Precourse Preparation

Instructor Tips

- The time you invest in preparation is important. Prepare well, and anticipate questions and challenges
- Anticipate what could happen, and have a plan for possible challenges such as
  - Instructor does not arrive
  - Equipment fails/malfunctions
  - Batteries are dead (bring extras)

30 to 60 Days Before Class

- Determine course specifics
  - Target audience
  - Number of students
  - Special needs or equipment
- Review and reserve ACLS equipment
- Schedule the room(s) as soon as dates are determined
- Schedule additional instructors, if needed (Table 1)

Table 1. Class Size and Student-to-Instructor Ratios for Course Activities

Activity	Recommended size or ratio
Large-group interactions	The size of the group is limited by the size of the room and the number of video monitors or projection screens.
Learning stations and High-Performance Teams: Megacode Testing	6:1 up to a maximum of 8:1 The student-to-instructor ratio should be 6 students to 1 learning station, with 1 instructor for each station. In some cases, a maximum of 8 students to 1 instructor to 1 learning station may be used.

Optional

Instructors or Training Centers may consider offering an ACLS preparation course days or weeks before the ACLS Course to ensure that students understand

- ECGs (rhythm analysis)
- Pharmacology
- Airway management
- BLS skills

At Least 3 Weeks Before Class

- Confirm room reservations and setups
- Send students a precourse letter with student materials

- Ensure that students understand that precourse preparation is necessary for successful participation in the ACLS Course
- Provide students information on the precourse self-assessment and precourse work (interactive video lessons)
- Confirm additional instructors
- **Research local treatment protocols and prepare for discussion**

Day Before Class

- Set up the room
- Coordinate the plan with additional instructors, if needed for class size
- Use the Equipment List (found in Part 2 of this manual as well as in this lesson plan) as a checklist to ensure that all equipment is available and tested for operation (including feedback devices and their accessory devices, such as tablet computers and smartphones)
  - Have extra batteries on hand for equipment
- Check with your Training Center Coordinator to determine any Training Center–specific paperwork needed
- Ensure that all course paperwork is in order, such as
  - ACLS Course roster
  - Testing checklists
  - Learning station checklists

Day of Class

- Make sure all equipment is working
- Greet students as they arrive to help make them feel at ease
- Have students fill out the course roster. Rosters may vary between Training Centers; refer to the Instructor Network (**www.ahainstructornetwork.org**). Required: Make sure all students have passed the ACLS Precourse Self-Assessment and have completed all of the ACLS precourse work (except for the traditional course; see sample agenda) before entering the class

Equipment List

This table lists the equipment and supplies needed to optimally conduct this course. This includes a code cart for in-hospital providers and a jump kit and defibrillator unit for prehospital providers. The code cart or jump kit should contain the equipment and supplies listed in Table 2.

Table 2. Classroom Equipment and Supplies

Equipment and supplies	Quantity needed	Learning/testing station where equipment needed
Paperwork		
Course roster	1/class	Beginning of course
Listing of student groups	1/class	All
Name tags	1/student and instructor	All
Course agenda	1/student and instructor	All
Course completion card	1/student	End of course
ACLS Provider Manual	1/student and instructor	All
Handbook of ECC (optional)	1/student and instructor	All
ACLS posters	1 set/class	All
Precourse letter	1/student	Precourse
Airway Management Skills Testing Checklist	1/student	Airway Management
Adult High-Quality BLS Skills Testing Checklist	1/student	High-Quality BLS
High-Performance Teams: Megacode Testing Checklist	1/student	Megacode Testing
ACLS Provider Course exam (if not taking online)	1/student	Exam
Blank exam answer sheet (if not taking online)	1/student	Exam
Exam answer key (if not taking online)	1/class	Exam
ACLS Instructor Manual (including case scenarios) and ACLS Lesson Plans	1/instructor	All
Learning station checklists	1/student	High-Quality BLS; Airway Management; Preventing Arrest: Bradycardia; Preventing Arrest: Tachycardia (Stable and Unstable); High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; and High-Performance Teams: Megacode Practice
Audiovisual Equipment		

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Equipment and supplies	Quantity needed	Learning/testing station where equipment needed
Course video: TV with DVD player or computer with internet access/streaming capability and projection screen	1/station	High-Performance Teams
CPR and AED Equipment		
Adult CPR manikin with shirt	1/every 3 students	High-Quality BLS
Adult airway manikin	1/every 3 students	Airway Management
Adult manikin (airway, CPR, and defibrillation capable)	1/every 6 students	Technology Review; Preventing Arrest: Bradycardia; Preventing Arrest: Tachycardia (Stable and Unstable); High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
CPR/short board	1/station	High-Quality BLS; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Code cart or jump kit	1/station	Technology Review; Bradycardia, Tachycardia; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Stopwatch/timing device (ventilation timing or CCF)	1/instructor	Airway Management; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Countdown timer	1/instructor	All
Feedback device (required)	1/station	High-Quality BLS; Airway Management; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
AED trainer with adult AED training pads	1/every 3 students	High-Quality BLS

