

## FATHER MULLER SIMULATION AND SKILL CENTRE

### AHA COURSE CURRICULUM

#### 1. Basic Life Support

BLS is the foundation for saving lives after cardiac arrest. At our Institute, we follow the AHA's BLS Course, that has been updated to reflect new science in the 2015 American Heart Association Guidelines Update for CPR and Emergency Cardiovascular Care. This video-based, Instructor-led course teaches both single-rescuer and team basic life support skills for application in both in-facility and prehospital settings. We use the International English version of the BLS Course. The training materials have been adapted to include metric units of measure and other references that apply to students outside the U.S. and Canada.

#### *Audience-*

Undergraduate Interns , Post graduates, Interested faculty

#### *Content and Modules*

Importance of high-quality CPR and its impact on survival

Application of the steps of the Chain of Survival

Signs of someone needing CPR

High-quality CPR skills acquisition for adults, children and infants

Importance of early use of an AED

AED skill demonstration

Effective ventilations with a barrier device

Multi-rescuer resuscitation and skill acquisition

Techniques for relief of foreign-body airway obstruction (choking) for adults, children and infants

#### *Student Materials*

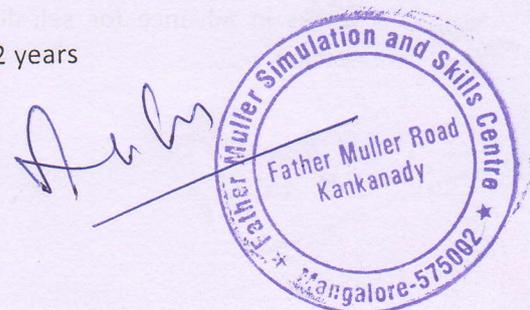
BLS Provider Manual, includes a BLS Reference Card, this book is given to the students at least two weeks in advance for self-directed learning before they come for the instructor led classroom session

#### *Course Format and Exam*

The Instructor-led format ensures that students participate in simulated clinical scenarios and learning stations. Students work with an AHA BLS Instructor to complete BLS skills practice and skills testing. Students also complete a written exam in class and their competencies are tested in the practical skill OSCE based station.

#### *Course Completion Card Type*

American Heart Association BLS course completion card, valid for 2 years



## FATHER MULLER SIMULATION AND SKILL CENTRE

### AHA COURSE CURRICULUM

#### 2. Advanced Cardiac Life Support

Advanced Cardiovascular Life Support (ACLS) builds on the foundation of Basic Life Support (BLS), emphasizing the importance of continuous, high-quality CPR. The hands-on instruction and simulated cases in this advanced course are designed to help enhance their skills in the recognition and intervention of cardiopulmonary arrest, immediate post-cardiac arrest, acute arrhythmia, stroke, and acute coronary syndromes. We use the International English version of the ACLS Course. The training materials have been adapted to include metric units of measure and other references that apply to students outside the U.S. and Canada.

#### *Audience-*

Post graduates, Interested interns and faculty

#### *Content and Modules*

Apply the BLS, Primary, and Secondary Assessments sequence for a systematic evaluation of adult patients

Perform prompt, high-quality BLS, including prioritizing early chest compressions and integrating early automated external defibrillator (AED) use

Recognize and perform early management of respiratory arrest

Discuss early recognition and management of ACS and stroke, including appropriate disposition

Recognize and perform early management of bradyarrhythmias and tachyarrhythmias that may result in cardiac arrest or complicate resuscitation outcome

Recognize and perform early management of cardiac arrest until termination of resuscitation or transfer of care, including immediate post-cardiac arrest care

Model effective communication as a member or leader of a high-performance team

Evaluate resuscitative efforts during a cardiac arrest through continuous assessment of CPR quality, monitoring the patient's physiologic response, and delivering real-time feedback to the team

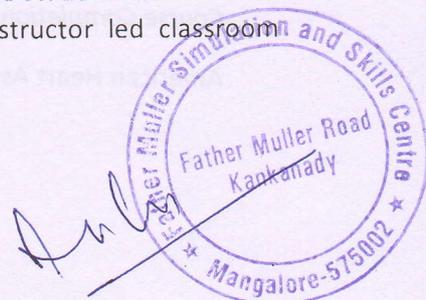
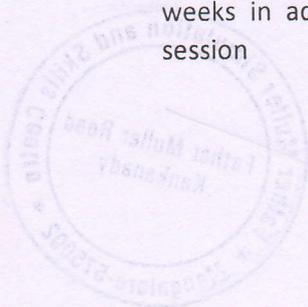
Recognize the impact of team dynamics on overall team performance

Discuss how the use of a rapid response team or medical emergency team may improve patient outcomes

Define systems of care

#### *Student Materials*

ACLS Provider Manual, includes a ACLS Reference Card, this book is given to the students at least four weeks in advance for self-directed learning before they come for the instructor led classroom session



### *Course Format and Exam*

The Instructor-led format ensures that students participate in simulated clinical scenarios and learning stations. Students work with an AHA ACLS Instructor to complete ACLS skills practice and skills testing. Students also complete a written exam in class and their competencies are tested in the practical skill OSCE based station.

