Syllabus

DATE OF LAST REVIEW: 02/2013
CIP CODE: 24.0101
SEMESTER: Departmental Syllabus
COURSE TITLE: Neonatal Resuscitation
COURSE NUMBER: ALHT/RSCR0294
CREDIT HOURS: 3
INSTRUCTOR: Departmental Syllabus
OFFICE LOCATION: Departmental Syllabus
OFFICE HOURS: Departmental Syllabus
TELEPHONE: Departmental Syllabus
PREREQUISITES: Respiratory Therapy or Nursing student; or permission of the instructor

REQUIRED TEXT AND MATERIALS:

Please check with the KCKCC bookstore, http://www.kckccbooksotre.com/, for the required texts for your particular class.

COURSE DESCRIPTION:

This course presents the Neonatal Resuscitation Program, NRP, of the American Academy of Pediatrics and the American Heart Association. Students learn to provide advanced life support to the newborn child.

METHOD OF INSTRUCTION:

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, and panels, conferencing, learning experiences, and performances outside the classroom. Methodology will be selected to best meet student needs.
COURSE OUTLINE:

I. Overview and Principles of Neonatal Resuscitation
   A. Initial steps in neonatal resuscitation
   B. Use of neonatal resuscitation bag and mask

II. Neonatal Chest Compressions

III. Neonatal Endotracheal Intubation

IV. Neonatal Medications

V. Neonatal Special Considerations

VI. Putting It All Together

EXPECTED LEARNER OUTCOMES:

A. The student will be able to explain the principles of newborn resuscitation.
B. The student will be able to assess the newborn baby.
C. The student will be able to perform positive pressure ventilation.
D. The student will be able to perform chest compressions.
E. The student will be able to assist with endotracheal intubation.
F. The student will be able to assist with medication administration.
G. The student will be able to recommend care in situations that may complicate resuscitation.
H. The student will be able to recommend post resuscitation care.

COURSE COMPETENCIES:

The student will be able to explain the principles of newborn resuscitation.
1. The student will be able to state the percentage of newborns that require resuscitation.
2. The student will be able to state the effect of oxygen on pulmonary blood flow after birth.
3. The student will be able to describe the characteristics of primary and secondary apnea.
4. The student will be able to list the steps on the resuscitation flow diagram.
5. The student will be able to state three reasons why premature babies are more likely to need resuscitation than normal term babies.
6. The student will be able to identify appropriate personnel who should attend every delivery to ensure resuscitation if needed.
7. The student will be able to list in correct order the initial steps for newborn resuscitation.
8. The student will be able to describe the management of the newborn with meconium.
The student will be able to assess the newborn baby.
9. The student will be able to identify newborn babies at risk for cardiopulmonary compromise.
10. The student will be able to list the three primary signs used for evaluation of the newborn during resuscitation.

The student will be able to perform positive pressure ventilation.
11. The student will be able to state indications for free-flow oxygen.
12. The student will be able to demonstrate the initial steps of resuscitation.
13. The student will be able to state indications for bag-mask ventilation.
14. The student will be able to identify parts and features of self-inflating bag.
15. The student will be able to identify parts and features of a flow-inflating bag.
16. The student will be able to identify parts and features of a T-piece resuscitator.
17. The student will be able to demonstrate how to check the proper function of a resuscitation bag.
18. The student will be able to describe the proper fit of a resuscitation face mask to the newborn.
19. The student will be able to demonstrate correct BMV and problem solving steps if the chest does not rise.
20. The student will be able to state indications and rationale for insertion of an orogastric tube during BMV.
21. The student will be able to state three indications that a newborn’s condition is improving during BMV.

The student will be able to perform chest compressions.
22. The student will be able to state indications for chest compressions.
23. The student will be able to describe how chest compressions work and why ventilation is an important component of CPR.
24. The student will be able to demonstrate correct technique for performing chest compressions on a newborn manikin.
25. The student will be able to describe the actions to take when the newborn’s heart rate is less than 60 BPM, greater than 60 BPM, and greater than 100 BPM.

The student will be able to assist with endotracheal intubation.
26. The student will be able to state four major indications for ETT intubation.
27. The student will be able to state the steps to intubation.
28. The student will be able to demonstrate the correct intubation technique on a newborn manikin.
29. The student will be able to state three indicators of correct ETT placement.
30. The student will be able to describe the correct technique for tracheal suctioning in the depressed newborn in the presence of meconium stained fluid.
31. The student will be able to demonstrate the assistant’s role during newborn intubation.
The student will be able to assist with medication administration.
32. The student will be able to state the indications for epinephrine in CPR.
33. The student will be able to state the indications for volume expanders in CPR.
34. The student will be able to state the dose, route and rate of epinephrine administration.
35. The student will be able to state the dose, route and rate of volume expander administration.
36. The student will be able to describe emergency umbilical venous catheter placement.
37. The student will be able to state the indications and major contraindications for naloxone hydrochloride administration.
38. The student will be able to state the dose, route and rate of naloxone hydrochloride administration.

The student will be able to recommend care in situations that may complicate resuscitation.
39. The student will be able to identify four problems that could cause mechanical blockage of the newborn’s airway.
40. The student will be able to identify six problems that could cause impaired lung function.
41. The student will be able to list potential post-resuscitation complications.
42. The student will be able to discuss situations for non-initiation or discontinuation of resuscitation.
43. The student will be able to identify NRP principles that apply beyond the immediate delivery.

The student will be able to recommend post resuscitation care.
44. The student will be able to define the three levels of post-resuscitation care.
45. The student will be able to recommend ongoing care post resuscitation.

ASSESSMENT OF LEARNER OUTCOMES:

Student progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

To attain a NRP Provider designation/card through the American Academy of Pediatrics, AAP, and American Heart Association, AHA, the student must fulfill the requirements of the AAP & AHA.
SPECIAL NOTES:

This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college’s policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact Director of the Academic Resource Center at 913-288-7670.