

## Paediatric Critical Care Levels 1 & 2 Course

### Day 1

Session Title	Indicative Content
<b>Welcome and introductions</b>	<ul style="list-style-type: none"><li>• Introductions to the course including aims and objectives</li><li>• Introduction to Faculty</li><li>• Icebreaker - meet your fellow students</li><li>• Expectations</li><li>• Moodle</li></ul>
<b>Blood gases</b>	<ul style="list-style-type: none"><li>• Normal Blood gases</li><li>• Abnormalities found in children with critical illness</li><li>• Practice examples</li></ul>
<b>Respiratory workshop</b>	<ul style="list-style-type: none"><li>• Series of case studies exploring different elements of paediatric respiratory critical care</li><li>• Content to include: relevant physiology, altered pathophysiology, patient assessment, blood gas analysis, treatment options, indications and practicalities of intubation and ventilation</li></ul>

Example Only

## Paediatric Critical Care Levels 1 & 2 Course

### Day 2

Session Title	Indicative Content
<b>Cardiovascular workshop</b>	<ul style="list-style-type: none"> <li>• Brief revision of cardiac anatomy</li> <li>• Cardiac cycle, cardiac output, cardiac conduction</li> <li>• Assessing cardiovascular status</li> <li>• Series of case studies exploring different elements of paediatric cardiovascular critical care</li> <li>• Content to include relevant physiology, altered pathophysiology, patient assessment, treatment options.</li> </ul>
<b>Shock</b>	<ul style="list-style-type: none"> <li>• Causes / stages / presentation - ABCDE assessment</li> <li>• Recognising the early and later signs of shock</li> <li>• NICE Redflags dehydration and shock</li> <li>• Scenarios – shock worksheets- all to complete Feedback Day 3</li> </ul>
<b>Introduction to vasoactive drugs</b>	<ul style="list-style-type: none"> <li>• Short introduction to vasoactive drugs using Powerpoint</li> <li>• Vaso active drug worksheet – all to complete -Feedback Day 4</li> <li>• Fluids article – self directed study plus quiz on Moodle - Feedback Day 3</li> <li>• Fluids Calculations – Optional</li> </ul>
<b>Course assessment details</b>	<ul style="list-style-type: none"> <li>• Guidance of what is required for completion of competencies to required standard</li> <li>• Guidance on what is required for completion of academic poster assessment</li> <li>• Paediatric Critical Care Society (PCCS) accreditation</li> </ul>

Exam Only

## Paediatric Critical Care Levels 1 & 2 Course

### Day 3

Session Title	Indicative Content
<b>Acute kidney injury workshop</b>	<ul style="list-style-type: none"> <li>Series of case studies exploring different elements of paediatric renal critical care</li> </ul> Content to include relevant physiology, altered pathophysiology, patient assessment, treatment options, management of AKI including renal replacement options <ul style="list-style-type: none"> <li>Quiz</li> </ul>
<b>Fluids and shock</b>	<ul style="list-style-type: none"> <li>Any queries re fluid article/Moodle quiz (self-directed study set on day 2) and fluid calculation answers (optional task)</li> <li>Scenarios</li> </ul>
<b>Childhood cancer and oncology emergencies</b>	<ul style="list-style-type: none"> <li>What is childhood cancer</li> <li>Incidence and survival of childhood cancer</li> <li>Tumour lysis syndrome</li> <li>Neutropenic sepsis</li> </ul>

Example only

## Paediatric Critical Care Levels 1 & 2 Course

### Day 4

Session Title	Indicative Content
<b>Congenital heart disease</b>	<ul style="list-style-type: none"> <li>• Foetal Circulation</li> <li>• Congenital Heart disease in Children</li> <li>• Case studies</li> <li>• Quiz</li> </ul>
<b>Sepsis</b>	<ul style="list-style-type: none"> <li>• Causes of paediatric sepsis</li> <li>• Presentation of sepsis</li> <li>• Management of sepsis</li> </ul>
<b>Vaso active drugs</b>	<ul style="list-style-type: none"> <li>• Going through self-directed worksheet as a whole group</li> </ul>
<b>Management of major burns</b>	<ul style="list-style-type: none"> <li>• Definition, cause and incidence of major burns</li> <li>• Initial treatment in ED</li> <li>• On-going management in PICU and PHDU</li> <li>• Fluid management</li> </ul>