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Equipment and supplies	Quantity needed	Learning/testing station where equipment needed
Step stools to stand on for CPR	1/every 3 students	High-Quality BLS; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Ultrasound (optional)	1 every 6 students	High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Airway and Ventilation		
Bag-mask device, reservoir, and tubing	1/every 3 students	All but High-Quality BLS; Preventing Arrest: Bradycardia; and Preventing Arrest: Tachycardia (Stable and Unstable)
Oral and nasal airways	1 set/station	All but High-Quality BLS; Preventing Arrest: Bradycardia; and Preventing Arrest: Tachycardia (Stable and Unstable)
Water-soluble lubricant	1/station	All but High-Quality BLS; Preventing Arrest: Bradycardia; and Preventing Arrest: Tachycardia (Stable and Unstable)
Nonrebreathing mask	1/every 3 students	All but High-quality BLS
Waveform capnography	1/station	Airway Management; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Rhythm Recognition and Electrical Therapy		
ECG simulator/rhythm generator	1/station	All but High-Quality BLS and Airway Management
Electrodes	1/station	All but High-Quality BLS and Airway Management
Monitor capable of defibrillation/ synchronized cardioversion, transcutaneous pacing	1/station	All but High-Quality BLS and Airway Management
Pacing pads, defibrillator pads, or defibrillator gel (if pads are not used)	1/station	All but High-Quality BLS and Airway Management
Spare batteries or power cord	1/station	All but High-Quality BLS and Airway Management

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Equipment and supplies	Quantity needed	Learning/testing station where equipment needed
Spare ECG paper	1/station	All but High-Quality BLS and Airway Management
Recommended Drugs, Drug Packages, or Drug Cards (Appendix)		
Epinephrine	1/station	Preventing Arrest: Bradycardia; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Atropine sulfate	1/station	Preventing Arrest: Bradycardia; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Amiodarone and/or lidocaine	1/station	Preventing Arrest: Bradycardia; Preventing Arrest: Tachycardia (Stable and Unstable); High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Adenosine	1/station	Preventing Arrest: Tachycardia (Stable and Unstable); High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Dopamine	1/station	Preventing Arrest: Bradycardia; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Saline fluid bags/bottles	1/station	All but ACS, Stroke, Airway Management, and High-Quality BLS
IV pole	1/station	All but High-Quality BLS and Airway Management
Safety		
Sharps container (if using real needles)	1/station	All but High-Quality BLS and Airway Management

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Equipment and supplies	Quantity needed	Learning/testing station where equipment needed
Advanced Airways (must choose endotracheal tube and at least 1 supraglottic device)		
Endotracheal tube and all equipment and supplies necessary for correct insertion	1/station	Airway Management; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Laryngeal tube and supplies necessary for correct insertion	1/station	Airway Management; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Laryngeal mask airway and supplies necessary for correct insertion	1/station	Airway Management; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Regionally available supraglottic airway and all equipment and supplies necessary for correct insertion	1/station	Airway Management; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Cleaning Supplies for Use Between Student Practice and After Every Class		
Manikin cleaning supplies	Varies	All

Note: Consider an emergency department or intensive care unit bed and/or stretcher to place manikins on for a more realistic case-based scenario during appropriate learning stations.

Lesson START
Welcome, Introductions, and
Course Administration

15 minutes

Instructor Tips

- Knowing what you want to communicate, why it's important, and what you want to have happen as a result is critical to the success of your presentation
- Be flexible: Be ready to adjust your lesson plan to students' needs and focus on what seems to be more productive rather than sticking to your original plan
- Introductions: Use a visual aid (flip chart, whiteboard) to display introduction requirements (name, occupation, specialty, place of practice)

Discussion

In a large group, with all students, do the following:

- Introduce yourself and additional instructors, if needed
- Invite students to introduce themselves and ask them to provide the following information:
  - Name
  - Occupation
  - Specialty
  - Place of practice
- As students are introducing themselves, document their occupation, specialty, etc. This information will help instructors tailor future case scenarios and lessons
- Explain that the course is interactive
  - Use of the provider manual, learning station checklists
  - Skills testing checklists
  - Hands-on learning stations
  - Explain the use of **feedback devices** (audiovisual) during the **learning and testing stations** with cardiac arrest or respiratory arrest. Also explain how **timing** is a critical component of the learning and testing stations
- Explain that parts of the course are somewhat physically strenuous
  - For example, Lesson 2 involves adult CPR, which will require students to perform 2 minutes of compressions, which could be physically strenuous
- Ask that anyone with a medical concern, such as knee or back problems, speak with one of the instructors
- Explain the layout of the building, including bathrooms and fire exits
- Advise students where an AED can be found in the building
- Tell students to silence cell phones
- If a call needs to be answered, tell students to answer it in the hallway
- Tell the students, "We are scheduled to end at _____"

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Regionally available supraglottic airway and all equipment and supplies necessary for correct insertion	1/station	Airway Management; High-Performance Teams: Cardiac Arrest and Post–Cardiac Arrest Care; High-Performance Teams: Megacode Practice; and High-Performance Teams: Megacode Testing
Cleaning Supplies for Use Between Student Practice and After Every Class		
Manikin cleaning supplies	Varies	All

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