

Dear AMLS Student,

Thank you for your interest in the National Association of Emergency Medical Technician's Advanced Medical Life Support (AMLS) Class hosted at the UCLA Center for Prehospital Care. This course provides students with an advanced look at medical emergencies faced in the prehospital setting and evidence based practice.

This two-day course will be held at the UCLA facility at 5220 Pacific Concourse Drive, Los Angeles, California, 90045 and a map is included for reference. Please note students attending the class Monday thru Friday will incur a \$10 per day parking fee, payable upon leaving the parking lot.

Students will be engaged in both lecture and scenario based skills sessions so should plan accordingly and dress appropriately. The AMLS textbook will be used throughout the course and student should purchase a copy of the paper or electronic version (<https://www.psglearning.com/catalog/productdetails/9781284040920>).

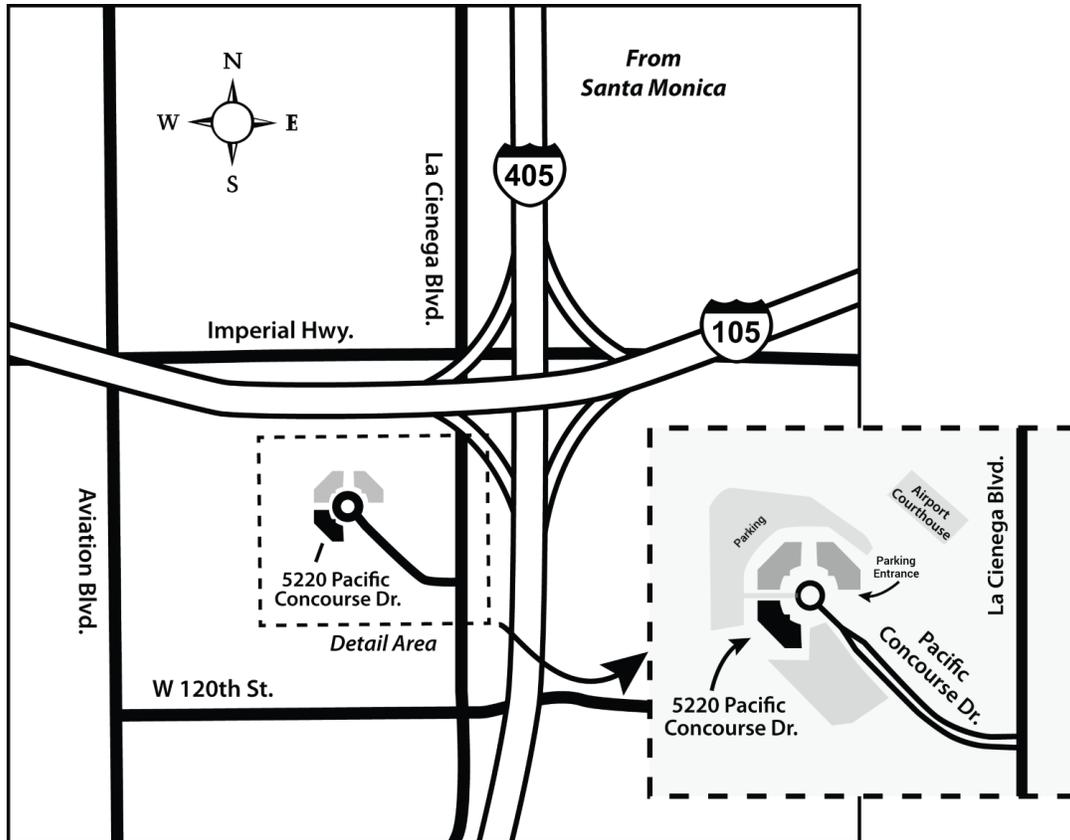
Breakfast and lunch are not provided for the course however ample time will be given for lunch so students can travel to get food and refrigerators are available on site if students bring their own lunch.

