SYLLABUS

DATE OF LAST REVIEW: 02/2013

CIP CODE: 51.0812

SEMESTER: Departmental Syllabus

COURSE TITLE: Cardiopulmonary Care II

COURSE NUMBER: RSCR0235

CREDIT HOURS: 4

INSTRUCTOR: Departmental Syllabus

OFFICE LOCATION: 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. Respiratory Tests to Identify Lung Problems
   A. pulmonary mechanics
   B. flow rates
   C. lung volumes
   D. lung capacities
   E. lung diffusion
   F. airway pressures

II. Differentiating Types and Severity of Cardiopulmonary Conditions
   A. asthma
   B. bronchitis
   C. emphysema
   D. combined airway defects
   E. respiratory insufficiency
   F. deconditioning
   G. obstructed airway
   H. pneumonia
   I. hypersecretion
   J. mucus plugging
   K. pulmonary edema
   L. congestive heart failure
   M. airway trauma
   N. tracheal deviation
   O. thoracic deviation

III. Cardiopulmonary Measurements and Monitoring
   A. arterial blood gases
      a. PA02
      b. PAC02
      c. PH
      d. HC03
   B. buffering mechanisms
   C. hemoximetry
   D. chest x-rays
   E. microbiology lab values
   F. white blood cells
   G. hemoglobin
   H. hematocrit
   I. electrolytes
   J. theophylline
   K. electrocardiograms
   L. complete blood counts
   M. enzymes
EXPECTED LEARNER OUTCOMES:

A. The student will be able to discuss respiratory tests used to identify lung problems.
B. The student will be able to determine severity of airway and breathing conditions.
C. The student will be able to discuss recommendations for respiratory care based upon measurements of cardiopulmonary function.

COURSE COMPETENCIES:

The student will be able to discuss respiratory tests used to identify lung problems.
1. The student will be able to define respiratory tests used to measure lung function.
2. The student will be able to identify normal and abnormal blood gas.
3. The student will be able to identify cooximetry values.
4. The student will be able to identify electrolyte values.
5. The student will be able to identify acid-base values.
6. The student will be able to identify red blood cell count values.
7. The student will be able to identify white blood cell count values.
8. The student will be able to identify lymphocyte values.
9. The student will be able to identify neutrophil values.
10. The student will be able to identify basophil values.
11. The student will be able to identify eosinophil values.
12. The student will be able to identify hemoglobin values.
13. The student will be able to identify hematocrit values.
14. The student will be able to identify carboxyhemoglobin values.
15. The student will be able to identify oxyhemoglobin values.
16. The student will be able to identify methemoglobin values.
17. The student will be able to identify sodium values.
18. The student will be able to identify potassium values.
19. The student will be able to identify chloride values.
20. The student will be able to identify anion gap values.
21. The student will be able to identify normal and abnormal microbiology lab values.
22. The student will be able to identify normal and abnormal chest radiography.
23. The student will be able to interpret arterial blood gases.
24. The student will be able to interpret pulmonary function tests.
25. The student will be able to interpret electrocardiograms.
26. The student will be able to identify life threatening electrocardiograms.

The student will be able to determine severity of airway and breathing conditions
27. The student will be able to explain obstructive airway conditions.
28. The student will be able to describe restrictive lung conditions.

The student will be able to discuss indications for respiratory care based upon measurements of cardiopulmonary function.
29. The student will be able to recommend interventions for metabolic acidosis.
30. The student will be able to recommend interventions for metabolic alkalosis.
31. The student will be able to recommend interventions for respiratory alkalosis.
32. The student will be able to recommend interventions for respiratory acidosis
33. The student will be able to recommend interventions for abnormal hemoximetry.
34. The student will be able to recommend interventions for abnormal electrolytes.
35. The student will be able to recommend interventions for abnormal microbiology.
36. The student will be able to recommend interventions for abnormal PFTs.
37. The student will be able to recommend interventions for abnormal EKGs.
38. The student will be able to recommend interventions for abnormal chest radiographs.

**ASSESSMENT OF LEARNER OUTCOMES:**

Assessment methods include, but may not be limited to: written examinations, lab practicals, homework, and observation of professional behavior.

**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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