

## ALS Provider Course

2015

### Course Program

Format/Content	Time	Module	Objectives
<b>Day 1</b>			
Faculty meeting/ registration	30 min		
Mentor/ mentee	15 min		<ul style="list-style-type: none"> <li>• Introduction to candidates</li> </ul>
Introduction	15 min		<ul style="list-style-type: none"> <li>• Course objectives</li> <li>• Faculty</li> <li>• candidates</li> </ul>
WS: BLS and defibrillation	45 - 60 min	Module BLS	<ul style="list-style-type: none"> <li>• Confirmation cardiac arrest</li> <li>• Delivery of high quality chest compressions</li> <li>• Recognition of need for defibrillation</li> <li>• Safe defibrillation with minimum interruption to chest compressions</li> <li>• Module might be placed after "The deteriorating patient"</li> </ul>
WS: The deteriorating patient	60 min	Module ILS	<ul style="list-style-type: none"> <li>• ABCDE approach to a deteriorating patient in case-based discussions</li> <li>• Identification and treatment of life-threatening problems as they are found</li> <li>• Call for help / escalate / refer to specialist</li> </ul>
Facultative module: WS: RR and 12-lead ECG	45 - 60 min		<ul style="list-style-type: none"> <li>• Indications for ECG monitoring</li> <li>• Effective ECG monitoring</li> <li>• Basic physiology of the ECG</li> <li>• 6-stage approach to rhythm recognition</li> <li>• Recognition of the common 12-lead ECG patterns of acute myocardial infarction</li> </ul>
WS: Airway and i.o. access	45 - 60 min		<ul style="list-style-type: none"> <li>• Principles of establishing and maintaining a patent airway</li> <li>• Provision of adequate ventilation</li> <li>• Indications for insertion of intraosseous (i.o.) access</li> <li>• Insertion of an i.o. device</li> </ul>

Lecture: ALS algorithm ( <i>demo practice for remaining faculty</i> )	30 min		<ul style="list-style-type: none"> <li>• Introduction ALS algorithm</li> <li>• Practice for Demo</li> </ul>
Demo: CAS including Team factors	20 - 30 min		<ul style="list-style-type: none"> <li>• Introduction of the concept of cardiac arrest simulation training</li> <li>• Demonstration of team work and leadership in managing a cardiac arrest</li> <li>• Demonstration of cardiac arrest recognition and management</li> </ul>
CASTeach 1 (VF, pVT)	30 – 45 min		<ul style="list-style-type: none"> <li>• Application of current guidelines and the skills taught in the workshops / skill stations into the practical management of the patient in cardiac arrest</li> <li>• Development of the candidates' skills, attitudes and knowledge required to function as a member of a resuscitation team</li> <li>• Development of the candidates' skills, attitudes and knowledge required to lead a resuscitation team</li> </ul>
CASTeach 2 (Asystole, PEA)	30 min		
CASTeach 3 (Decision making)	45 min		<ul style="list-style-type: none"> <li>• Treatment of the post cardiac arrest syndrome</li> <li>• Transfer of the patient</li> <li>• Assessing prognosis after cardiac arrest</li> </ul>
CASTeach 4 (Post Resus Care)	30 - 45 min		<ul style="list-style-type: none"> <li>• Considerations involved in the decision to stop a resuscitation attempt</li> <li>• Implications of DNAR orders and advanced directives</li> <li>• Ethical and legal implications in regard to resuscitation</li> <li>• Involvement of relatives</li> </ul>
Course dinner			<ul style="list-style-type: none"> <li>• Mentoring</li> <li>• Feedback</li> </ul>

Day 2	Time	Module	Objectives
Faculty meeting Registration/ ALS Video	30 min if needed		<ul style="list-style-type: none"> <li>Preparation Faculty</li> <li>Rehearsal candidates</li> </ul>
Mentor groups	15 min		<ul style="list-style-type: none"> <li>Mentoring</li> <li>Feedback</li> <li>Introduction if standalone module</li> </ul>
WS: BLS, manual defibrillation	30 min	Module ALS	<ul style="list-style-type: none"> <li>Mandatory standalone module</li> </ul>
CASTeach 5 (Non-Technical skills)	45 min		<ul style="list-style-type: none"> <li>Rehearsal</li> <li>TEAM</li> <li>Situational Awareness</li> <li>Decision making</li> <li>Leadership</li> <li>Teamwork and interprofessional skills</li> <li>Communication</li> <li>Team membership</li> </ul>
WS: Bradycardia, Pacing	30 - 45 min		<ul style="list-style-type: none"> <li>Recognition of bradycardia and differentiation between the different degrees of heart block</li> <li>Principles of bradycardia management</li> <li>Indications for cardiac pacing</li> <li>Different methods for cardiac pacing</li> <li>Safe and effective application of non-invasive, transcutaneous electrical pacing</li> </ul>
WS: Tachycardia, Cardioversion	30 - 45 min		<ul style="list-style-type: none"> <li>Recognition of types of tachycardia, defined by regularity and QRS width</li> <li>Principles of tachycardia management</li> <li>Indications for electrical and pharmacological cardioversion</li> <li>Safe and effective synchronised cardioversion</li> </ul>
WS: ABG, Capnography	45 min		<ul style="list-style-type: none"> <li>Normal ranges for arterial blood gas values</li> <li>5-step approach to arterial blood gas interpretation</li> <li>Some of the common causes of arterial blood gas abnormalities</li> </ul>

			<p>and what to do to correct them</p> <ul style="list-style-type: none"> <li>• The basic physiology of carbon dioxide (CO<sub>2</sub>) and the normal concentration in blood and expired air</li> <li>• The terminology associated with CO<sub>2</sub> monitoring</li> <li>• The systems used to monitor end tidal CO<sub>2</sub></li> <li>• The structure of a normal capnography waveform</li> <li>• The role of waveform capnography during CPR</li> </ul>
WS: Special circumstances (3 modules)	90 min		<ul style="list-style-type: none"> <li>• 6 scenarios according to local setting</li> </ul>
CASTeach 6 (bringing it all together)	60 + min		<ul style="list-style-type: none"> <li>• Per arrest management</li> <li>• Team factors</li> <li>• Preparation for assessments</li> </ul>
CASTest	60 min		<ul style="list-style-type: none"> <li>• Recognition and intervention in the management of a simulated patient at risk of cardiac arrest</li> <li>• Leading a team in the resuscitation of a simulated patient in cardiac arrest</li> <li>• Demonstrating knowledge and application of current resuscitation guidelines</li> <li>• Demonstrating an understanding of the importance of post-resuscitation care and stabilisation following a return of spontaneous circulation</li> </ul>
MCQ	60 min		