# **RESP-2950: RESPIRATORY CARE FIELD EXPERIENCE II**

# **Cuyahoga Community College**

### Viewing: RESP-2950 : Respiratory Care Field Experience II

Board of Trustees: May 2020

Academic Term:

Fall 2020

Subject Code RESP - Respiratory Care

#### Course Number:

2950

Title:

**Respiratory Care Field Experience II** 

#### **Catalog Description:**

Field experience in the clinical setting on respiratory therapy equipment, policies, and procedures. Emphasis on intubation, pulmonary function testing, airway clearance techniques, hyperinflation techniques, manual ventilation and suctioning, and mechanical ventilation. Clinical activities also include proficiencies completed in patient assessment, aerosol therapy, bedside pulmonary function testing, arterial blood gas sampling and analysis, and oxygen therapy.

Other required hours: 24 hours field experience per week for 15 weeks (360 total hours).

Credit Hour(s):

2

Other Hour(s): 360

#### **Requisites**

#### Prerequisite and Corequisite

RESP-2210 Introduction to Mechanical Ventilation, RESP-2310 Mechanical Ventilation or concurrent enrollment, and RESP-2940 Respiratory Care Field Experience I.

#### Outcomes

#### Course Outcome(s):

Evaluate a patient to determine if the patient meets the indications for hyperinflation therapy, administer appropriate therapy and instruct the patient in the proper breathing techniques.

#### 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 hyperinflation therapy according to the clinical practice guidelines.
- 2. Calculate patient goal requirements to determine the optimal therapeutic goals.
- 3. Interpret and evaluate a physician's order for hyperinflation therapy; identifying goals, indications, contraindications, and hazards of therapy.
- 4. Administer hyperinflation therapy, including instruction to patient on proper breathing pattern/technique and chart appropriate data in patient medical record.
- 5. Recommend, and if appropriate institute changes in respiratory care modalities according to the individual patient needs.

#### Course Outcome(s):

Evaluate a patient to determine if the patient meets the indications for airway clearance therapy, administer appropriate therapy and instruct the patient in the proper breathing techniques.

#### Objective(s):

- 1. Administer hyperinflation therapy, including instruction to patient on proper breathing pattern/technique and chart appropriate data in patient medical record.
- 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 airway clearance therapy according to the clinical
  practice guidelines.
- 3. Interpret and evaluate a physician's order for airway clearance therapy; identifying goals, indications, contraindications, and hazards of test.
- 4. Perform airway clearance therapy and chart appropriate data in patient medical record.
- 5. Recommend, and if appropriate institute changes in respiratory care modalities according to the individual patient needs.

#### Course Outcome(s):

Assess a patient to determine the need for airway suctioning, perform suctioning utilizing sterile technique and manual ventilation while continuously monitoring the patient.

#### Objective(s):

- 1. Administer hyperinflation therapy, including instruction to patient on proper breathing pattern/technique and chart appropriate data in patient medical record.
- 2. Assess the indications for suctioning and/or manual ventilation according to the clinical practice guidelines.
- 3. Interpret and evaluate a physician's order for suctioning; identifying goals, indications, contraindications, and hazards.
- 4. Administer suctioning and manual ventilation and chart appropriate data in patient medical record.
- 5. Evaluate delivered therapy and recommend, and if appropriate institute changes in respiratory care modalities according to the individual patient
- 6. Recommend, and if appropriate institute changes in respiratory care modalities according to the individual patient needs.

#### 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.

#### **Essential Learning Outcome Mapping:**

Information Literacy: Acquire, evaluate, and use information from credible sources in order to meet information needs for a specific research purpose.

#### 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. Administer suctioning and manual ventilation and chart appropriate data in patient medical record.
- 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.
- 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.

#### Course Outcome(s):

Demonstrate placement of artificial airways (endotracheal tubes and LMAs) in the operating room setting and continuously monitor the patient.

#### Objective(s):

- 1. Interpret and evaluate a physician's order for intubation; identifying goals, indications, contraindications, and hazards.
- 2. Insert artificial airway and ventilate patient; chart appropriate data in patient medical record
- 3. Evaluate patient after intubation and recommend follow-up tests/studies to verify endotracheal tube placement, and if appropriate institute changes in artificial airway according to the individual patient.
- 4. Recommend, and if appropriate institute changes in artificial airway according to the individual patient needs.