Please complete the included pretest and bring it to the first day of class. Attendance is required for successful completion. The course will conclude with a scenario based medical assessment and written exam, both must be completed with a passing score for course completion.

We look forward to having you in class. If you have questions please contact Michael Kaduce, Mkaduce@mednet.ucla.edu.

UCLA Paramedic Education Program

5220 Pacific Concourse, Los Angeles, CA 90045 • Suites 135 & 250



From the 405 North & 405 South

Southbound: Take the **Century Blvd East/Imperial Hwy** exit ramp, and stay to the left. Proceed to the Imperial Hwy exit, and turn **left** onto **La Cienega** from the offramp. Turn **right** on **Pacific Concourse**, the first stoplight.

Northbound: Exit **El Segundo Blvd.** toward El Segundo. Turn **left** onto **El Segundo Blvd.** Pass under the freeway and turn **right** onto **La Cienega**. After about 0.7 miles, turn **left** on **Pacific Concourse**.

From the 105 West

Take the exit for **La Cienega Bl/Aviation Blvd.** Turn **right** onto **Imperial Hwy.** Turn **right** on **La Cienega.** Turn **right** on **Pacific Concourse.**

Transit

The area is served by Metro Rail Green Line, Metro Local line 120, Metro Shuttle line 625, Santa Monica Bus line 3, Culver City Bus line 6, Beach Cities Transit line 109, and Gardena municipal bus line 5.

Parking

When approaching the three Pacific Concourse buildings, turn right at the traffic circle and enter the parking lot by taking a ticket at the kiosk. After entering the parking lot, turn left and go as far left as possible to park behind 5220 Pacific Concourse. The daily parking rate is \$10.



AMLS ALS PRETEST

VERSION 1.21

Advanced Medical Life Support

ALS Pre-Test Version 1.21

1. A 28 year old female is being evaluated for an acute onset of an alteration in mentation. She complained of a stiff neck and persistent headache. Vital signs are P112, R22 and regular, BP 144/88, SpO₂95% and T 102.3°F (39°C). The healthcare provider should observe for which complication?
 - A. Sepsis
 - B. Seizure
 - C. Cardiac arrest
 - D. Internal bleeding

2. A 45 year old patient is found supine on the floor of the Triage area. Healthcare providers note pinpoint pupils, shallow respirations and vomitus in and around the mouth. What course of action should be implemented next?
 - A. Initiate an IV and administer naloxone
 - B. Supplemental oxygen and suction
 - C. Obtain a blood glucose level
 - D. Begin bag-mask ventilation

3. Patients with a history of chronic bronchitis that present with shortness of breath are likely to have which condition?
 - A. Pulmonary embolism
 - B. Angina pectoris
 - C. Angioedema
 - D. Hypertensive crisis

4. Acute Respiratory Distress Syndrome (ARDS) is characterized by what pathological change?
 - A. Excessive mucus production
 - B. Inflammation of the visceral pleura
 - C. Breakdown of the alveolar-capillary membrane
 - D. Accumulation of fluid between the pleural layers

5. An anxious male complains of a sore throat, fever, chills, dental pain and dyspnea. The patient has a firm, red pronounced swelling in the sublingual anterior throat area and tongue. What diagnosis is most likely?
 - A. Croup
 - B. Tonsillitis
 - C. Angioedema
 - D. Ludwig's angina

6. Patients on mechanical ventilation may have hypoxemia due to alveolar collapse from mucous plugging. The best treatment for this is:

