DATE OF LAST REVIEW: 02/2013

CIP CODE:      51.0908
SEMESTER:     Departmental Syllabus
COURSE NAME:  Perinatal Pediatrics
COURSE NUMBER:    RSCR0290
CREDIT HOURS:      2
INSTRUCTOR:   Departmental Syllabus
OFFICE LOCATION: Departmental Syllabus
OFFICE HOURS:  Departmental Syllabus
TELEPHONE:    Departmental Syllabus
EMAIL:        Departmental Syllabus

KCKCC issued email accounts are the official means for electronically communicating with our students.

PREREQUISITES:  Admission to the Respiratory Therapy Program, Program Sequence

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

COURSE DESCRIPTION:
In this applications oriented class, students put lecture content and lab competencies to use on clinical rounds. Students become familiar with cardiopulmonary diseases and diagnostic symptoms. Bedside testing, patient monitoring, and pharmacologic interventions are key components of this course.

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.

REQUIREMENTS FOR THE COURSE:
All weekly assignments are to be read and/or completed for the class sessions in which they are scheduled. Students are responsible for reading assignments and attending scheduled classes in order to be prepared to participate in discussions, successfully complete quizzes and exams, and complete in-class activities and projects.
Written examinations may contain multiple choice, true-false, matching, fill in the blank and/or short answer questions. They will be based mainly on lecture and text content. A course grade of C or better is required to fulfill Respiratory Therapy Program requirements.

**COURSE OUTLINE:**

I. Risks and Diseases of Newborns and Children  
   A. Fetal growth & development  
   B. Transition from fetal circulation  
   C. Risk Factors for the Neonate  
      1. related to the mother  
      2. related to the pregnancy  
      3. related to labor and delivery  
   D. Transient Tachypnea of the newborn  
      1. description  
      2. signs & symptoms  
      3. common factors  
      4. contributing factors  
      5. interventions  
   E. Acute Respiratory Distress Syndrome  
      1. description  
      2. signs & symptoms  
      3. morbidity & mortality  
      4. common factors  
      5. contributing factors  
      6. interventions  
   F. Bronchopulmonary Dysplasia  
      1. description  
      2. signs & symptoms  
      3. morbidity & mortality  
      4. common factors  
      5. contributing factors  
      6. interventions  
   G. Diaphragmatic Hernia  
      1. description  
      2. signs & symptoms  
      3. common factors  
      4. contributing factors  
      5. interventions  
   H. Sudden Infant Death Syndrome  
      1. description  
      2. signs & symptoms  
      3. common factors  
      4. contributing factors  
      5. interventions  
   I. Foreign Body Airway Obstruction  
      1. assessment  
      2. partial vs full  
      3. interventions  
      4. adult/pediatric structure differences  
   J. Asthma  
      1. description  
      2. signs & symptoms
3. common factors
4. contributing factors
5. interventions

K. Cystic Fibrosis
1. description
2. signs & symptoms
3. morbidity & mortality
4. common factors
5. contributing factors
6. interventions

L. Bronchiolitis
1. description
2. signs & symptoms
3. common factors
4. contributing factors
5. interventions

M. Meningitis
1. description
2. signs & symptoms
3. common factors
4. contributing factors
5. interventions

N. Pneumothorax
1. assessment
2. description
3. signs & symptoms
4. common factors
5. contributing factors
6. interventions

O. Laryngeotracheobronchitis
1. description
2. signs & symptoms
3. common factors
4. contributing factors
5. interventions

P. Epiglottitis
1. description
2. signs & symptoms
3. common factors
4. contributing factors
5. interventions

Q. Congenital Cardiac Disorders
1. description
2. signs & symptoms
3. common factors
4. contributing factors
5. interventions

