### 1.0 General

**1.1** Day one of the course may be delivered in a live ‘remote’ online or videoconference like format to complete the cognitive aspects of the course. Using the standard ARC ALS2 Slides in a live educational format to permit group learning and interaction.

If day one of the course is divided into two half sessions on consecutive days, it must include a review of completed material to date at the start of the second session.

Day two of the course is the face-to-face day. This will include all the skills stations and Cardiac Arrest Scenario Teaching. The practical/psychomotor /kinaesthetic components of the course will be taught to the standard timings.

The course should ideally be delivered over two or three consecutive days. The dates set for remote and face-to-face learning must be so the course will last no longer than five days from the first session to the course closure.

**1.2** The Course centre is responsible for selection of candidates and to ensure remote resources for the course be available to all candidates and faculty. Candidates must ensure they have their time quarantined to attend all remote and face-to-face learning. Faculty must ensure time is quarantined for remote session delivery and attending the face-to-face date.

**1.3** Recording of the session may only be completed with permission from all candidates and faculty/session participants.

Recording may only be accessed by the course participants, (candidates and faculty) prior to the face-to-face day. This recording may be used to assist in delivering a ‘catch-up’ session. All recordings must be confirmed as deleted at the start of day two (the face-to-face component) of the course and communicated to all participants.

**1.4** A course programme with the complete schedule must be available to all participants in advance. The programme must include adequate breaks and opportunity for questions.

**1.5** The Course Director and Medical Lead must be available for the full duration of the course, including the delivery of the remote educational content.

Either the Course Director or Medical Lead must be present during the remote educational delivery. This includes all live videoconference/online delivery.

**1.6** A risk assessment for the face-to-face component of the course must be performed by the course centre.

Course Centres will need to complete a risk assessment for the course facilitation and make a local judgement if it safe to continue. This assessment and decision to facilitate the course should include Organisational Executive and possibly others - for example Health and Safety, Infection Control and Occupational Safety teams in completing this evaluation.

**1.7** Participants exhibiting symptoms typical of flu, a cold or have been in close contact outside the healthcare setting with someone who has the SARS-CoV-2 infection, should consider excluding themselves from the course.

**1.8** Participants should be reminded to cough/sneeze into a tissue and dispose of this into a bin immediately, washing hands afterwards. Alternatively, coughing/sneezing into the bent elbow if no tissue available.

**1.9** Expired air ventilation must not be included in the course.

**1.10** Prepare for the most common technical issues with any video/web conferencing software:
- Participants cannot see
- Participants cannot hear
- Background noise and mic feedback
- Disconnection intermittent/permanent
2.0 **ALS2 course centres**

### 2.1 Remote Education Delivery

#### 2.1.1 Education must be delivered in a live real-time delivery format with all candidates in attendance. It may be delivered via Videoconference, Zoom, Cisco, Adobe Connect, Microsoft Teams, Bluejeans or other live streaming/videoconference platforms. Compatibility across multiple operating systems for participants may need to be considered in choice of the videoconferencing platform.

It is advised that Course Centres test the platform to be used prior to the course. This should include aspects such as functionality, connectivity, broadcasting, texting functions, questioning/alert options, video and audio quality. Any polling function to allow interactive responses may also need to be checked. Course Centres are responsible for the connectivity and functioning of the platform.

Test audio and video. Be sure light is on your face and that your background (and desktop) are free of distractions. Practice looking at your webcam, not the screen when presenting. Practice sharing of your screen. Anticipate potential challenges including the possibility that candidates do not have ideal connections and are not able to hear and see everything perfectly.

The instructor delivering the session must have the ability to deliver the education in a live real-time format, share/display the slides, live whiteboard and other educational aids to the other participants in a visual form.

#### 2.1.2 Candidates must be able to attend the remote component of the course in full videoconference format. Dial in with audio alone is not practical for the sessions. It is advised that the time is quarantined to attend the sessions.

It is recommended that the environment where remote education is free of distractions.

Candidate must be aware of the platform being used and prepare with required software prior to the remote sessions. Course Centres will need to include this when communicating with the candidates and offer guidance on how to operate the platform. This may include an advanced session to connect all or some participants to test and educate on how to use the platform. Candidate will need to check data plans if using home internet to avoid excess charges.

Candidates must always be visible and/or immediately responsive to the faculty during the session.

