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.
- **Office Hours:** Click here to enter text.
- **Phone Number:** Click here to enter text.
- **E-Mail Address:** Click here to enter text.

E. **Credit Hours:** 1  
**Laboratory:** 3 hours

F. **Prerequisites:** Health Care Provider CPR Certification

G. **Syllabus Effective Date:** Fall, 2017

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:

<table>
<thead>
<tr>
<th>College-Wide Learning Outcome</th>
<th>Assessments - - How it is met &amp; When it is met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication – Written</td>
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<tr>
<td>Communication – Speech</td>
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<tr>
<td>Intercultural Knowledge and Competence</td>
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<tr>
<td>Critical Thinking</td>
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<td>Information Literacy</td>
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<tr>
<td>Quantitative Literacy</td>
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</table>

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Assessments – How it is met &amp; When it is met</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>Written examination produced by the AHA at the end of the ACLS course week 2</td>
</tr>
<tr>
<td>2. Perform an ACLS “Mega code”</td>
<td>Laboratory demonstration and check-off at the end of the ACLS course week 2</td>
</tr>
<tr>
<td>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</td>
<td>Written examination produced by the AHA at the end of the PALS course Week 4</td>
</tr>
<tr>
<td>4. Perform successfully a PALS “Mega code”</td>
<td>Laboratory demonstration and check-off at the end of the PALS course week 4</td>
</tr>
<tr>
<td>5. Describe NRP: neonatal resuscitation: patient assessment, manual ventilation via endotracheal tube, setup and ventilation via mask, newborn assessment/resuscitation, neonatal CPR</td>
<td>Written examination produced by the AHA at the end of the NRP course Week 5</td>
</tr>
<tr>
<td>6. Perform successfully a NRP “Mega code”</td>
<td>Laboratory demonstration and check-off at the end of the NRP course week 5</td>
</tr>
</tbody>
</table>
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 dynamics
   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, methylprednisolone, 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:

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

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:

Attendance Requirements: All students are required to attend all scheduled classes and examinations. Each faculty member has the right to establish regulations regarding attendance that he/she considers necessary for successful study.

Students who do not attend classes may be administratively withdrawn from those classes. However, failure to attend classes does not constitute withdrawal, and students are expected to process a formal withdrawal though the Student Records Office in Kee Hall.
Student engagement requirements:
Student engagement is based on the “active pursuit” of learning which can be measured by class attendance, class participation (in class or online), taking required quizzes/examinations, and submission of work assignments or papers. Student engagement consists of a student attending at least 60% of the class sessions (there should be attendance throughout the term) and/or completing 75% of the assignments listed on the syllabus at the midpoint in the term. Exceptions can be made when there is on-going communication between the student and faculty member. The communication must be documented and the faculty member and student must be in agreement regarding the exception. Students not meeting the expectation will be administratively withdrawn from class. If a student believes he/she was administratively withdrawn in error, he/she may file an appeal. Being administratively withdrawn may have program and financial aid implications.

Academic Misconduct is any activity that tends to compromise the academic integrity of the college, or subvert the educational process. Examples of academic misconduct include, but are not limited to:

1. Violation of course or program rules as contained in the course syllabus or other information provided to the student; violation of program requirements as established by departments and made available to students.

2. Plagiarism including, but not limited to, submitting, without appropriate acknowledgment, any written, visual or oral material that has been copied in whole or in part from the work of others (whether such source is published or not) even if the material is completely paraphrased in one’s own words. This includes another individual’s academic composition, compilation, or other product, or a commercially prepared paper. Plagiarism also includes submitting work in which portions were substantially produced by someone acting as a tutor or editor.

   Such practices constitute plagiarism regardless of motive. Those who deny deceitful intent, claim not to have known that the act constituted plagiarism, or maintain that what they did was inadvertent are nevertheless subject to penalties when plagiarism has been confirmed.

3. Cheating and dishonest practices in connection with examinations, papers and projects, including but not limited to using unauthorized notes, study aids or information on an examination; obtaining help from another student during an examination; taking an exam or doing work for another student; providing one’s own work for another student to copy and submit as his/her own; or allowing another student to do one’s work and then submitting the work as one’s own. Also included would be altering a graded work after it has been returned, then submitting the work for re-grading; or submitting identical or similar papers for credit in more than one course without prior permission from the course instructors.

4. Fabrication including but not limited to falsifying or inventing any information, data or citation; presenting data that were not gathered in accordance with defined appropriate guidelines, and failing to include an accurate account of the method by which data were collected.

5. Obtaining an Unfair Advantage including, but not limited to stealing, reproducing, circulating, or otherwise gaining access to examination materials prior to the time authorized by the instructor; unauthorized collaborating on an academic assignment; taking, hiding or altering resource material; or undertaking any activity with the purpose of creating or obtaining an unfair advantage over another student’s academic work.

6. Aiding and Abetting Academic Dishonesty including, but not limited to providing material, information or other assistance to another person with the knowledge that such aid could be used in any of the violations stated above, or providing false information in connection with any inquiry regarding academic integrity.

7. Alteration of Grades or Marks including but not limited to, action by the student in an effort to change the earned credit or grade.
In addition, cases of academic dishonesty may involve photocopied materials. Materials used may fall under the Copyright Act. Violations of said Act may subject the user and/or the College to sanctions.

**Statement on Disabilities:** Any student who requires reasonable accommodations related to a disability should inform the course instructor and the Coordinator of Specialized Services (Room 138 in Kee Hall; phone 419-755-4727).

Students who encounter difficulty in any of their courses are encouraged to visit the Tutoring Resource Center (Room 119 in Fallerius Technical Education Center) for tutoring assistance, and the Student Success Center (Room 136 in Kee Hall) for academic assistance, advising services, referrals for personal counseling and Learning Disability (LD) Testing.

**Statement on Withdrawals:** As a student, you are expected to attend class. If you are unable or choose not to attend class, or if for whatever reason you are unable to keep up with the requirements of a course, you need to officially drop the class at the Student Records Office. Refund dates and withdrawal dates will vary slightly from term to term. Contact the Student Records Office for applicable dates. Additionally these dates are posted on the academic calendar available on the college’s website, [www.ncstatecollege.edu](http://www.ncstatecollege.edu), under the Academics heading on the home page and are available at the Student Records Office in Kee Hall. Students should go to the Student Records Office (Room 142 in Kee Hall) to process their withdrawal from any class.

If you choose to walk away from your class without officially withdrawing from it, the faculty member teaching the class must grade your classroom performance on the material available to him or her. This normally results in an "F" grade. An "F" grade can lower your grade point average considerably depending on the total credits accumulated.