Clinical/Respiratory Care (RSPT 2362)

Credit: 3 semester credits (18 hours clinic/lab)



Prerequisite: RSPT 1329, RSPT 1207, RSPT 2310, RSPT 1113, RSPT 1325, RSPT 1261, RSPT 1262, RSPT 1331, RSPT 1335, RSPT 2353, RSPT 1360, RSPT 2314, RSPT 2319, RSPT 2255, RSPT 2361

Co-requisite: RSPT 2147, RSPT 2230, RSPT 1141

Course Description: A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

Required Textbook and Materials (furnished by students)

- 1. Materials
 - a. Scrubs
 - b. Lab Coat
 - c. Watch with second hand
 - d. Goggles
 - e. Scissors
 - f. Stethoscope
 - g. Black pens
 - h. Calculator
 - i. Name badge
 - j. LIT Patch
 - k. Clinical Notebook
- 2. Text
 - a. Pocket Guide for Respiratory Care by Dana Oaks
 - b. (ISBN # 0-932887-00-7)
- 3. Current Healthcare Provider Certification (CPR)
- 4. Tokens for modules- www.ketteringseminars.com
- 5. Dataarc access

Course Objectives

Upon completion of the course, the student will be able to:

- 1. Applies text book learning plans, theory, concepts and skills that are involved with the use of specialized materials and tools. (SCANS F1, F6, F7, F8, F9, F12)
- 2. Explains while demonstrating equipment procedures (SCANS F6, F16, F14, F16 C14, C12, C15, C15, C16, C18, C19, C20)
- 3. Maintains patient confidentiality by practicing regulations, laws and HIPPA standards (SCANS F5,Ff12, F13, F16, F17, C11,)

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- 4. Concentrates on safety practices through information from the chart and patient history by using the necessary precautions on ALL patients (SCANS C15, C14, C13,C11, C7, C5, F13, C8)
- 5. Works as a team member (SCANS C12, C9)
- 6. Demonstrates appropriate written and verbal communication skills by using the correct terminology of the medical profession (SCANS F1, F2, F3, F5, F6, F7, F8, F9, C5, C7,)
- 7. Perform and demonstrate competency of the following procedures: Ventilator setup, routine ventilator check, ventilator parameter change, Ventilator graphic analysis, capnography, weaning parameters, weaning, non-invasive vent setup, non-invasive vent check, Pressure ventilation(neonatal or pediatric) routine ventilator check, Pressure ventilation- ventilator parameter change, arterial line sampling, setup and ventilation via mask, CPR- airway and ventilation, CPR compressions, extubation, capnography, (SCANS: F8,C7,C10,C15, C18,C19,C20)

SCANS Skills and Competencies

Beginning in the late 1980's, the U.S. Department of Labor Secretary's Commission on Achieving Necessary Skills (SCANS) conducted extensive research and interviews with business owners, union leaders, supervisors, and laborers in a wide variety of work settings to determine what knowledge workers needed in order to perform well on a job. In 1991 the Commission announced its findings in *What Work Requires in Schools*. In its research, the Commission determined that "workplace know- how" consists of two elements: foundation skills and workplace competencies.

Course Outline

- A. Ventilator setup
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- B. Routine ventilator check
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)

Course Syllabi

6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

C. Ventilator Graphic analysis

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

D. Ventilator parameter change

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

E. Capnography

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

F. Weaning Parameters

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)

Course Syllabi

6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

G. Weaning

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

H. Non-Invasive ventilator setup

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

I. Non-Invasive ventilator check

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

J. Pressure ventilation (pediatric or neonatal) – routine check

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)

Course Syllabi

6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

K. Pressure ventilation (pediatric or neonatal)- parameter check

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

L. Pressure ventilation (pediatric or neonatal) – parameter change

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

M. Arterial line sampling

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

N. Set- up and ventilation via mask

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)

Course Syllabi

6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

O. Set-up and ventilation via e-t tube

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

P. CPR airway and ventilation

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

Q. CPR compressions

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

R. Extubation

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)

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- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- S. Capnography
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

Grade Scale

A = 93 - 100 B = 85 - 92 C = 77 - 84 D = 68 - 75 F = less than 68

Course Evaluation

Final Grades will be calculated according to the following criteria.

Daily clinical grade 60%
Modules: 10%
Final Exam 10%
Case Studies 15%
Physician contact 5%

Student must demonstrate competency in all procedures of the course outline. Student will receive an F in the course if competency is not obtained.

Course requirements

- A. Competency in all procedures in Course Outline.
- B. Modules: (<u>www.ketteringseminars.com</u>). Must turn in grade sheet and your written review of the module.

RRT- Simulation

Cardiac- JP McNail

General Medicine- Susan Jones

Neonatal-Baby Charlie

Neuro-Tim Hall

Pediatirc- Paul Pele

Pulmonary Alva Trip

Trauma- Laura Kraft

C. Completion of two affective evaluations. If student receives a score of 3 or less, the RC handbook will be followed with appropriate sanction. Student

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must show improvement in the deficient area in order to continue in the RC Program.

- D. 10 Physician Contact hours.
- E. Final exam
- F. Presentation of 2 (two) Case Studies

Course Policies

- 1. As outlined in the Respiratory Care Handbook.
- 2. Two allowed 8 hour absences (two 8 hour shift)
- 3. One allowed 2 hour absence (post conference)

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office located in the Cecil Beeson Building.

Course Schedule

This course requires 18 hours per week in the assigned facility. Daily assignments are distributed by the clinical instructor.

Specific Objectives

The student will be able to:

- 1. Perform
 - a. Ventilator Setup
 - b. Routine Ventilator Check- Volume Ventilation
 - c. Ventilator Parameter Change- Volume Ventilation
 - d. Ventilator Graphic Analysis
 - e. Capnography
 - f. Weaning Parameters
 - g. Weaning
 - h. Non-invasive Vent Setup,
 - i. Non-invasive Vent Check
 - j. Pressure Ventilation(neonatal or pediatric)
 - k. Routine Ventilator check- Pressure Ventilation
 - 1. Ventilator Parameter change- Pressure Ventilation
 - m. Arterial Line Sampling
 - n. Setup and Ventilation via Mask
 - o. CPR- Airway and Ventilation
 - p. CPR Compressions
 - q. Extubation
 - r. Capnography

Course Syllabi

- 2. Setup monitor and evaluate patient repose to
 - a. Ventilator Setup
 - b. Routine Ventilator Check- Volume Ventilation
 - c. Ventilator Parameter Change- Volume Ventilation
 - d. Ventilator Graphic Analysis
 - e. Capnography
 - f. Weaning Parameters
 - g. Weaning
 - h. Non-invasive Vent Setup,
 - i. Non-invasive Vent Check
 - j. Pressure Ventilation(neonatal or pediatric)
 - k. Routine Ventilator check- Pressure Ventilation
 - 1. Ventilator Parameter change- Pressure Ventilation
 - m. Arterial Line Sampling
 - n. Setup and Ventilation via Mask
 - o. CPR- Airway and Ventilation
 - p. CPR Compressions
 - q. Extubation
 - r. Capnography
- 3. Properly document in the medical record
- 4. Take a hand off report from others and perform a hand off report to other
- 5. Demonstrate competency in the affective, psychomotor and cognitive domains as documented in the student evaluation section of the dataarc system.