing resources and support towards the goal of a diverse, equitable, inclusive, socially just, anti-racist, and accessible academic and work environment.
4. Analyze, troubleshoot, and apply problem-solving skills to technical problems.
5. Establish and maintain a variety of filing, record-keeping, and tracking systems.
6. Properly store and dispose of hazardous chemicals and materials.
7. Ensure adherence to safe work practices and procedures.
8. Participate in budget preparation and administration.
9. Interpret, apply, explain, and ensure compliance with federal, state, and local policies, procedures, laws, and regulations.
10. Organize and prioritize a variety of multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
11. Communicate effectively through various modalities.
12. Learn and apply emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
13. Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures; understands scope of authority in making independent decisions.
14. Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

1. Equivalent to an associate's degree from a regionally or nationally accredited college in electronics, computer technology, or related field, and
2. Two (2) years of full-time equivalent experience in computer use, set up, troubleshooting, and maintenance repair of technology equipment, simulators, and mannequins.

Desirable Qualifications:

1. Recent experience in computer use, set up, troubleshooting, and maintenance repair of technology equipment, simulators, and mannequins within the last five (5) years.
2. Certification in Simulation Technology.
3. Experience working with policies and procedures relating to diversity, equity, inclusion, social justice, anti-racism, and accessibility preferably in a minority serving institution such as Hispanic Serving Institution (HSI) and Asian American and Native American Pacific Islander-Serving Institution (AANAPISI); OR
4. Experience with participation in programs relating to diversity, equity, inclusion, social justice, anti-racism, and accessibility preferably in a minority serving institution such as Hispanic Serving Institution (HSI) and Asian American and Native American Pacific Islander-Serving Institution (AANAPISI).

Licenses and Certifications:

The incumbent may periodically be required to travel to a variety of locations. If operating a vehicle, employees must have the ability to secure and maintain a valid California driver's license.

PHYSICAL DEMANDS

Must possess mobility to work in a laboratory/classroom environment and in the field; strength, stamina, and mobility to perform medium to heavy physical work, to operate varied lab tools, instruments, and equipment; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate above-mentioned equipment. Positions in this classification bend, stoop, kneel, reach, and climb to perform work. Incumbents must possess the ability to lift, carry, push, and pull materials and objects, typically weighing up to 50 pounds, and occasionally heavier weights with the use of proper equipment. May require the wearing of safety goggles, lab coat, rubber or plastic gloves, and face shields.

ENVIRONMENTAL ELEMENTS

Incumbents work in a laboratory/classroom and in the field and may be exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, dust, fumes, and allergens, hazardous physical substances, mechanical and electrical hazards, and moving equipment. Incumbents may interact with staff and/or students in interpreting and enforcing departmental policies and procedures.