

# RESP-2960: RESPIRATORY CARE FIELD EXPERIENCE III

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## Cuyahoga Community College

**Viewing: RESP-2960 : Respiratory Care Field Experience III**

**Board of Trustees:**

May 2020

**Academic Term:**

Fall 2020

**Subject Code**

RESP - Respiratory Care

**Course Number:**

2960

**Title:**

Respiratory Care Field Experience III

**Catalog Description:**

Capstone course in Respiratory Care. Field experience in clinical setting on respiratory therapy equipment, policies, and procedures. Emphasis on adult invasive and non-invasive mechanical ventilation, weaning from mechanical ventilation, pediatric patient care, and respiratory care in the long-term acute care facility environment.

**Credit Hour(s):**

2

**Other Hour(s):**

360

**Other Hour Details:**

24 hours field experience per week for 15 weeks (360 hours total)

## Requisites

**Prerequisite and Corequisite**

RESP-2950 Respiratory Care Field Experience II.

## Outcomes

**Course Outcome(s):**

Deliver invasive mechanical ventilation and analyze the data to determine patient's pathophysiologic state.

**Objective(s):**

1. Perform the necessary bedside tests, laboratory studies, and/or chart review, to adequately assess a patient's condition, correctly interpret the results obtained, and analyze results to determine indications for invasive mechanical ventilation according to the clinical practice guidelines.
  2. Obtain arterial blood gas sample from arterial line; analyze and interpret results.
  3. Interpret and evaluate a physician's order for invasive mechanical ventilation identifying goals, physiologic effects, indications, contraindications and hazards.
  4. Assemble and verify safety check of equipment.
  5. Perform ventilator check and chart appropriate data in patient medical record.
  6. Recommend, and if appropriate institute parameter changes in invasive mechanical ventilation according to the individual patient data and laboratory results.
  7. Perform and analyze the indicated bedside tests/assessments and review patient chart to evaluate if patient is a candidate for weaning from invasive mechanical ventilation.
  8. Institute and evaluate weaning trial based on patient data and clinical practice guidelines.
  9. Evaluate patient for extubation, if indicated select equipment and extubate patient including pre/post assessment of ventilation.
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**Course Outcome(s):**

Deliver noninvasive mechanical ventilation and analyze the data to determine patient's pathophysiologic state.

**Objective(s):**

1. Perform the necessary bedside tests, laboratory studies, and/or chart review, to adequately assess a patient's condition, correctly interpret the results obtained, and analyze results to determine indications for noninvasive mechanical ventilation according to the clinical practice guidelines.
2. Interpret and evaluate a physician's order for noninvasive mechanical ventilation, identifying goals, physiologic effects, indications, contraindications and hazards.
3. Assemble and verify safety check of equipment.
4. Perform noninvasive ventilator check and chart appropriate data in patient medical record.
5. Recommend, and if appropriate institute parameter changes in noninvasive mechanical ventilation according to the individual patient data and laboratory results.
6. Perform and analyze the indicated bedside tests/assessments and review patient chart to evaluate if patient is a candidate for weaning from noninvasive mechanical ventilation.
7. Evaluate weaning trial based on patient data, hospital protocol, and clinical practice guidelines.
8. Prepare the noninvasive mechanical ventilation equipment, administer the therapy and perform an evaluation of effectiveness.

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**Course Outcome(s):**

Perform tracheostomy care while maintaining a sterile field.

**Objective(s):**

1. Perform the necessary bedside tests, laboratory studies, and/or chart review, to adequately assess a patient's condition, correctly interpret the results obtained, and analyze results to determine indications for tracheostomy care according to the clinical practice guidelines.
2. Interpret and evaluate a physician's order for tracheostomy care; identifying goals, indications, contraindications, and hazards.
3. Perform tracheostomy care and chart appropriate data in patient medical record.
4. Recommend, and if appropriate institute changes in respiratory care modalities according to the individual patient needs.
5. Participate in patient instruction required for tracheostomy care.

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**Course Outcome(s):**

Administer respiratory care to a neonatal/pediatric patient and analyze the data to determine patient's pathophysiologic state.

**Objective(s):**

1. Perform the necessary bedside tests, laboratory studies, and/or chart review, to adequately assess a patient's condition, correctly interpret the results obtained, and analyze results to determine indications for respiratory care according to the clinical practice guidelines.
2. Interpret and evaluate a physician's order for respiratory care; identifying goals, indications, contraindications, and hazards.
3. Perform manual ventilation/suctioning and chart appropriate data in patient medical record.
4. Recommend, and if appropriate institute changes in respiratory care modalities according to the individual patient needs.
5. Differentiate adult, pediatric, and neonatal therapy techniques and guidelines.

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**Course Outcome(s):**

Design and implement a respiratory care patient care plan.

**Objective(s):**

1. Schedule the delivery of therapies based on time management dependent upon patient acuity and work load assignments.
2. Compose a patient summary to deliver to medical team and/or shift report.
3. Prioritize and manage a respiratory care workload as determined by the clinical instructor
4. Demonstrate/modify the delivery of patient care to accommodate patients with special needs.
5. Analyze patient records, patient interview, examination of the chest, radiologic exams, laboratory data evaluation, vital signs patient data to develop patient care plan.

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**Course Outcome(s):**

Communicate with patients and health care personnel verbally, written, and via electronic medical record (EMR) within Health Insurance Portability Accountability Act (HIPAA) standards.

