

Bossier Parish Community College
Master Syllabus

Course Prefix and Number: RSTH 225

Credit Hours: 2

Course Title: Clinical Applications and Procedures II

Course Prerequisites: RSTH 221

Course Description:

Clinical instruction in an adult critical care area with emphasis on patient assessment, ICU monitoring, mechanical ventilators, ventilation techniques, and advanced airway management. Occasionally, rotations also include pulmonary functions testing, long-term acute care (LTAC), and anesthesia/intubation emphasis. Hospital practicum (minimum 168 hours). Enrollment in Respiratory Therapy courses is limited to students who have applied, been interviewed and have been selected for the Respiratory Therapy clinical program.

Learning Outcomes:

At the end of this course the student will:

- A. perform advanced, common respiratory care procedures and display minimum competency in the performance of these advanced, intensive care unit-level inpatient respiratory care modalities in implementation and management of mechanical ventilation as directed by a physician's order;
- B. prescribe appropriate respiratory care as indicated by information obtained from patient assessment and available diagnostic values;
- C. demonstrate the ability to determine the appropriateness of mechanical ventilator settings as indicated by patient assessment, diagnostic data, and American Association for Respiratory Care clinical practice guidelines; and
- D. modify respiratory care interventions according to patient performance.

To achieve learning outcomes, the student will

- 1. change equipment and practice infection control practices as stated per hospital protocol (A, B)
- 2. deliver medicated aerosols to patients on mechanical ventilation (A)
- 3. administer bronchial hygiene to patients on mechanical ventilation (A)
- 4. perform airway care to include suctioning, repositioning ET tube, and taping ET (A)
- 5. perform arterial blood gas via arterial line (A)
- 6. initiate mechanical ventilation to include indications, complications, and hazard of mechanical ventilation (A, B, C, D)
- 7. monitor mechanical ventilation using a flow sheet to include bedside monitor measurements (B, C, D)
- 8. measure and differentiate between patient and machine parameters (A, C, D)

9. adjust ventilator settings according to physician orders and /or diagnostic data (A, B, C, D)
10. perform bedside calculations, measurements, and studies on the mechanically ventilated patient (A, B, C, D)
11. perform weaning parameters, interpret values, and act on data obtained (A, B, C, D)
12. intubate patients and perform follow-up procedures or ordered therapy (A, B, C, D)
13. complete a minimum of 168 hours of supervised clinical practice (A, B, C, D)
14. set appropriate ventilator parameters to include mode VT, F102. flow, rate, PEEP, PS, and alarms (A, B, C, D)
15. perform bedside assessment, using monitors and physical assessment (A, B, D)
16. discuss various modes, the use of adjunctive features to include discussion of indication, complication, and potential hazards associated with each (B, C)
17. interpret various lab data and develop a patient care plan based on findings (A, B, D)
18. insert various oral airways and assess patient via monitor and daily care (A, B)
19. set and monitor BiPAP and CPAP setting and titrate according to physician orders (A, B, C, D)
20. document therapy and procedures performed on patients according to hospital policy (A)
21. document and communicate results of all therapy given (A)
22. monitor and correctly adjust ventilator alarm settings (A, B, C, D)
23. adjust ventilator settings based on graphics (A, B, C, D)
24. adjust ventilator models and circuits as needed (A, B, C, D)
25. understand and alter mechanical dead space (A, B, C, D)
26. perform 12-lead EKG (A)
27. properly position patient (A)
28. discuss patient care plan and properly assign workload based on scenarios (B, C, D)
29. develop and correlate with interdisciplinary and family plan (B, C, D)
30. perform respiratory care quality assurance and follow quality improvement programs and respiratory care protocols (A, B, C, D)
31. assist physician with invasive procedure such and thoracentesis (A)
32. assist physicians with ultrasound (A)
33. participate in intrahospital transport of patients (A)
34. participate in rapid response team (A, B, D)
35. demonstrate competency in the performance of: (A, B, C, D)

ARTIFICIAL AIRWAY MAINTENANCE

- a. Intubation
- b. Trach Care
- c. Extubation
- d. Securing and repositioning E-T Tube
- e. Cuff Management
- f. Oral Care

BLOOD GASES

- a. A-Line Sampling

ADULT VENTILATORY MANAGEMENT

- a. Non-Invasive Ventilation
- b. Routine Ventilator Check (adult)
- c. Adjusting Ventilation

- d. Weaning
- e. Ventilator Circuit Change
- f. Ventilator Set Up

CALCULATIONS

- a. Compliance
- b. Airway Resistance
- c. PA-aO₂
- d. Pa-vO₂
- e. PAO₂
- f. PaO₂/FiO₂
- g. Shunt
- h. V_d/V_t

ASSIST WITH PROCEDURE

- a. Bronchoscopy
- b. Intubation
- c. Tracheostomy
- d. Arterial Line Insertion
- e. Chest tube insertion

Course Requirements

- minimum average of 70% on student clinical packet cumulative grade
- completion of a minimum of 168 clinical contact hours
- successful performance of clinical competencies
- good standing with clinical policies and the Patient Bill of Rights
- successful completion of written case study along with case study presentation

Course Grading Scale:

- 90% or more of total possible points and a minimum of 70% average on clinical evaluations and successful performance of clinical competencies while completing required clinical hours and maintaining good standing with regard to clinical policies and successful completion of written case study along with case study presentation
- 80% or more of total possible points and a minimum of 70% average on clinical evaluations and successful performance of clinical competencies while completing required clinical hours and maintaining good standing with regard to clinical policies and successful completion of written case study along with case study presentation
- 70% or more of total possible points and a minimum of 70% average on clinical evaluations and successful performance of clinical competencies while completing required clinical hours and maintaining good standing with regard to clinical policies and successful completion of written case study along with case study presentation
- 60% or more of total possible points or less than a 70% average on clinical evaluations or unsuccessful performance of clinical competencies or failure to complete required clinical hours or failure to maintain good standing with regard to clinical policies and unsuccessful completion of written case study along with case study presentation
- less than 60% of total possible points or less than a 70% average on clinical evaluations or unsuccessful performance of clinical competencies or failure to complete required clinical

hours or failure to maintain good standing with regard to clinical policies and unsuccessful completion of written case study along with case study presentation

Attendance Policy: The college attendance policy, which is available at <http://www.bpcc.edu/catalog/current/academicpolicies.html>, allows that “more restrictive attendance requirements may apply to some specialized classes such as laboratory, activity, and clinical courses because of the nature of those courses.” The attendance policy of the Respiratory Therapy program is described in the Respiratory Therapy Clinical Handbook.

Nondiscrimination Statement

Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

COORDINATOR FOR SECTION 504 AND ADA

Angie Cao, Student and Disability Services Specialist

Disability Services, F254, 6220 East Texas Street, Bossier City, LA 71111

318-678-6511

acao@bpcc.edu

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Equity/Compliance Coordinator

Teri Bashara, Director of Human Resources

Human Resources Office, A-105

6220 East Texas Street

Bossier City, LA 71111

Phone: 318-678-6056

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Reviewed by J. Anderson, March 2019