



North Central State College
MASTER SYLLABUS
2019-2020

- A. Academic Division: Health Sciences
- B. Discipline: Respiratory Care
- C. Course Number and Title: RESP 2330 Advanced Life Support Procedures
- D. Course Coordinator: Tricia Winters, BBA, RRT, RCP
Assistant Dean: Melinda Roepke, MSN, RN

Instructor Information:

- Name: [Click here to enter text.](#)
- Office Location: [Click here to enter text.](#)
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- E. Credit Hours: 1
Laboratory: 3 hours
- F. Prerequisites: Health Care Provider CPR Certification
- G. Syllabus Effective Date: Fall, 2019
- H. Textbook(s) Title:

Neonatal Resuscitation

- Author: American Heart Association
- Copyright Year: 2012
- Edition: 6th
- ISBN #: 9781581104981

Advance Cardiac Life Support, Provider Manual

- Author: American Heart Association
- Copyright Year: 2011
- Edition:
- ISBN #: 978-1616690106

Pediatric Advance Life Support, Provider manual

- Author: American Heart Association
- Copyright Year: 2011
- Edition:
- ISBN #: 978-1616691127

- I. Workbook(s) and/or Lab Manual: None
- J. Course Description: This course consists of the American Heart Association's Advanced Cardiovascular Life Support (ACLS), Pediatric Advance Life Support (PALS), and Neonatal Resuscitation Program

(NRP). When the student successfully completes this course he/she will be issued certification cards for each discipline from the American Heart Association. The course is taught by certified AHA instructors. The laboratory hours are arranged. The course will be offered during the term as three separate modules, each two days (approximately 16 hours) dates and times to be announced.

K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	
Communication – Speech	
Intercultural Knowledge and Competence	
Critical Thinking	
Information Literacy	
Quantitative Literacy	

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

Outcomes	Assessments – How it is met & When it is met
1. Describe ACLS: adult resuscitation: patient assessment, setup and ventilation via endotracheal tube, setup and ventilation via mask, adult CPR airway and ventilation, adult CPR compressions	Written examination produced by the AHA at the end of the ACLS course week 2
2. Perform an ACLS “Mega code”	Laboratory demonstration and check-off at the end of the ACLS course week 2
3. Describe PALS: pediatric resuscitation: patient assessment, setup and ventilation via endotracheal tube, setup and ventilation via mask, pediatric CPR airway and ventilation, pediatric CPR compressions	Written examination produced by the AHA at the end of the PALS course Week 4
4. Perform successfully a PALS “Mega code”	Laboratory demonstration and check-off at the end of the PALS course week 4
5. Describe NRP: neonatal resuscitation: patient assessment, manual ventilation via endotracheal tube, setup and ventilation via mask, newborn assessment/resuscitation, neonatal CPR	Written examination produced by the AHA at the end of the NRP course Week 5
6. Perform successfully a NRP “Mega code”	Laboratory demonstration and check-off at the end of the NRP course week 5

M. Topical Timeline (Subject to Change):

1. ACLS

- a. Systematic Approach to BLS and ACLS
 - 1) BLS survey
 - 2) ACLS secondary survey
- b. Effective resuscitation team dynamics
 - 1) Roles of the team leader
 - 2) Elements of effective resuscitation team dynamic
- c. ACLS core cases
 - 1) Respiratory arrest case
 - 2) VF treated with CPR case
 - 3) VF/pulseless VT case
 - 4) Asystole case
 - 5) Acute coronary syndrome case
 - 6) Bradycardia case
 - 7) Unstable tachycardia case
 - 8) Stable tachycardia case
 - 9) Acute stroke case

2. PALS

- a. Pediatric assessment
 - 1) General assessment
 - 2) Primary assessment
 - 3) Life-threatening conditions
 - 4) Secondary assessment
 - 5) Assessment of circulatory abnormalities
- b. Recognition of respiratory distress and failure
 - 1) Impairment of oxygenation and ventilation in respiratory problems
 - 2) Physiology of breathing in respiratory problems
 - 3) Categorization of respiratory problems and severity
 - 4) Classification of respiratory problems by types
- c. Management of respiratory distress
 - 1) Initial management of respiratory distress
 - 2) Management of upper airway obstruction
 - 3) Specific management recommendations for upper airway obstruction etiology
 - 4) Management of lower airway obstruction
 - 5) Specific management recommendations for lower airway obstruction etiology
 - 6) Management of lung tissue disease
 - 7) Specific management recommendations for lung tissue disease by etiology
 - 8) Management of disordered control of breathing
- d. Recognition of shock
 - 1) Physiology of shock
 - 2) Categorization of shock by severity
 - 3) Categorization of shock by type
 - a) Hypovolemic shock
 - b) Distributive shock
 - c) Septic shock
 - d) Anaphylactic shock
 - e) Neurogenic shock
 - f) Cardiogenic shock
 - g) Obstructive shock
- e. Management of shock
 - 1) Goals of shock management
 - 2) Fundamentals
 - 3) General management of shock
 - 4) Advance management of shock