- A. Increase oxygen concentration to 100%
 - B. Increase tidal volume
 - C. Increase respiratory rate
 - D. Administer PEEP
7. Anaphylaxis is most associated with which physiological event?
- A. Hemorrhage
 - B. Vasodilation
 - C. Bradycardia
 - D. Hypertension
8. An elderly patient in an assisted living facility presents with a diminished level of consciousness and elevated white blood count. Assessment reveals pale, clammy skin and a urinary catheter with dark colored urine. Vital signs are P 132, R 38 and shallow, BP 78/46, SpO₂ 91% and T 100.8°F (32.8°C). What classification of shock is the patient most likely experiencing?
- A. Hypovolemic
 - B. Cardiogenic
 - C. Distributive
 - D. Obstructive
9. Healthcare providers are assessing a patient with pronounced jugular vein distention and muffled heart tones. Vitals are P 128, R 26, BP 74/52. What classification of shock should be suspected?
- A. Hypovolemic
 - B. Cardiogenic
 - C. Distributive
 - D. Obstructive
10. During compensatory shock, the renin-angiotensin-aldosterone system is activated to cause a/an:
- A. Increase in preload, afterload and re-absorption of sodium
 - B. Decrease in preload, afterload and re-absorption of sodium
 - C. Increase in myocardial contractility
 - D. Vasodilation and sodium retention
11. A 42 year old patient with a history of rheumatoid arthritis is taking glucocorticoids. Over the past two weeks, she complains of chronic fatigue, weakness, and loss of appetite with weight loss. Lab results indicate hyponatremia and hyperkalemia. What underlying diagnosis is suspected?
- A. Adrenal insufficiency
 - B. Diabetic ketoacidosis
 - C. Hypothyroidism
 - D. Rhabdomyolysis
12. Which condition should the healthcare provider consider to usually be a non-emergent, non-life threatening illness?

- A. Acute coronary syndrome
 - B. Thoracic outlet syndrome
 - C. Esophageal tear
 - D. Aortic dissection
13. Healthcare providers should use extreme caution with nitroglycerin when ST elevation is present in which ECG leads?
- A. V1, V2
 - B. V3, V4
 - C. I, aVL
 - D. II, III, aVF
14. Which is a high-risk factor for intracerebral hemorrhage?
- A. Marijuana
 - B. Coronary artery spasm
 - C. Bradycardia
 - D. Cocaine drug abuse
15. What is the initial treatment for a patient experiencing Hyperosmolar Hyperglycemic Nonketotic Syndrome (HHNS)?
- A. Crystalloid IV fluid resuscitation
 - B. Administration of dextrose
 - C. Administration of insulin
 - D. Fluid bolus of 5% Dextrose in Water (D5W)
16. What condition is most likely to cause respiratory acidosis?
- A. Anxiety/panic attack
 - B. narcotic overdose
 - C. Methanol ingestion
 - D. Diabetic ketoacidosis
17. What is the most effective treatment for an unconscious patient in respiratory acidosis?
- A. Assisted bag-mask ventilation
 - B. Sodium bicarbonate
 - C. Supportive care
 - D. IV fluid bolus
18. An autoimmune disease which produces antibodies that mimic the role of TSH and cause an increase in thyroid hormones is:
- A. Addison's disease
 - B. Myxedema coma
 - C. Grave's disease
 - D. Diabetic ketoacidosis

19. Glucagon may not be effective treatment for a patient with hypoglycemia if they also have which underlying illness?
- A. Alcoholism
 - B. Cholecystitis
 - C. Pancreatitis
 - D. Hypothyroidism
20. A 24 year old has completed a triathlon on a hot, humid day. The athlete complains of a severe headache, muscle cramps and abdominal pain. As the patient history is obtained, the athlete becomes lethargic. What underlying electrolyte disturbance should the healthcare provider most likely suspect?
- A. Magnesemia
 - B. Hyponatremia
 - C. Hypocalcemia
 - D. Hypokalemia
21. What is the sign on the ECG that will indicate a patient is experiencing hyperkalemia?
- A. Flattened T waves
 - B. Peaked T waves
 - C. Narrowing of QRS complex
 - D. Presence of Osborn wave
22. An 82 year old alcoholic complains of nausea, non-bloody vomiting and severe epigastric and right upper quadrant pain that radiates to the back. Palpation reveals epigastric tenderness without peritoneal signs. What working diagnosis should be considered most likely?
- A. Acute pancreatitis
 - B. Intestinal (bowel) obstruction
 - C. Peptic ulcer
 - D. Mallory-Weiss Syndrome
23. A 23 year old male complains of a productive cough, fever, chills and pleuritic chest pain that has worsened over 3 days. A physical exam reveals unilateral wheezing with shallow respirations. Vitals are P 128, R 26, BP 144/88, SpO₂ 90%, and T 102°F (38.8°C). What treatment should be performed?
- A. 12 Lead
 - B. Beta blockers
 - C. Initiate STEMI protocols
 - D. Supplemental oxygen and immediate transport
24. A patient with suspected gallbladder disease is asked to take a deep breath while the provider presses upward into the upper right quadrant. If the patient ceases inspiration due to increase pain while being examined, this is known as:
- A. Cullen's sign
 - B. Rovsing's sign
 - C. Murphy's sign

