COURSE SYLLABUS

LAST REVIEW   Spring 2021

COURSE TITLE   Clinical Practice III

COURSE NUMBER   RSCR 0279

DIVISION   Health Professions

DEPARTMENT   Respiratory Therapy

CIP CODE   51.0908

CREDIT HOURS   4

CONTACT HOURS/WEEK   Clinical: 12

PREREQUISITES   None

COURSE PLACEMENT   This course is part of a selective admission program. Students must be admitted to the Respiratory Therapy program to enroll in this course.

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.

PROGRAM ALIGNMENT
This course is part of a program aligned through the Kansas Board of Regents and Technical Education Authority. For more information, please visit:
https://kansasregents.org/workforce_development/program-alignment

PROGRAM LEARNING OUTCOMES
1. Formulate the knowledge and critical reasoning skills necessary to pass the National Board for Respiratory Care Therapist Multiple Choice Exam.
2. Execute the variety of assessment and intervention skills necessary to provide respiratory care in the clinical setting at the entry Registered Respiratory Therapist level.
3. Integrate professional behaviors necessary at the entry Registered Respiratory Therapist level.

TEXTBOOKS
http://kckccbookstore.com/

METHODS 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, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE
I.   Rounds in Critical Care Settings
    A. Cardiopulmonary equipment needs and proper operation
    B. Patient census
    C. 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. Mechanical Ventilation and Adjunctive Therapies
    A. Settings for adults
    B. Settings for children
    C. Alarm limits
    D. Oxygen percentage
    E. Check mechanical ventilator function
    F. Change modes of ventilation as prescribed
    G. Transporting mechanically ventilated patients
    H. 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 with special procedures
   A. Intubation
   B. Bronchoscopy
   C. Thoracentesis
   D. Chest tube insertion
   E. Cardioversion
   F. Tracheostomy

VI. Cardiopulmonary emergencies
   A. Code Blue
   B. Rapid response team
   C. Intra-hospital transport
   D. Disaster management

COURSE LEARNING OUTCOMES AND COMPETENCIES
Upon successful completion of this course, the student will:
   A. Perform rounds in critical care settings.
      1. Identify himself to other healthcare providers in critical care.
      2. Communicate her contact information with other healthcare providers.
      3. Give and get reports on patients at shift changes to other healthcare providers.
      4. Determine the patient census in critical care at the beginning of the clinical shift.
      5. Identify patients with cardiopulmonary compromise throughout the clinical shift.
      6. Review medical records of patients assigned to the student.
      7. Assure adequate quantity and operation of cardiopulmonary equipment is maintained in critical care settings.
      8. Assure proper application of cardiopulmonary devices to patients in critical care settings.

   B. Assess patients in critical care settings
      9. Perform physical assessments on patients in critical care settings.
      10. Assess wearing parameters for mechanically ventilated patients.
      11. Assess pulse oximetry and cooximetry.
      12. Obtain arterial blood specimens from arterial lines.
      13. Assess arterial pressure waveforms.
      14. Assess arterial blood gases.
      15. Assess flow waveforms.
      16. Assess airway pressure waveforms.
      17. Assess volume waveforms.
      18. Assess airway pressures.
      19. Assess airway resistance.

20. Assess lung compliance.
21. Assess patients from intrinsic PEEP.
22. Assess artificial airways
23. Assess EKGs.
24. Assess cardiac output.
25. Assess muscle fatigue.
26. Assess intakes and outputs.
27. Assess patient weight.
28. Assess skin turgor.
29. Assess total calorie intake.
30. Assess respiratory quotient.
31. Assess blood Urea nitrogen levels.
32. Assess creatinine levels.
33. Assess albumin levels.
34. Assess electrolyte levels.
35. Assess levels of consciousness.

C. Apply mechanical ventilation and adjunctive therapies.
36. Apply and adjust select modes of ventilation.
37. Apply and adjust respiratory rates for mechanical ventilation.
38. Apply and adjust tidal volumes for mechanical ventilation.
39. Apply and adjust F_IO_2 for mechanical ventilation.
40. Apply and adjust PEEP for mechanical ventilation.
41. Apply and adjust I:E ratios.
42. Apply and adjust ventilator settings based on vent graphics.
43. Apply and adjust ventilator alarms.
44. Apply and adjust advanced artificial airways.
45. Apply and adjust CPAP.
46. Apply and adjust bi-level positive airway pressures.
47. Apply disease-specific ventilator protocol e.g.; COPD, ARDS.
48. Apply Ventilator Associated Pneumonia (VAP) protocol.

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

E. Recommend and modify therapies based on the patient's response.
56. Recommend weaning from mechanical ventilator.
57. Recommend arterial blood gases.

58. Recommend intubation and extubation based on patient's response.
59. Recommend changes and adjusting in mechanical ventilation to improve alveolar ventilation.
60. Recommend discontinuing treatment based on patient response.
61. Recommend chest radiograph based on the patient's response.

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

G. Participate and treat cardiopulmonary emergencies.
68. Assist and treat a tension pneumothorax.
69. Participate in intra hospital transportation.
70. Participate in disaster management.
71. Participate in medical emergency team e.g.; code blue and rapid response team.

ASSESSMENT OF COURSE LEARNING OUTCOMES AND COMPETENCIES
Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES
Student Handbook
https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf

College Catalog
https://www.kckcc.edu/academics/catalog/index.html

College Policies and Statements
https://www.kckcc.edu/about/policies-statements/index.html

Accessibility and Accommodations
https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html.