



**King Abdulaziz University
Clinical Skills & Simulation Center**

Clinical Skills & Simulation Center Educational Programs



Introduction

The Clinical Skills & Simulation Center (CSSC) at King Abdulaziz University (KAU) is a state of the art training center that offers specialized training of medical students, physicians, nurses and other healthcare professionals. In the center, participants evaluate and diagnose patients through teaching models that incorporate the use of actor-patient and computerized manikin that simulate disease. CSSC provides opportunities for simulation-based hands-on training in a safe and challenging learning environment.

CSSC also provides courses which can enhance the skills and improve the knowledge of those people in the medical field who are interested to join. These courses are usually accredited by the Saudi Commission of Health Specialties for many years.

In 2016, CSSC as a leading national training center have received international accreditation from Royal College of Canada and Society for Simulation in Healthcare which has been proudly added to the center's international achievements.





Vision

The vision of KAU-CSSC is to be the benchmark in Professional Health Training and Simulation in the Middle East.

Mission

KAU-CSSC is committed to provide high quality Health Training Programs and to promote scholarly activities and community engagement

Activities

- Risk Free and Hands-on part task training
- OSCE's and High Stake Exams
- Standardized Patients Program
- Virtual Simulation
- High Fidelity Simulation Program
- Advanced AV Management
- Life Support Programs
- Community Awareness Programs

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Team Training Courses



Train of Trainer for Essential Skills for Clinical Simulation Instructor Course

About the course

This continuing education course emphasize on simulations that focus on clinical judgment, teamwork and inter-disciplinary communications. Participants will be able to learn concepts and skills associated with debriefing, as well as they will actively engage with the tools needed to design and implement a simulation program in their units or institutions.

Course Objectives

By the end of this full day workshop, you will be able to:

1. Build a challenging and safe learning environment.
2. Understand the principles of simulation-based training characteristics.
3. Build your own scenarios in a small group exercise with expert's guidance.
4. Practice core instructor roles (observe, process, facilitate and debrief).
5. Build basic debriefing skills through interactive sessions.
6. Meet simulation-interested local educator to build your sociogram that will help you with your own program development.
7. Count on our ongoing support in the future at the Clinical Skills Center and be invited to develop your experience and sharpen your skills in our future simulation courses.



Target Participants

Educators from the following categories:

- Doctors
- Nurses
- Paramedics
- Respiratory Therapists
- Technicians



Train of Trainer for Personal Protective Equipment Workshop

About the course

Interdisciplinary Team-Based training program specifically developed to enhance first line healthcare providers' competence to deal with high risk infectious cases.

The program is designed to enhance Mers-CoV, H1N1, Ebola, PPE competency & checklist to improve participant's knowledge of donning PPE according to current CDC protocols and increase self-confidence in providing optimal safe care for patients.

Course Objectives

By the end of this workshop, participants will be able to:

- Comprehend and apply the concepts of simulation by training in PPE.
- Demonstrate the use of basic debriefing skills.
- Recognize the clinical presentation of Ebola & Mers-CoV.
- Demonstrate Donning & Doffing procedures.
- Provide appropriate PPE observation skills during simulation for healthcare workers.



Target Participants

KAUH Healthcare Providers in High- Risk areas (ED, ICU)

- Doctors
- Nurses
- Other Healthcare Workers



Simulation- Based Rapid Response-Crisis Resource Management Course

About the course

This workshop helps to reduce mistakes in medicine, thereby, increasing the patient safety. This course aims to develop crisis management skills relevant to all emergency and potential emergency situations that may take place in anesthetic and other practice locations. Educational sessions and practical hands-on skill stations complement the realistic critical event scenarios played out in fully equipped simulated environment.

Course Description

Full intensive course intended to give participants opportunities to learn and apply complex problem solving skills, decision making, crisis resources management and teamwork behaviors during simulated clinical encounter.

Course Objectives

By the end of the workshop and after participating in the activities participant will be expected to:

1. Improve their technical and theoretical cognitive and professional skills in realistic and complex medical situations.

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2. Update their approach to management of critically ill patient.
 3. Review common complications of medical and surgical interventions in critically ill patients.
 4. Reflect their role in approaching leadership and effective communication through highly interactive small group debriefing under strict confidentiality.