### *Course Completion Card Type*

American Heart Association ACLS course completion card, valid for 2 years

## **FATHER MULLER SIMULATION AND SKILL CENTRE**

### **AHA COURSE CURRICULUM**

#### 3. Pediatric Advanced Cardiac Life Support

The AHA's PALS Course has been updated to reflect new science in the 2015 AHA Guidelines Update for CPR and ECC. This classroom, Instructor-led course uses a series of videos and simulated pediatric emergencies to reinforce the important concepts of a systematic approach to pediatric assessment, basic life support, PALS treatment algorithms, effective resuscitation, and team dynamics. The goal of the PALS Course is to improve the quality of care provided to seriously ill or injured children, resulting in improved outcomes. We use the International English version of the ACLS Course. The training materials have been adapted to include metric units of measure and other references that apply to students outside the U.S. and Canada.

#### *Audience-*

Pediatric Post graduates, Interested interns and faculty

#### *Content and Modules*

High-quality Child CPR AED and Infant CPR

Recognition of patients who do and do not require immediate intervention

Recognition of cardiopulmonary arrest early and application of CPR within 10 seconds

Apply team dynamics

Differentiation between respiratory distress and failure

Early interventions for respiratory distress and failure

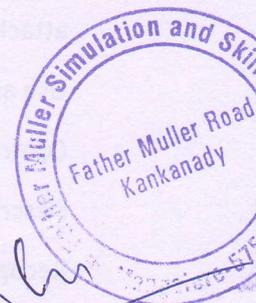
Differentiation between compensated and decompensated (hypotensive) shock

Early interventions for the treatment of shock

Differentiation between unstable and stable patients with arrhythmias

Clinical characteristics of instability in patients with arrhythmias

Post-cardiac arrest management



### *Student Materials*

PALS Provider Manual, includes a PALS Reference Card, this book is given to the students at least four weeks in advance for self-directed learning before they come for the instructor led classroom session

### *Course Format and Exam*

In the Instructor-led format, students work with an AHA PALS Instructor to complete the following:

Actively participate in, practice and complete all learning stations

Complete the open-resource written exam with a minimum score of 84%

Pass the 1- and 2-Rescuer Child BLS with AED and 1- and 2-Rescuer Infant BLS Skills Tests

Pass 2 PALS core case scenarios (1 cardiac and 1 respiratory or shock) as a team leader, providing appropriate medical treatment and demonstrating effective team dynamics

Students also complete a written exam in class and their competencies are tested in the practical skill OSCE based station.

### *Course Completion Card Type*

American Heart Association PALS course completion card, valid for 2 years

## **FATHER MULLER SIMULATION AND SKILL CENTRE**

### **AHA COURSE CURRICULUM**

#### 4. Heartsaver First Aid CPR AED Course

For anyone with limited or no medical training who needs to learn how to respond to and manage a first aid, choking or sudden cardiac arrest emergency in the first few minutes until emergency responders or healthcare professionals take over. Students learn skills such as how to treat bleeding, sprains, broken bones, shock and other first aid emergencies. This course also teaches adult CPR and AED use.

#### *Audience-*

Undergraduate First year students during the foundation Course

#### *Content and Modules*

Describe the key steps in first aid

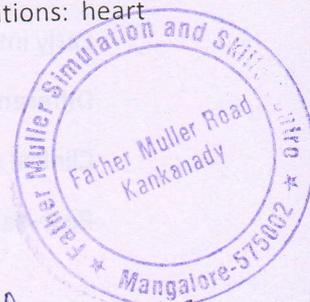
Describe the assessment and first aid actions for the following life-threatening conditions: heart attack, difficulty breathing, choking, severe bleeding, shock, and stroke

Use an epinephrine pen

Control bleeding and bandaging

Describe how to find information on preventing illness and injury

Recognize the legal questions that apply to first aid rescuers



Perform high-quality CPR for an adult

Demonstrate how to use an AED on an adult

Child and Infant CPR

Written exam

*Student Materials*

Heartsaver First Aid CPR AED Student Workbook includes: Heartsaver First Aid CPR AED Quick Reference Guide, Adult CPR AED Reminder Card, Child and infant CPR AED reminder card, this book is given to the students at least two weeks in advance for self-directed learning before they come for the instructor led classroom session.

*Course Format and Exam*

In the Instructor-led format, students participate in video – based lessons and learning stations. Students work with an AHA BLS or Heartsaver Instructor to complete the First Aid, CPR and AED skills practice and skills testing. Students also complete a written exam in class.

*Course Completion Card Type*

AHA Heartsaver First Aid CPR AED course completion card is valid for 2 years.