#### Course Outcome(s):

Administer pulmonary function tests and interpret a patient's pulmonary mechanics from test results.

#### Objective(s):

- 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 pulmonary function tests according to the clinical
  practice guidelines.
- 2. Interpret and evaluate a physician's order for pulmonary function tests; identifying goals, indications, contraindications, and hazards of test.
- 3. Perform pulmonary function tests 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. Interpret pulmonary function test results and relate to possible cause of any abnormal results.
- 6. Calibrate, monitor, and record quality control procedures for PFT instruments.

#### Course Outcome(s):

Initiate mechanical ventilation (volume controlled ventilation), select/set safely alarm settings, and monitor patient response.

#### Objective(s):

- 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 mechanical ventilation according to the clinical practice guidelines.
- 2. Interpret and evaluate a physician's order for mechanical; identifying goals, indications, contraindications, and hazards.
- 3. Initiate mechanical ventilation and set safety alarms at appropriate levels; chart appropriate data in patient medical record.
- 4. Calculate initial mechanical ventilation settings given baseline patient data.
- 5. Assemble mechanical ventilator and circuit, perform equipment safety check and document.
- 6. Recommend, and if appropriate, institute changes in mechanical ventilation settings based on patient data and arterial blood gas result according to the individual patient needs.

#### Course Outcome(s):

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

#### Objective(s):

- 1. Apply Centers for Disease Control (CDC) 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 small group presentations 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.

#### Objective(s):

- 1. Evaluate and discuss the respiratory management of the patient, including recommendations to respiratory care plan for problem based learning activity.
- 2. Categorize all medications by indications specific to your patient for problem based learning activity.
- 3. Compose an oral PowerPoint presentation of the problem based learning activity for presentation to classmates, clinical instructors, and program staff.
- 4. Formulate responses to Journal Club activity questions and present to classmates, clinical instructors, and program staff.

#### Methods of Evaluation:

- 1. Proficiency evaluations
- 2. Summative clinical evaluation
- 3. Computerized clinical simulations
- 4. Information gathering and decision-making examinations

- 5. Special topics paper/internet exercises
- 6. Small group presentation-journal club
- 7. Small group presentation-problem-based learning case study

#### **Course Content Outline:**

- 1. Clinical orientation activities
  - a. Departmental orientation
    - i. department management and organization
    - ii. department policy and procedure manuals
    - iii. student meeting area
    - iv. parking facilities
    - v. equipment/supply storage
    - vi. 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
    - iii. infection control policies/protocols
    - iv. HIPAA policies
    - v. attendance
    - vi. lesson plans
    - vii. clinical activity
    - viii. schedule
    - ix. infection control policies/procedures
    - x. universal precautions
- 2. Clinical proficiencies
  - a. Airway clearance therapies
  - b. Hyperinflation therapies
  - c. Pulmonary function testing
  - d. Suctioning and manual ventilation
  - e. Mechanical ventilation initial set-up
- 3. Clinical activities
  - a. Chart review and documentation
  - b. Use of equipment/supplies related to administration of therapies
  - c. Emergency codes
  - d. Assessment of patients and development of therapeutic care plans
  - e. Administration of ordered therapies- concentration on , but not limited to: airway clearance, hyperinflation, suctioning and manual ventilation, intubation, pulmonary function testing, patient assessment, oxygen therapy, aerosol therapy, and ABG puncture
  - f. Communication with health care team
  - g. Physician rounds/conferences

## Resources

DesJardins T. (2020) Clinical manifestations of respiratory disease, St. Louis, MO: Elsevior .

Gardenhiere DS. (2019) Rau's respiratory care pharmacology, St. Louis, MO: Elsevior .

Des Jardins T & Burton GG. (2020) Case studies T/A clinical manifestations & assessment of respiratory diseases, St Louis, MO: Elsevier .

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

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

West JD. (2012) Respiratory physiology: the essentials, Baltimore: Williams & Wilkins.

West JD. (2001) Pulmonary physiology & Pathophysiology, Baltimore: Lippincot.

AARC Clinical Practice Guidelines.

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