Target Participants

All first-line critical event responders:

- Critical Care Physicians
- Anesthesiologists
- ER Physicians
- Experienced Nurses
- Experienced Technicians
- All Residents (Anesthesia, ER, Surgery, Internal Medicine)



Personal Protective Equipment Workshop

Course Description

Interdisciplinary Team-Based training program specifically developed to enhance first line healthcare providers' competence to deal with high risk infectious cases.

The program is designed to enhance Mers-CoV, H1N1, Ebola, PPE competency & checklist to improve participant's knowledge of donning PPE according to current CDC protocols and increase self- confidence in providing optimal safe care for patients.

Course Objectives

By the end of this workshop, you will be able to:

1. Recognize the clinical presentation of Ebola, Mers-CoV and H1N1.
2. Understand PPE principles.
3. Demonstrate appropriate PPE practice (Donning and Doffing) for healthcare workers.
4. Demonstrate appropriate maintenance of PPE while providing patient care.

Target Participants

KAUH Healthcare Providers in High- Risk areas (ED, ICU)

- Doctors
- Nurses
- Other Healthcare Workers



Difficult Airway Management Workshop

Course Objectives

By the end of the workshop and after participating in the activities, candidate will be expected to:

1. Discuss the difficult airway algorithm and the pathway used from assessment to intubation in routine and urgent cases.
2. Apply the algorithm to different clinical scenarios.
3. Perform many of the included approaches to airway management.
4. Participate in management of a realistic Difficult Airway Simulation Scenario.

Topics

- Awake intubation
- Definition and terms
- Airway assessment
- The general ASA algorithm
- The practical techniques to use different airway tools, such as:
 - LMAs
 - Airtraq
 - Fiberoptic Intubation
 - Glideoscope
 - Laryngeal Airway
 - Trachealight Intubation
 - Retromolar Scope
 - Senso-scope



Utilizing Simulation for Patient Safety Workshop

Course Description

This continuing education course will introduce doctors, nurses, paramedics, and related health professions to best methods in utilizing different levels of simulation, low to high fidelity, in faculty development programs and quality improvement patient safety programs.

Course Objectives

By the end of this workshop, participants will be able to:

- Discuss roles of simulation in patient safety
- Relate to showcases of different institutions experiences to their own experience!
- Practice constructing a simulation based program with low fidelity simulation in small group exercise with expert facilitator
- Practice a safety-oriented high fidelity simulation scenario design and debrief, in small group exercise with expert facilitator
- Collaborate with different participants with vast experience of managing patient safety promoting programs.



Target Participants

- Physicians
- Interns
- Nurses
- Pharmacists
- Physiotherapists
- Technicians
- Quality & Safety Officers



Human Performance Courses



Ultrasound Guided Vascular Access

About the Course

This course will feature didactic presentations and hands-on skill stations for performing venous cannulation under ultrasound guidance.

Ultrasound Guided Vascular Access hands-on training includes comprehensive lectures and extensive hands-on scanning for central and peripheral line placement featuring live models and inanimate objects.

Course Objectives

At the end of this workshop participants will be able to:

- Increase the participant's knowledge to better perform ultrasound-guided vascular access procedures.
- Demonstrate proper transducer manipulation and system optimization to produce diagnostic images.
- Identify ultrasound imaging characteristics of vessels and contiguous anatomy to determine the optimal approach for vascular access.
- Recognize ultrasound imaging characteristics of vascular pathology that would indicate a vessel is not suitable for vascular access.
- Demonstrate the use of ultrasound guidance for Central Line vascular access.
- Demonstrate the use of ultrasound guidance for Peripheral Line vascular access.
- Increase confidence to incorporate protocols, scan techniques, and interpretation criteria to improve treatment accuracy.



Target Participants

1. Intensivists
2. Anesthesiologist
3. Cardiologist
4. ER Physicians
5. Residents
6. Interns
7. Medical Students



Extended Focused Assessment with Sonography for Trauma (EFAST) Workshop

Course Description

This course will feature didactic presentations and hands-on skill stations for performing and interpreting ultrasound imaging used to determine injuries in the trauma patient.

Target Participants

- Emergency physicians
- Anesthesiologists
- Intensivists
- Advanced practice nurses
- Surgeons
- Physician Assistants



Bronchoscopy Course

Course Description

This course teaches fundamental knowledge and technical skills to perform bronchoscope. It includes didactic session and hands-on skills training.