- D. Kehr's sign
25. The patient is alert and oriented presenting with hypotension, bradycardia, normal capillary refill and warm, dry pink skin. These are cardinal signs of which type of distributive shock?
- A. Anaphylactic
 - B. Neurogenic
 - C. Septic
 - D. Toxic shock syndrome
26. During what period of the communicable disease process will antibodies begin to reach detectable levels and the infected blood will test positive for exposure to a pathogen?
- A. Communicability
 - B. Incubation
 - C. Disease
 - D. Latent
27. The patient presents with a history of headache, weight loss, chest discomfort, night sweats and a persistent cough for several weeks. Which infectious disease is most likely occurring?
- A. Novel H1N1 influenza
 - B. Meningococcal meningitis
 - C. Tuberculosis
 - D. Malaria
28. A lethargic patient presents with dilated pupils and vital signs of P 122, R 26 and BP 130/80. He admits to excessive ingestion of diphenhydramine. What response is the cause for the presenting signs and symptoms?
- A. Sympathomimetic
 - B. Anticholinergic
 - C. Cholinergic
 - D. Opioid
29. Organophosphate poisoning will present with which signs and symptoms?
- A. Dry mucous membranes and shock
 - B. Altered mental status and flushed skin
 - C. Euphoria and tachycardia
 - D. Salivation and incontinence of urine and liquid stool
30. What medication classification should be administered to an uncooperative, agitated patient?
- A. Opioid
 - B. Nitrate
 - C. Benzodiazepine
 - D. Sympathomimetic

31. A patient presents with mildly decreased mental status, slow respirations, bradycardia, hypotension, has a blood sugar of 42mg/dl (2.3mmol). This is most likely caused from excessive ingestion of:
- A. Calcium channel blockers
 - B. Tricyclic antidepressants
 - C. Beta blockers
 - D. Salicylates
32. The patient complains of a deep burning discomfort diffusely throughout the epigastrium. This is an example of which type of pain?
- A. Somatic
 - B. Visceral
 - C. Referred
 - D. Radiating
33. A 24 year old female presents with lower right quadrant abdominal pain. Her skin is hot to the touch and she exhibits a Psoas Sign. She complains of nausea and vomiting for 2 days. What diagnosis is suspected?
- A. Pancreatitis
 - B. Appendicitis
 - C. Gastroenteritis
 - D. Ectopic pregnancy
34. A known chronic alcoholic complains of the constant, severe mid-epigastric pain, nausea and blood-streaked emesis. The patient has a temperature of 101.9°F (38.8°C) and severe abdominal tenderness. What underlying diagnosis should be suspected?
- A. Gastritis
 - B. Pancreatitis
 - C. Diverticulitis
 - D. Perforated gastric ulcer
35. What component of a patient's past medical history is most helpful in considering myocardial infarction as a working diagnosis?
- A. Daily intake of an aspirin
 - B. History of CHF
 - C. Recent hip surgery
 - D. Familial heart disease history
36. A patient describes an "aching" sensation in his chest. It occurred suddenly while resting and radiates to the jaw. He self administered 1 nitroglycerin tablet without relief and the 12 lead reveals a normal sinus rhythm with ST elevation in leads II, III, and aVF. What working diagnosis is most likely?
- A. Anterior wall myocardial injury
 - B. Inferior wall myocardial injury
 - C. Costochondritis
 - D. Pericarditis