#### 2.1.3 Interactive sessions are encouraged. Candidate must have ability to ask questions to the presenter. This can be via audio direct, flagging or text options. The second faculty member attending may be used to moderate the text in questions and alert the presenter. This is particularly important for candidate who do not feel familiar with the format or have limited ability to pose questions via audio.

Use of polling functions to ask questions of candidates and record answers is encouraged. (e.g. Zoom, Microsoft Forms/Teams, Bluejeans, Slido). Some platforms also enable breakout rooms for smaller groupwork and whiteboard/annotation for candidate to contribute to the session. These may be considered in planning of sessions.

#### 2.1.4 Opportunity for questions must be provided at the end of each session.

#### 2.1.5 Course Centres may need to model, and coach your participants on, basic online education etiquette:

- ask people to turn on their cameras
- look at the camera in order to make eye contact when they're talking
- mute their microphones when not contributing
- use the ‘Chat’ field for constructive comments or questions only
- Make sure everyone can hear the speaker
  - use a microphone when you speak
  - make sure the microphone is on and close enough to pick up your voice
- avoid side conversations
### 2.2 Course reassessment

#### 2.2.1 An ARC may reassess approval of any course at any time.

#### 2.2.2 The ARC may wish to review the remote course content and must be provided with an access invite to the sessions.

The National Course Coordinator or an ARC Representative may attend the Remote education to provide assurance that the course standards are being adhered to. They will observe sessions without contribution unless invited to do so by the Instructor/Session Lead or Course Director. Feedback may be sought or offered by the National Course Coordinator or an ARC Representative in confidence to the appropriate faculty members and Course Director.

### 3.0 Course organisation

#### 3.1 Candidate eligibility

##### 3.1.1 Candidate eligibility is unchanged from the standard 2-day face-to-face course

##### 3.1.2 Candidate must be able to access the remote learning in an environment with minimal distraction. This includes video feed ability to view the presentations. There is always a potential to experience temporary (or ongoing) connection issues or bandwidth problems that can affect the ability to participate.

To optimise local network consideration may be needed in disconnection of other devices using bandwidth such as streaming services or live gaming platforms. If internet speed is slow via wireless systems, consider using a hardwired connection.

Quitting unused applications and browser tabs may improve ability for local computer processing. The use of headphones may assist with audio quality in reduction of echo and feedback. Caution candidates that they may need to check headphones (if wireless) have adequate charge for the sessions.

If connected via telephone for audio and another device via video it would be advisable to highlight potential lag between them during reception to the candidates and allow for this with longer pauses for questions/responses.

##### 3.1.3 Candidate should be able to connect via telephone as a temporary measure in case of connectivity issues. They should not attend all sessions using this access and reconnect via video promptly.

##### 3.1.4 Candidates must attend the same complete course. This includes both remote learning and face-to-face sessions of the same course. If one component (remote or face-to-face session) is missed they will need to repeat the whole course.

If a single session is missed in the remote component of the course the Course Director may facilitate a repeat session for the candidate should time be possible. The recording may be played locally by the Course Director and screen shared to the candidate. Sharing of recording files is not recommended to ensure candidate privacy.

##### 3.1.5 Any candidate who needs to be self-isolating or displaying flu like illness cannot attend the face-to-face component. This includes anyone who is awaiting results for SARS-CoV-2 screening.

#### 3.2 Pre-course organisation including Candidate preparation:

Course Centres should provide the following advice to candidates concerning pre-course preparation

##### 3.2.1 The Course Director must complete the course notification form thereby confirming and accepting responsibility that the course will run in accordance with the criteria set out in these regulations.

##### 3.2.2 Course approval is via electronic submission and changes notified to the ARC Executive Officer as soon as possible ([arc@resus.org.au](mailto:arc@resus.org.au)). This includes the confirmation a risk assessment has been conducted locally and course confirmed by the Organisational/Lead for education.
### 3.2.3 The ARC will not provide refunds or credit on unused registrations. If a course candidate does not attend registrations may not be transferred to a future course. All candidates who have received manuals and are registered on the course as not attending must be included in the results.

### 3.2.4 All candidates must be informed that they are to ensure a safe educational environment by safeguarding course confidentiality. This includes no recording of remote sessions locally to ensure privacy of all participants.

Rural and remote area candidates may require additional time and support in these videoconference sessions. Confirming internet speeds/videoconference reception prior to the course for candidates external to metropolitan areas will be essential for Course Centres in ensuring remote course viability.