- 5) Fluid therapy
 - 6) Glucose
 - 7) Management of specific categories of shock
 - a) Hypovolemic shock
 - b) Distributive shock
 - c) Septic shock
 - d) Anaphylactic shock
 - e) Neurogenic shock
 - f) Cardiogenic shock
 - g) Obstructive shock
 - f. Recognition and management of brady-arrhythmias and tachy-arrhythmias
 - 1) Recognition of brady-arrhythmias
 - 2) Management of brady arrhythmias: pediatric bradycardia with pulse algorithm
 - 3) Tachycardia
 - 4) Sinus tachycardia
 - 5) Supraventricular tachycardia
 - 6) Comparison of ST and SVT
 - 7) Atrial flutter
 - 8) Ventricular tachycardia
 - 9) Management of tachy-arrhythmias
 - 10) Emergency interventions
 - 11) Pharmacology therapy
 - 12) Pediatric tachycardia with adequate perfusion algorithm
 - 13) Pediatric tachycardia with pulses and poor perfusion algorithm
 - g. Recognition and management of cardiac arrest
 - 1) Presentations of cardiac arrest
 - 2) Causes of cardiac arrest
 - 3) Recognition of cardiac arrest
 - 4) Management of cardiac arrest
 - 5) Basic life support
 - 6) Pediatric advance life support in cardiac arrest
 - 7) Pediatric pulseless arrest algorithm
 - 8) Pediatric cardiac arrest special circumstances
 - 9) Social issues and ethics in resuscitation
 - 10) Predictors of outcomes after cardiac arrest
 - h. Post-resuscitation management
 - 1) Respiratory system, cardiovascular system, PALS post-resuscitation of shock algorithm, Administration and maintenance of fluids, neurological system, renal system, gastrointestinal system, hematologic system
 - 2) post resuscitation transport
 - 3) mode of transport and transport team composition
 - 4) transport checklist
 - i. Pharmacology
 - 1) Adenosine, albumin, albuterol, alprostadil, amiodarone, atropine, calcium chloride, dexamethasone, dextrose, diphenhydramine, dobutamine, epinephrine, furosemide, hydrocortisone, inamrinone, ipratropium bromide, lidocaine, magnesium sulfate, methylprednisone, milrinone, naloxone, nitroglycerin, norepinephrine, oxygen, procainamide, sodium bicarbonate, sodium nitroprusside, terbutaline sulfate
3. NRP
- a. Overview and principles of resuscitation
 - b. Initial steps in resuscitation
 - c. Use of resuscitation devices for positive pressure ventilation
 - d. Chest compressions
 - e. Endotracheal intubation
 - f. Medications and dosage used in resuscitation
 - g. Special considerations

- h. Resuscitation of babies born preterm
- i. Ethics and care at the end of life
- j. Mega code

N. Course Assignments:

1. Laboratory discussion
2. Lab experiments and demonstrations
3. Mega Code performance check-off examination
4. Written examination

O. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93-100	A	4.00	Superior
90-92	A-	3.67	Superior
87-89	B+	3.33	Above Average
83-86	B	3.00	Above Average
80-82	B-	2.67	Above Average
77-79	C+	2.33	Average
73-76	C	2.00	Average
70-72	C-	1.67	Below Average
67-69	D+	1.33	Below Average
63-66	D	1.00	Below Average
60-62	D-	0.67	Poor
00-59	F	0.00	Failure

P. Grading and Testing Guidelines:

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Q. Examination Policy:

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R. Class Attendance and Homework Make-Up Policy:

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S. Classroom Expectations:

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T. College Procedures/Policies:

Important information regarding College Procedures and Policies can be found on the [syllabus supplement](#) located at <https://sharept.ncstatecollege.edu/committees/1/curriculum/SiteAssets/SitePages/Home/SYLLABUS%20SUPPLEMENT.pdf>

The information can also be found Choose an item.