37. Healthcare providers are managing a patient presenting with substernal chest discomfort. They describe the pain as "pressure-like" and it radiates to the jaw and left arm. The discomfort subsides with rest, oxygen and administration of nitroglycerin. What is the most likely working diagnosis?
- A. Pleurisy
 - B. Angina pectoris
 - C. Myocardial infarction
 - D. Pulmonary embolism
38. Which infectious disease must have oxygen present to survive?
- A. Tuberculosis
 - B. Lung abscess
 - C. Botulism
 - D. Tetanus
39. Which best practices help to prevent the spread of infectious disease?
- A. Alcohol based antimicrobial equipment cleaning and handwashing
 - B. Goggles, gown and gloves for all patient contact
 - C. Facial protection and gloves for all patient contact
 - D. Handwashing before and after all patient contact and standard precautions.
40. Continuous positive airway pressure would be most appropriate in treating which patient?
- A. 43 year old with decreased level of consciousness with respiratory difficulty
 - B. 22 year old with severe asthma and not responding to nebulizer treatments
 - C. 38 year old with carpal pedal spasms, clear lung sounds and respirations 40 times per minute
 - D. 55 year old with jugular vein distention and BP 90/60
41. A patient has attempted suicide by ingesting ethylene glycol about 20 hours prior to arriving for treatment. Lung sounds reveal bilateral crackles and respirations of 30 with symptoms of pulmonary edema and cyanosis of the lips. The ECG reveals ventricular tachycardia. Which stage of ethylene glycol poisoning has occurred?
- A. 1
 - B. 2
 - C. 3
 - D. 4
42. A patient with a history of Grave's disease presents with anxiety, profuse sweating and a palpable goiter. Vitals are P 151, R 35 and labored, BP 84/42. Which working diagnosis is most likely?
- A. Myxedema
 - B. Cocaine toxicity
 - C. Thyrotoxicosis

- D. Diabetes insipidus
43. A patient experiences unilateral facial weakness and droop, garbled speech, altered sense of taste and no extremity weakness. The patient has a history of Lyme's disease. What condition is the patient likely experiencing?
- A. Meningitis
 - B. Bell's palsy
 - C. Ischemic stroke
 - D. Hemorrhagic stroke
44. Which component of the history is most crucial when assessing a potential stroke patient?
- A. Time of onset
 - B. Last oral intake
 - C. Medication allergies
 - D. Familial risk factors
45. The determination of a working diagnosis is dependent on the provider's assessment, critical thinking and _____ skills.
- A. Patter recognition
 - B. Written documentation
 - C. Radio communication
 - D. Treatment intervention
46. When performing a patient assessment, what information provides the most essential information in determining a working diagnosis?
- A. Ordering and correctly interpreting all diagnostic information
 - B. A thorough head-to-toe examination on all patients
 - C. Obtaining information from bystanders
 - D. Medical history
47. Clinical reasoning requires the healthcare provider to:
- A. Adequately communicate to peers regarding evidence-based practice
 - B. Order and interpret diagnostic testing results
 - C. Adequately perform a physical assessment
 - D. Process relevant information, filter out irrelevant information
48. According to the AMLS Assessment Pathway, determining whether a patient is "Sick or Not Sick" is initially done which component of the assessment process?
- A. Detailed assessment
 - B. First impression
 - C. Initial observation
 - D. Ongoing management

49. Select an example of a communication barrier that impairs an efficient and thorough assessment process.
- A. The patient speaks clearly and is shy
 - B. The patient's family is present in the home
 - C. You and your patient communicate fluently in the Spanish language
 - D. The patient can't find his hearing aid
50. Healthcare providers are treating an unresponsive patient who overdosed on lorazepam. What intervention should be initiated?
- A. Airway support
 - B. Administration of naloxone
 - C. Gather a SAMPLE history
 - D. Supplemental oxygen with nasal cannula