Course Objectives

Upon completion of the course the learner will be able to:

- Describe the instruments and equipment used in bronchoscopy.
- Know the anatomic location of different part of the lung physically and radiologically.
- The arts of using bronchoscopy under local anesthesia and overcome the fear of patient.
- Complications
- Identify normal tissues from abnormal finding during bronchoscopy.
- Explain ABG changes during procedure.
- Provide an overview of biopsy techniques and homeostasis.
- Summarize the process of postoperative care.

Target Participants

- ICU Physicians
- Chest Physicians



Specific Critical Care / Emergency Care Courses

Ultrasound-Guided Nerve Blocks

Course Description

This is a one day intensive ultrasound workshop offered to anesthesiologists who wish to learn the BASIC Skills of ultrasound guided nerve blocks.

Course Objectives

- At the of this introductory course, participants would have acquired a thorough knowledge of the imaging and needling techniques for nerve blocks in the following regions of the body:
 - ✓ Interscalene
 - ✓ Supraclavicular
 - ✓ Femoral
 - ✓ Popliteal
- Supervised hands on scanning on live models.
- Opportunity to use and handle ultrasound machines.
- Hit-the-target practice on phantoms
- Knowledge evaluation with immediate feedback

Target Participants

- Anesthesia Residents
- Acute pain service nurses
- Anesthesiologists (Consultants, Senior Registrars, Registrars Specialists)
- Experienced Anesthesia and Operative Room Nurse & Technicians



Bedside Ultrasound for Critically ill Patient Course

Course Description

Helps “bring technology to the bedside” by offering high quality educational material to help providers from any discipline to learn how to perform a focused bedside ultrasound examination in critically ill patients.

Target Participants

- Intensivists
- Anesthesiologists
- Cardiologists
- Emergency Physicians
- Physician Assistants
- Any medical provider working in a critical or non-critical care environment who have clinical



Fundamental Critical Care Support Course (Adult)

About the Course

A two-day comprehensive course addressing fundamental management principles for the first 24 hours of critical care.

Course Purpose

- To better prepare the non-intensivist for the first 24 hours of management of the critically ill patient until transfer or appropriate critical care consultation can be arranged.
- To prepare nurses and other critical care practitioners as well as non critical care staff to deal with acute deterioration of the critically ill patient.

Course Objectives

- Prioritize assessment needs for the critically ill patient.
- Select appropriate diagnostic tests
- Identify and respond to significant changes in the unstable patient.
- Recognize and initiate management of acute life-threatening conditions.
- Determine the need for expert consultation and/or patient transfer and prepare the practitioner for optimally accomplishing transfer.

✚ LECTURES AND SKILL STATIONS PREPARED UNDER THE AUSPICES OF AMERICAN SOCIETY OF CRITICAL CARE.



Course Description

- Pre & Post tests
- 17 didactic lectures
- Companion textbook
- 9 case based skill stations
- Certificate of successful course completion
- Requirements for successful course completion by ASCC

Target Participants

- Critical Care Fellows
- General Practitioners
- Specialists / Residents
- Respiratory Therapists
- Advanced Practice Nurses
- Family Medicine Physicians
- Emergency Medicine Physicians



Pediatric Fundamental Critical Care Support Simulation Course

Course Description

PFCCS addresses management principles for the first 24 hours of critical care of the pediatric patient. It also provides an excellent foundation for Residents and other trainees and includes:

- ✓ Comprehensive textbook
- ✓ Pre-test
- ✓ Post-test

Topics

- Introduction to course
- Fluids and Electrolytes
- Neurological Emergencies
- Management of Trauma in Children
- Diagnosis and Management of Acute Infections
- Cardiovascular Evaluation and Management of Shock



Target Participants

- Critical Care Fellows
- General Practitioners
- Respiratory Therapists
- Family Medicine Physicians
- Emergency Medicine Physicians
- Pediatrics Specialists / Residents
- Nursing care for complex or potentially unstable patients
- Advanced Practice Nurses with limited pediatric practice



Trainer Preparation Courses



Basic Essential Skills for Clinical Simulation Instructor Course

About the course

This course is mainly intended for education tutors/trainers working in their unit/institution. Tutors/trainers will be working with the participants from varied settings and with different experiences and expectations.

The aim of the course is to build skills, knowledge of teaching, confidence of simulation based educational methods and approaches. It is designed for participants who are interested in becoming educators and those who are active in their area. The objective is to explore the expanding role of High Fidelity Simulation Educators.

Course Description

This continuing education course assists and conveys teaching or training to doctors, nurses, paramedics, and related health professions by means of communication skills, equipments, and high fidelity simulation and it focuses as well on clinical judgment and teamwork on each participants.