### 3.2.5 Candidates and faculty must be informed of the platform to be used in the remote sessions, with time and instructions to prepare (software download and installing) prior to the course.

### 3.2.5 A mechanism must be in place for candidates to promptly notify the Course Director of unexpected disconnections or connectivity issues. This may be via telephone or other communication that is monitored during the remote sessions.

### 3.2.6 At the end of each session candidates will indicate they were able to participate in that session by means of verbal confirmation or text/icon/polling process.

### 4.0 Faculty

#### 4.1 Medical/Course Director/Faculty requirements

### 4.1.1 The Course Director and/or Medical lead must be present throughout the course but do not need to instruct on all sessions.

### 4.1.2 Each course must have a multidisciplinary faculty that is reflective of the candidate group.

Faculty approval is for the whole course. The same faculty must be used for or the remote sessions and the face-to-face component of the course.

As many as the faculty as possible should contribute towards delivery of remote sessions.

During remote sessions at least two faculty full instructor members must be present and participating in the session. Participation by the second instructor may be by observing only.

One of these may be the Course Director or Medical Lead that is required to participate.

### 4.1.3 Full Instructors may recertify on the course if they attend the course in full and present sessions in both remote and face-to-face components.

Recertifying Instructors will complete the formal assessments during the face-to-face component of the course. They should receive informal feedback on all other sessions they deliver.

### 4.1.4 Instructor Candidates may participate and undertake assessment in the remote course format. They may only complete one of their two courses in this format of course delivery. Instructor Candidates must attend the full course.

If this is the first course for the Instructor Candidate, they may not advance to full instructor status from the single remote course alone.

Instructor Candidates are to attend all the remote sessions. They are not required to deliver any sessions as a first course Instructor Candidate. Second course Instructor Candidates may choose to deliver a remote session.

### 4.1.5 During face-to-face sessions the standard regulations will apply to faculty requirements.
### Programme

5.1 The course can be delivered with the platform for remote sessions of the Course Centres choosing. Course Centres will remain responsible for the functioning of the platform during the course and resolution of issues arising from it.

Candidates with connectivity issues resulting in non-attendance of the remote sessions will require local resolution. This may include transfer to a future course.

5.2 Timing for the faculty meeting and registration at the beginning of the course should be decided locally.

5.3 The teaching materials are from the standard ALS2 Course.

Pre-course MCQ must be completed prior to the face-to-face day and handed in. Candidate must receive feedback on their pre-course MCQ.

Remote sessions present the cognitive material of the course. Sessions may be split at natural points to retain candidate engagement, (e.g. ALS lecture split into Algorithm - technical aspects and Reversible Causes identification and treatment, Rhythm Workshop – rhythm strip six step tool and 12 lead ECG’s).

The End Tidal Carbon Dioxide session may be presented in remote format to reduce overall timing in the face-to-face airway station.

Four Special circumstances sessions must be presented. The course must include:
- Asthma
- Anaphylaxis

Course centres may produce additional supporting materials congruent with the ALS2 manual for these sessions.

Slide sets and teaching materials must not be sent to candidates.

5.4 Timing of face-to-face sessions may be reduced proportionately from the standard program for the candidate numbers.

5.5 During the face-to-face sessions it is recommended that candidate groups remain in the same physical environment/room and faculty change between those groups regularly.

5.6 Assessment criteria are unchanged.

Candidates should be aware of their ongoing performance throughout the course.

Candidates who the faculty deem unlikely to pass the ALS2 summative assessments should be counselled. They may be offered ALS1 certification prior to testing if successful in skill stations:
- Initial Assessment
- High Quality CPR and Defibrillation (may be reassessed in AED if required)
- Airway

### Post-course requirements

6.1 The candidates’ results should be uploaded to the ARC within 1 week of the course date and must include the current email address of the candidate.

6.2 Candidate will complete an electronic course evaluation on the ARC website. The course centre does not need to collect this locally. The results will be made available to the whole faculty.

