DATE OF LAST REVIEW: 02/2013

CIP CODE: 51.0908

SEMESTER: Departmental Syllabus

COURSE TITLE: Clinical Practice III

COURSE NUMBER: RSCR0279

CREDIT HOURS: 4

INSTRUCTOR: Departmental Syllabus

OFFICE LOCATION: Departmental Syllabus

OFFICE HOURS: Departmental Syllabus

TELEPHONE: Departmental Syllabus

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

PREREQUISITE(S): RSCR0235 Cardiopulmonary Care II and RSCR0239 Clinical Practice II.

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

COURSE DESCRIPTION: Students perform rounds with physicians and therapists in critical care settings. In this applications-oriented class/clinic, students become familiar with mechanical ventilation and other respiratory care responsibilities in life threatening situations. Adult and child applications are covered.

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 REQUIREMENTS: Each student is required to successfully pass examinations. Skill check offs for the units covered must be made prior to the examination. The 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. Practical exams will be based on lecture materials. Related policies are located in the respiratory therapist program handbook.
COURSE OUTLINE:
I. Perform Rounds in Critical Care Settings
   A. Assess cardiopulmonary equipment needs and proper operation
   B. Determine patient census
   C. Identify patients with cardiopulmonary compromise
   D. Communicate with other healthcare providers

II. Assess Patients in Critical Care Setting
   A. Physical assessment
   B. Weaning assessment
   C. Oxygenation assessment
   D. Ventilation assessment
   E. Cardiac assessment
   F. Artificial airway assessment
   G. Hemodynamic assessment
   H. Nutrition assessment
   I. Neurologic assessment
   J. Renal assessment

III. Apply and Adjust Mechanical Ventilation and Adjunctive Therapies
   A. Initial mechanical ventilation setting for adults
   B. Initial mechanical ventilation setting for children
   C. Evaluate alarm limits
   D. Analyze oxygen percentage
   E. Check mechanical ventilator function
   F. Change modes of ventilation as prescribed
   G. Transporting mechanically ventilated patients
   H. Provide back-up mechanical ventilation systems
   I. Adjust mechanical ventilation to patient responses

IV. Perform and recommend procedure
   A. Intubation and extubation
   B. Arterial blood gases
   C. Chest radiograph
   D. 6 min walk exercise
   E. Weaning parameters
   F. Hemodynamic monitoring
   G. Capnography and transcutaneous monitoring

V. Assist physician performing special procedures.
   A. Intubation
   B. Bronchoscopy
   C. Thoracentesis
   D. Chest tube insertion
   E. Cardioversion
   F. Tracheostomy

VI. Participate and treat cardiopulmonary emergencies
   A. Code Blue
   B. Rapid response team
   C. Intra-hospital transport
   D. Disaster management.
EXPECTED LEARNER OUTCOMES:
A. Student will perform rounds in critical care settings.
B. Student will assess patients in critical care settings.
C. Student will apply mechanical ventilation and adjunctive therapies.
D. Student will perform procedure and interpret procedure results.
E. Student will recommend and modify therapies based on the patient’s response.
F. Student will assist to the physician performing special procedure.
G. Student will participate and treat cardiopulmonary emergencies.

COURSE COMPETENCIES:

Student will perform rounds in critical care settings.
1. Student will identify himself to other healthcare providers in critical care.
2. Student will communicate her contact information with other healthcare providers.
3. Student will give and get reports on patients at shift changes to other healthcare providers.
4. Student will determine the patient census in critical care at the beginning of the clinical shift.
5. Student will identify patients with cardiopulmonary compromise throughout the clinical shift.
6. Student will review medical records of patients assigned to the student.
7. Student will assure adequate quantity and operation of cardiopulmonary equipment is maintained in critical care settings.
8. Student will assure proper application of cardiopulmonary devices to patients in critical care settings.

Student will assess patients in critical care settings
9. Student will perform physical assessments on patients in critical care settings.
10. Student will assess wearing parameters for mechanically ventilated patients.
11. Student will assess pulse oximetry and cooximetry.
12. Student will obtain arterial blood specimens from arterial lines.
13. Student will assess arterial pressure waveforms.
14. Student will assess arterial blood gases.
15. Student will assess flow waveforms.
16. Student will assess airway pressure waveforms.
17. Student will assess volume waveforms.
18. Student will assess airway pressures.
19. Student will assess airway resistance.
20. Student will assess lung compliance.
21. Student will assess patients from intrinsic PEEP.
22. Student will assess artificial airways
23. Student will assess EKGS.
24. Student will assess cardiac output.
25. Student will assess muscle fatigue.
26. Student will assess intakes and outputs.
27. Student will assess patient weight.
28. Student will assess skin turgor.
29. Student will assess total calorie intake.
30. Student will assess respiratory quotient.
31. Student will assess blood Urea nitrogen levels.
32. Student will assess creatinine levels.
33. Student will assess albumin levels.
34. Student will assess electrolyte levels.
35. Student will assess levels of consciousness.

   **Student will apply mechanical ventilation and adjunctive therapies.**

36. Student will apply and adjust select modes of ventilation.
37. Student will apply and adjust respiratory rates for mechanical ventilation.
38. Student will apply and adjust tidal volumes for mechanical ventilation.
39. Student will apply and adjust FiO2 for mechanical ventilation.
40. Student will apply and adjust PEEP for mechanical ventilation.
41. Student will apply and adjust I:E ratios.
42. Student will apply and adjust ventilator settings based on vent graphics.
43. Student will apply and adjust ventilator alarms.
44. Student will apply and adjust advanced artificial airways.
45. Student will apply and adjust CPAP.
46. Student will apply and adjust bilevel positive airway pressures.
47. Student will apply disease-specific ventilator protocol e.g.; COPD, ARDS.
48. Student will apply Ventilator Associated Pneumonia (VAP) protocol.

   Student will perform procedure and interpret procedure results.
49. Student will perform capnography and transcutaneous monitoring.
50. Student will perform weaning parameters and procedure.
51. Student will perform and interpret 6 minute walk test and oxygen titration with exercise
52. Student will perform hemodynamic monitoring.
53. Student will perform and interpret arterial blood gases.
54. Student will perform endotracheal intubation, extubation and suction artificial airways.
55. Student will calculate and interpret compliance and airway resistance.

   **Student will recommend and modify therapies based on the patient’s response.**
56. Student will recommend weaning from mechanical ventilator.
57. Student will recommend arterial blood gases.
58. Student will recommend intubation and extubation based on patient’s response.
59. Student will recommend changes and adjusting in mechanical ventilation to improve alveolar ventilation.
60. Student will recommend discontinuing treatment based on patient response.
61. Student will recommend chest radiograph based on the patient’s response.

   **Student will assist to the physician performing special procedure.**
62. Student will assist intubation and tracheostomy.
63. Student will assist bronchoscopy.
64. Student will assist thoracentesis.
65. Student will assist chest tube insertion.
66. Student will assist moderate sedation
67. Student will assist cardioversion.

   **Student will participate and treat cardiopulmonary emergencies.**
68. Student will assist and treat a tension pneumothorax.
69. Student will participate in intra hospital transportation.
70. Student will participate in disaster management.
71. Student will participate in medical emergency team e.g.; code blue and rapid response team.
ASSESSMENT OF LEARNER OUTCOMES:
Student progress is evaluated by means of exams, written assignments, and class participation.

SPECIAL NOTE:
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 the Director of the Academic Resource Center at 913-288-7670.