Example Only

## Paediatric Critical Care Levels 1 & 2 Course

### Day 5

Session Title	Indicative Content
<b>Neuro workshop</b>	<ul style="list-style-type: none"> <li>• Revision of main structures of the brain and CNS, cranial nerves , flow of CSF</li> <li>• Assessment scales and their draw backs AVPU, GCS</li> <li>• Series of case studies exploring the assessment of the child with neurological dysfunction</li> <li>• Content to include relevant physiology, altered pathophysiology, patient assessment, treatment options,</li> <li>• Quiz</li> </ul>
<b>Trauma management</b>	<ul style="list-style-type: none"> <li>• Incidence of major trauma</li> <li>• Mechanism of injury relating to type of injury (including NAI)</li> <li>• Initial management</li> <li>• Monitoring and management in the first 24 hours following major trauma</li> </ul>
<b>Care of a Critically Ill Child with a Learning Disability</b>	<ul style="list-style-type: none"> <li>• Care of a critically ill child with learning disabilities</li> <li>• Communication with non-verbal patients</li> </ul>
<b>Neuro workshop</b>	<ul style="list-style-type: none"> <li>• Revision of main structures of the brain and CNS, cranial nerves , flow of CSF</li> <li>• Assessment scales and their draw backs AVPU, GCS</li> <li>• Series of case studies exploring the assessment of the child with neurological dysfunction</li> <li>• Content to include relevant physiology, altered pathophysiology, patient assessment, treatment options,</li> <li>• Quiz</li> </ul>

Examined Only

## Paediatric Critical Care Levels 1 & 2 Course

### Day 6

Session Title	Indicative Content
<b>Preparation for transfer</b>	<ul style="list-style-type: none"> <li>• Preparing a child and family for transport</li> <li>• Moving the critically ill child</li> </ul>
<b>LTV</b>	<ul style="list-style-type: none"> <li>• Principles of CPAP/BIPAP</li> <li>• NIV</li> <li>• Conditions leading to LTV</li> </ul>
<b>Tracheostomy</b>	<ul style="list-style-type: none"> <li>• Understanding why a tracheostomy may be necessary</li> <li>• Clinical conditions</li> <li>• Managing the child with a tracheostomy</li> </ul>
<b>Human factors</b>	<ul style="list-style-type: none"> <li>• Explore human factors - scenarios</li> <li>• Developing leadership skills in Critical Care – First steps</li> </ul>
<b>DKA Introduction</b>	<ul style="list-style-type: none"> <li>• Pathophysiology of DKA</li> <li>• Set online work in preparation of unfolding scenario on day 8 (BSPED guidance, quiz, articles, You Tube video – all found on Moodle)</li> </ul>

Example Only

## Paediatric Critical Care Levels 1 & 2 Course

### Day 7

Session Title	Indicative Content
<b>Surgical emergencies</b>	<ul style="list-style-type: none"> <li>• Recognition and diagnosis of surgical emergencies –</li> <li>• Immediate treatment of acute surgical Emergencies</li> <li>• Surgical treatment</li> </ul>
<b>Wellbeing</b>	<ul style="list-style-type: none"> <li>• A reflective self-care session looking at techniques</li> </ul>
<b>Pain</b>	<ul style="list-style-type: none"> <li>• What is Pain?</li> <li>• Pain assessment</li> <li>• Pharmacological treatment of pain</li> <li>• Groupwork</li> </ul>
<b>Tutorial and self-study</b>	<ul style="list-style-type: none"> <li>• For those completing the assessment</li> <li>• self-study for those not doing a poster</li> </ul>

Example Only

## Paediatric Critical Care Levels 1 & 2 Course

### Day 8

Session Title	Indicative Content
<b>Unfolding scenario DKA</b>	<ul style="list-style-type: none"><li>• Use the 2020 BSPED guidance to care for a child in moderate and severe DKA</li></ul>
<b>Acute mental health considerations</b>	<ul style="list-style-type: none"><li>• Deliberate Self Harm</li><li>• Eating Disorders</li><li>• Escalating Challenging Behaviour</li></ul>
<b>Quizzes</b> <b>Catch-up &amp; evaluations</b> <b>Tutorials</b>	<ul style="list-style-type: none"><li>• Blood gases</li><li>• What are you going to take away from the course</li><li>• Anything else</li></ul>

Example Only