R. Neuromuscular Diseases
1. description
2. signs & symptoms
3. common factors
4. contributing factors
5. interventions

II. Assessment of Neonates and Children
   A. vital signs
   B. physical assessment
   C. complete blood counts
   D. electrolytes
   E. arterial blood gases
   F. transcutaneous blood gases
   G. chest x-rays & transillumination
   H. APGAR Scoring
   I. New Ballard Scoring
   J. Silverman Scoring
   K. pneumographs
   L. pulmonary functions

III. Cardiopulmonary Interventions
   A. airway care
   B. resuscitation
   C. oxygenation
   D. ventilation
   E. surfactant therapy
   F. nitric oxide
   G. extracorporeal membrane oxygenation
   H. aerosolized medication
   I. chest physiotherapy
   J. monitoring
   K. transports

EXPECTED LEARNER OUTCOMES:

A. The student will be able to safely operate cardiopulmonary equipment used in the neonatal/pediatric
B. The student will be able to perform physical assessments on neonates/pediatric patients
C. The student will be able to interpret cardiopulmonary diagnostic data for this age group.
D. The student will be able to apply neonatal and pediatric cardiopulmonary life support systems.
E. The student will be able to evaluate cardiopulmonary conditions or disorders of the neonatal/pediatric patients.
F. The student will be able to manage neonatal and child airway emergencies.
G. The student will be able to recommend cardiopulmonary care plans for infants and children.

COURSE COMPETENCIES:
Upon successful completion of this course:

The student will be able to safely operate cardiopulmonary equipment used in the neonatal/pediatric
   1. The student will be able to safely operate oxygen administration devices
   2. The student will be able to safely operated aerosol generators
   3. The student will be able to safely operated mechanical ventilators

The student will be able to perform physical assessments on neonates and children.
   4. The student will be able to perform a physical assessment by observation of the patient’s chest configuration, breathing pattern and skin color
   5. The student will be able to perform a physical assessment by auscultation of the patient’s
breath sounds and heart tones
6. The student will be able to perform a physical assessment of the patients' vital signs

The student will be able to interpret cardiopulmonary diagnostic data for this age group.
7. The student will be able to interpret arterial blood gas results.
8. The student will be able to assess results of basic spirometry
9. The student will be able to assess results of the body plethysmography for static lung volumes
10. The student will be able to assess/interpret radiographic studies (e.g. chest, airway)
11. The student will be able to will be able to assess bronchodilation studies of airway response

The student will be able to apply neonatal and pediatric cardiopulmonary life support systems.
12. The student will be able to apply emergency protocols of neonatal resuscitation program, NRP
13. The student will be able to apply emergency protocols of pediatric advanced life support, PALS

The student will be able to evaluate cardiopulmonary conditions or disorders of the neonatal and pediatric patients.
14. The student will be able to evaluate risks of prematurity.
15. The student will be able to evaluate apnea.
16. The student will be able to evaluate infant respiratory distress syndrome, IRDS.
17. The student will be able to evaluate bronchopulmonary dysplasia, BPD.
18. The student will be able to evaluate cystic fibrosis, CF.
19. The student will be able to evaluate sudden infant death syndrome, SIDS.
20. The student will be able to evaluate asthma.
21. The student will be able to evaluate bronchiolitis.

The student will be able to manage neonatal and child airway emergencies.
22. The student will be able to evaluate foreign body airway obstruction, FBAO.
23. The student will be able to evaluate laryngeoatracheobronchitis, croup
24. The student will be able to evaluate epiglottitis.

The student will be able to recommend cardiopulmonary care plans for infants and children.
25. The student will be able to make recommendations for treating ARDS.
26. The student will be able to make recommendations for treating BPD.
27. The student will be able to make recommendations for treating CF.
28. The student will be able to make recommendations for treating asthma.
29. The student will be able to make recommendations for treating FBAO.
30. The student will be able to make recommendations for treating bronchiolitis.
31. The student will be able to make recommendations for treating laryngeoatracheobronchitis.
32. The student will be able to make recommendations for treating epiglottitis.
33. The student will be able to make recommendations for treating apnea.

ASSESSMENT OF LEARNER OUTCOMES:
Students’ progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

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.

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