**Objective(s):**

1. Compose a patient summary to deliver to medical team and/or shift report.
2. Develop a plan to prioritize and manage a respiratory care workload as determined by the clinical instructor
3. Demonstrate/modify the delivery of patient care to accommodate patients with special needs.
4. Follow clinical site information systems and department protocols for access/sign-on to the electronic medical record (EMR) and to navigate through the EMR.
5. Follow clinical site information systems and department protocols for the dispensing of medications.
6. Chart (electronic medical record (EMR) and/or paper charting) all procedures, treatments, therapies, and flowsheets per clinical site protocols.
7. Adhere to the Health Insurance Portability & Accountability Act (HIPAA) standards.
8. Communicate patient data (assessment, evaluation of therapy, objective data) to members of the health care team (respiratory therapist, RN, MD).

**Course Outcome(s):**

Apply "Standard Precautions" protocols when administering therapies as recommended by the Centers for Disease Control and institutional guidelines in the care of all patients.

**Objective(s):**

1. Apply Centers for Disease Control recommendations for specific pandemic infection control policies and protocols.
2. Adhere to all infection control clinical site protocols.

**Course Outcome(s):**

Compose a college-level written and oral patient case study presentation using correct grammar, appropriate rhetorical strategies, reference citation and style format.

**Essential Learning Outcome Mapping:**

Oral Communication: Demonstrate effective verbal and nonverbal communication for an intended audience that is clear, organized, and delivered effectively following the standard conventions of that language.

Written Communication: Demonstrate effective written communication for an intended audience that follows genre/disciplinary conventions that reflect clarity, organization, and editing skills.

**Objective(s):**

1. Present an overview or description of the pathophysiologic condition.
2. Discuss/summarize the respiratory management of the patient; including ventilator management, specific therapies given, pharmacologic regiment, oxygenation management and acid-base disorders.
3. Categorize all medications by indications specific to your patient.
4. Evaluate patient management including recommendations to respiratory care plan.
5. Compose an oral PowerPoint presentation of the case study for presentation to classmates, clinical instructors, program staff, and medical director.

**Methods of Evaluation:**

1. Proficiency evaluations
2. Summative clinical evaluation
3. Clinical quizzes
4. Written case study
5. Oral case study presentation
6. Written paper - obtaining state license and national credentials

**Course Content Outline:**

1. Clinical orientation activities:
  - a. Departmental orientation
    - i. department management and organization
    - ii. department policy and procedures and manuals
    - iii. student meeting area
    - iv. parking facilities
    - v. ID badges
  - b. Hospital orientation

- i. patient care areas
    - ii. ancillary departments
    - iii. cafeteria
    - iv. department related equipment/supplies
    - v. HIPAA
  - c. Clinical orientation
    - i. patient charts and documentation
    - ii. equipment/supplies
    - iii. infection control policies/protocols
    - iv. HIPAA policies
- 2. Clinical proficiencies
  - a. Mechanical ventilation: volume-parameter change
  - b. Mechanical ventilation: pressure control
  - c. Noninvasive ventilation: initial set-up
- 3. Check-offs
  - a. Extubation
  - b. A-line sampling
- 4. Specialty rotations: Neonatal/pediatric rotation
  - a. Clinical activities
  - b. Chart review and documentation
  - c. Use of equipment/supplies related to administration of therapies
  - d. Emergency codes
  - e. Mechanical ventilation management
  - f. Administration of ordered therapy
  - g. Assessment of patients and development of therapeutic care plans
  - h. Communication with health care team
    - i. Physician rounds/conferences
    - j. Patient transport
  - k. General therapies delivered to rotation specific population
    - l. Modify therapy to deal with special patient needs.
  - m. Equipment specific to rotation specific population
- 5. Long Term Acute Care (LTAC) rotation
  - a. Clinical activities
  - b. Chart review and documentation
  - c. Use of equipment/supplies related to administration of therapies
  - d. Emergency codes, utility outages
  - e. Mechanical ventilation management
  - f. Administration of ordered therapy
  - g. Assessment of patients and development of therapeutic care plans
  - h. Communication with health care team
    - i. Physician rounds/conferences
    - j. Patient transport
  - k. General therapies delivered to rotation specific population
    - l. Modify therapy to deal with special patient needs.
  - m. Tracheostomy care, decannulation
  - n. Long term weaning protocol management
  - o. Equipment specific to rotation specific population
- 6. Clinical activities
  - a. Administration of ordered therapies in respiratory care - oxygen, arterial blood sampling, medicated aerosol, humidity, airway clearance, hyperinflation, suctioning/manual ventilation, mechanical ventilation, pulmonary function testing/intubation, pulmonary function testing
  - b. Chart review and documentation
  - c. Use of equipment/supplies related to administration of therapies
  - d. Emergency codes
  - e. Mechanical ventilation management
  - f. Assessment of patients and development of therapeutic care plans
  - g. Communication with health care team

- h. Physician rounds/conferences
- i. Patient transport
- j. Modify therapy to deal with special patient needs.

## Resources

Oakes, D & Jones S. (2017) *Clinical Practitioners Pocket Guide to Respiratory Care*, Main: Health Educator Publications.

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Wilkins S, Stoller J, Scanlan C. (2020) *Egan's Fundamentals of Respiratory Therapy*, St. Louis, MO: Elsevier .

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Des Jardins T & Burton GG. (2020) *Studies T/A Clinical Manifestations and Assessment of Respiratory Disease*, St. Louis: Elsevier .

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Gardenhiere DS. (2019) *Rau's Respiratory Care Pharmacology*, St. Louis: Elsevier .

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West JD. (2012) *Respiratory Physiology: The Essentials*, Baltimore: Lippincot Williams & Wilkins.

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Des Jardins T. (2010) *Clinical Manifestations and Assessment of Respiratory diseases*, St. Louis: Mosby.

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Hever L & Scanlan CL. (2018) *Wilkin's Clinical Assessment in Respiratory Care*, St. Louis: Elsevier .

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West JD. (2001) *Pulmonary Physiology and Pathophysiology*, Baltimore: lippincot Williams & Wilkins.

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