The evaluation will include additional questions from standard evaluations regarding:
- Evaluation of course format.
- Candidate assessment of instructors.
- Technology used and evaluation from candidate perspective.
### Remote Day 1: Example Program

**Faculty meeting and registration – live presentation online pre-course**

- Sessions should allow question and interaction from candidates
- Course Director and/or Medical lead must be actively online for all sessions
- One faculty member observing (can be Course Director/Medical Lead) to assist and monitor for submitted text questioning

<table>
<thead>
<tr>
<th>Duration</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 min</td>
<td>Lecture: Introduction to the ALS course</td>
</tr>
<tr>
<td>25 min</td>
<td>Lecture: Recognition and prevention of deterioration using the ABCDE approach</td>
</tr>
<tr>
<td>25 min</td>
<td>Lecture/Workshop: Cardiac causes of cardiac arrest</td>
</tr>
<tr>
<td>45 min</td>
<td>Lecture: ALS Algorithm</td>
</tr>
<tr>
<td>25 min</td>
<td>Lecture/Workshop: Post Resuscitation</td>
</tr>
<tr>
<td>30 min</td>
<td>Workshop: Rhythm recognition using 6 step approach</td>
</tr>
<tr>
<td>20 min</td>
<td>Workshop: Rhythm recognition – 12 lead ECG</td>
</tr>
<tr>
<td>15 min</td>
<td>Workshop: Introduction to EtCO₂ in cardiac arrest using Airway workshop slides</td>
</tr>
<tr>
<td>45 min</td>
<td>Workshop: Arterial Blood Gas Analysis (in cardiac arrest scenarios)</td>
</tr>
<tr>
<td>30 min</td>
<td>Workshop: Introduction to management of Bradycardia</td>
</tr>
<tr>
<td>30 min</td>
<td>Workshop: Introduction to management of Tachyarrhythmias</td>
</tr>
<tr>
<td></td>
<td><strong>Special Circumstances</strong> – introduction to modifications of ALS Algorithm</td>
</tr>
<tr>
<td>20 min</td>
<td>Asthma</td>
</tr>
<tr>
<td>20 min</td>
<td>Anaphylaxis</td>
</tr>
<tr>
<td>20 min</td>
<td>Choice of: Pregnancy/Hypovolaemia/Electrolyte/Hypothermia + Immersion</td>
</tr>
<tr>
<td>20 min</td>
<td>Choice of: Pregnancy/Hypovolaemia/Electrolyte/Hypothermia + Immersion</td>
</tr>
<tr>
<td>15 min</td>
<td>Questions</td>
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</table>

6 hours 35 minutes Online activity
### Remote Day 2: Example Program

Candidates stay in same room – faculty swap each session

<table>
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<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>10 min</td>
<td><strong>Welcome and introduction(s)</strong> hand in pre-course MCQ</td>
</tr>
<tr>
<td>20 min</td>
<td><strong>Review of online sessions</strong> (completed in small groups with mentors)</td>
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</table>

#### Skill Stations

**Associated Resuscitation Skills - Airway**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 min</td>
<td>Group 1</td>
</tr>
<tr>
<td></td>
<td>The ABCDE approach to assessment Inc. IO</td>
</tr>
<tr>
<td>50 min</td>
<td>Group 1</td>
</tr>
</tbody>
</table>

**MORNING BREAK (Faculty meeting) mentor meeting**

**High quality CPR and Defibrillation**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 min</td>
<td>Group 1</td>
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</table>

#### Cardiac Arrest Simulations Teaching Sessions (CASTeach) 1-5

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
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<tbody>
<tr>
<td>30 min</td>
<td>CASTeach 1.1 and 1.2</td>
</tr>
<tr>
<td>30 min</td>
<td>CASTeach 2.1 and 2.2</td>
</tr>
<tr>
<td>30 min</td>
<td>CASTeach 3.1 and 3.2</td>
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</table>

**LUNCH BREAK and faculty meeting and mentor meeting/remediation opportunity**

**Review Synchronised shock and pacing functions**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>30 min</td>
<td>CASTeach 4.1 and 4.2</td>
</tr>
<tr>
<td>30 min</td>
<td>CASTeach 4.3 and 5.1</td>
</tr>
<tr>
<td>30 min</td>
<td>CASTeach 5.2 and 5.3</td>
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**AFTERNOON BREAK and faculty meeting**

**Testing**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>60 min</td>
<td>MCQ Group 1 and 2</td>
</tr>
<tr>
<td>60 min</td>
<td>CASTest Group 1 and 2</td>
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**8 hours**

**Teaching and assessment**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td></td>
<td>Faculty meeting</td>
</tr>
<tr>
<td></td>
<td>Course Closure</td>
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