Course Objectives

By the end of the course, participants are intended to be able to:

- Build a challenging and safe learning environment
- Understand the principles of simulation-based training characteristics

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- Build your own scenarios in a small group exercise with expert's guidance
 - Practice core instructor roles (observe, process, facilitate, and debrief)
 - Build basic debriefing skills through interactive sessions
 - Meet Simulation interested local educators to build your sociogram that will help you with your program development
 - Count on our ongoing support in the future at the Clinical Skills & Simulation Center and be invited to develop your experience and sharpen your skills in our simulation course

Target Participants

Educators from the following categories:

- Doctors
- Nurses
- Paramedics
- Respiratory Therapists
- Technicians



Principles of Teaching & Learning Workshop

Course Description

This workshop allows an individual to think and develop approaches to principles, teaching, enhancing individual's engagement, and learning through effective curriculum design, and assessment strategies.

Workshop Description

A comprehensive program that involves teaching methods, techniques, technology and skills necessary to manage and assess learning along with teaching practice; and includes:

- The Teaching and Learning Context
- Learning Theories and Principles
- Teaching Strategies and Methods of teaching
- Assessment
- Managing Teaching and Learning
- Evaluating and Developing Own Practice

Course Objectives

At the end of this workshop participants will be able to:

1. Improve teaching by recognizing opportunities in your clinical setting.
2. Incorporate principles about teaching and learning into your teaching.
3. Give effective feedback.
4. Increase confidence in teaching ability.



Target Participants

- Those who intend to teach train or instruct others and who want to gain prior knowledge and understanding of educational principles.
- Teachers, trainers, instructors or facilitators within an educational or commercial environment and want to achieve a qualification which confirms their understanding of teaching and learning principles and practice.



Advanced Trainer Preparation Courses



Advanced Train of Trainer for Clinical Simulation Instructor Course

About the course

This continuing education course emphasize on simulations that focus on clinical judgment, teamwork and inter-disciplinary communications. Participants will be able to learn concepts and skills associated with debriefing, as well as they will actively engage with the tools needed to design and implement a simulation program in their units or institutions.

Course Description

This continuing education course assists and develop advanced simulation based training experience for doctors, nurses, paramedics, and related health professions by means of communication skills, equipment, and high fidelity simulation and allows participants to practice dealing with real students with low student-to-instructor ratio.



Course Objectives

By the end of the course, participants are intended to be able to:

1. Build a challenging and safe learning environment.
2. Apply the principles of simulation-based training characteristics.
3. Get exposed to four well-structured simulation scenarios with expert's guidance.
4. Practice core instructor roles (observe, process, facilitate, and debrief).
5. Build their debriefing skills through different styles after live scenarios of real students' performance.
6. Spend quality educational time with experts in the field to receive feedback on their own performance as simulation facilitators

Target Participants

1. Clinicians, healthcare providers and healthcare educators with interest in Simulation based education with experience.
2. Graduates of the basic train of trainer course in simulation or Essential Skills for Clinical Simulation instructor course, willing to take an active role in simulation training as facilitators.
3. Faculty development in simulation educators with leadership roles in healthcare training programs.



Teaching on the Run

Teacher Training program for Clinicians

About the course

This course is designed to provide quality training on teaching and more effective supervision for clinicians.

This is to enhance teaching in clinical setting and to integrate ideas about teaching and learning. In this course will be addressing there (3) types of workshops which includes; Clinical Teaching, Skills Teaching, and Giving Feedbacks, wherein each workshops uses a variety of small group teaching techniques including discussion, video presentation, small group work and reflection.

Course Objectives

At the end of this workshop participants will be able to:

Clinical Teaching

- Improve teaching by recognizing opportunities in your clinical setting
- Incorporate principles about teaching and learning into your teaching
- Give effective feedback
- Increase confidence in teaching ability



Skills Teaching

- Outline the features of a skill
- Identify cognitive element of skills
- Describe the four step approach to teach skills
- Give effective feedback
- Modify skills teaching in the workplace
- Explain competence and development of expertise

Giving Feedback

- To understand the meaning of the terms
- To understand the purpose for trainees
- To identify what is effective
- To define limitations and difficulties
- To outline the practicalities in your practice

Target Participants

1. Doctors
2. Nurses
3. Midwifery
4. All Allied Health Practitioners