

## 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](http://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 (medical records) 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. Review/Collect and evaluate patient records. (SCANS F1, F6, F7, F8, F9, F12)
8. Recommend Procedures to collect pertinent data(SCANS F1, F6, F7, F8, F9, F12)
9. Evaluate and monitor patients responses to Respiratory Care Procedures(SCANS F1, F6, F7, F8, F9, F12)
10. Determine appropriateness/Recommend/perform modifications to Respiratory Care Procedures (SCANS F1, F6, F7, F8, F9, F12)
11. 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)
12. Perform and demonstrate competency in all additional procedures as outlined in the RC handbook. Handwashing, Isolation procedures, vital signs, chest assessment, patient assessment, x-ray interpretation, nasal cannula, non-rebreather mask, air-entrainment mask, pulse oximetry, aerosol face mask, small volume nebulizer, pediatric vital signs. Incentive Spirometry, Chest Physiotherapy, Coughing, Breathing Exercises, Mucus Clearance adjuncts, Intrapulmonary Percussive Ventilation, Tracheal suctioning (nasal or endotracheal- sterile technique), Inline suctioning, Securing Artificial Airway, Tracheostomy Care, Transport with oxygen, Intermittent Positive Pressure Breathing, Oxyhood, Peak Flow, Inline suctioning ( Pediatric or Neonatal), HME, Inline MDI ( pediatric or neonatal), Inline Small volume Nebulizer ( adult, pediatric or neonatal) , Bulb suctioning ( Pediatric or neonatal), weaning parameters, Transcutaneous Monitoring, Manual ventilation during transport, Bedside spirometry, Spirometry, Nitrogen washout or helium dilution, diffusion studies, Plethysmography, PFT Quality assurance, Arterial Blood gas sampling, Arterial blood gas analysis, ABG quality assurance, Arterial line sampling, Cuff management(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)
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

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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)
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.

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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)
  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)

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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.

**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)
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)

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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.

**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)
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.

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|                      |     |
|----------------------|-----|
| Daily clinical grade | 40% |
| Modules:             | 5%  |
| Final Exam           | 35% |
| Case Studies         | 15% |
| Physician contact    | 5%  |

Student must demonstrate competency in all procedures as outlined in the Respiratory Care Handbook. Student will receive an F in the course if all program competency is not obtained.

### **Course requirements**

- A. Competency in all procedures as outlined in the Respiratory Care Handbook.
- B. Modules: ([www.ketteringseminars.com](http://www.ketteringseminars.com)). 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
    - Pediatric- 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 must show improvement in the deficient area in order to continue in the RC Program.
- D. 20 Physician Contact points.
- 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.