

RSPT 50B: INTRODUCTION TO PATIENT CARE PROCEDURES

Foothill College Course Outline of Record

Heading	Value
Units:	5
Hours:	3 lecture, 6 laboratory per week (108 total per quarter)
Prerequisite:	RSPT 50A.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Student Learning Outcomes

- Explain the indications, contraindications and hazards for invasive and noninvasive respiratory procedures administered.
- The student will be able to demonstrate both invasive and noninvasive respiratory procedures as lab competencies, and must complete all lab competencies with a score of 70% or higher.

Description

Introduction to patient care procedures, suctioning, artificial airways, tracheostomy, bronchoscopy, administration of hyperinflation therapy, airway pharmacology, bronchial hygiene therapy, aerosol drug therapy, introduction to non-invasive ventilation, basic and advanced airway care, and nutrition assessment. Intended for students in the Respiratory Therapy Program; enrollment is limited to students accepted in the program.

Course Objectives

The student will be able to:

- Describe how to safely perform endotracheal and nasotracheal suctioning
- Assess the need for and select an artificial airway
- Identify indications for a tracheostomy and bronchoscopy procedure
- Perform hyperinflation therapy
- Perform bronchial hygiene and chest physiotherapy
- Discuss aerosol drug therapy and medications used for airway pharmacology
- Explain the indications for non-invasive ventilation
- Identify indications, complications, and hazards for arterial blood sampling
- Discuss the effects of nutrition on the body from a respiratory standpoint

Course Content

- Endotracheal and nasotracheal suctioning
 - Causes of secretion retention
 - Indication for suctioning
 - Hazards of suctioning
 - Methods of evaluating effectiveness
 - Oropharyngeal, nasopharyngeal, endotracheal and tracheostomy suctioning procedures

- Adult vs. child vs. infant suctioning
- Selecting an artificial airway
 - Endotracheal tube
 - Tracheostomy tube
 - Hazards and complications
- Tracheostomy and bronchoscopy
 - Prolonged intubation
 - Aspiration of secretions
 - Tissue and secretion samples
- Hyperinflation therapy
 - Incentive spirometry equipment
 - Incentive spirometry administration procedure
 - CPAP therapy
- Indications, contraindications, and hazards for therapy
- Methods of evaluating therapy effectiveness
- Perform bronchial hygiene and CPT
 - Normal airway clearance mechanisms
 - Pulmonary diseases and abnormal clearance of secretions
 - Goals of bronchial hygiene therapy
 - Bronchial hygiene techniques
 - Postural drainage
 - Directed cough and expulsion techniques
 - PEP therapy
 - High frequency and oscillation methods
 - Mobilization and exercise
 - Patient's response to bronchial hygiene therapy
- Aerosol drug therapy and medications used for airway pharmacology
 - Definition of aerosol
 - Aerosol deposition
 - Drug delivery systems
 - Bronchodilator therapy
 - Exposure to aerosolized drugs
 - Classes of drugs
 - Aerosol route
 - Mode of action
 - Indication
 - Dosages
 - Outcome of each drug therapy
- Indications for non-invasive ventilation
 - Concept of non-invasive positive pressure ventilation
 - Goals of NPPV
 - Selecting patients for NPPV
 - Types of ventilators used and modes to deliver NPPV
 - Complications associated with NPPV
- Arterial blood gases
 - Arterial blood sampling indications and contraindications
 - Arterial blood gas equipment
 - Arterial line draws
 - Allen's test
- Effects of nutrition
 - Malnutrition
 - Observation of malnourished patient
 - Calorimetry
 - Energy expenditure
 - Effects of malnutrition on respiratory system
 - Nutritional guidelines and pulmonary diseases
 - Effects of respiratory medications on nutrition

Lab Content

- Suctioning
 - Suctioning equipment

2. Oral suctioning
3. Endotracheal suctioning
4. Tracheal suctioning
- B. Providing and maintaining artificial airways
 1. Endotracheal tubes
 2. Tracheostomy tubes
 3. Intubation models and equipment
 4. Resuscitation bags/masks
 5. Suction equipment
 6. Endotracheal and tracheostomy care
- C. Tracheostomy and bronchoscopy
 1. Tracheostomy procedures
 2. Tracheostomy equipment
 3. Tracheostomy care
 4. Introduction to bronchoscopy equipment
- D. Hyperinflation therapy
 1. Hyperinflation equipment
- E. Bronchial hygiene procedures
 1. Vest therapy
 2. IPV therapy
 3. PEP therapy
 4. Cough assist
 5. CPT
 6. Postural drainage
 7. Sputum inductions
- F. Aerosol drug therapy
 1. MDI
 2. DPI
 3. Spacers
 4. SVN
 5. Aerosolized medication
- G. Non-invasive positive pressure ventilation (NPPV)
 1. NPPV equipment
 2. NPPV interface options
- H. Arterial blood gases
 1. Perform Allen's test
 2. Perform arterial blood gas sampling
 2. Administer subcutaneous lidocaine
- I. Nutrition
 1. Indirect calorimetry

Special Facilities and/or Equipment

A. Hyperinflation therapy equipment, humidity and aerosol therapy equipment, MDI's and spacers, adult intubation models, intubation equipment, suctioning equipment, hospital bed, arterial blood sampling equipment.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Methods of evaluation may include:

- A. Quizzes
- B. Midterm
- C. Final exam
- D. Lab performance
- E. Lab competencies
- F. Lab final

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

- A. Lecture
- B. Laboratory

Representative Text(s) and Other Materials

Kacmarek, Stoller, and Heuer. Egan's Fundamentals of Respiratory Care. 11th ed. St. Louis: Elsevier, 2017. ISBN: 9780323341363

Kacmarek, Stoller, and Heuer. Workbook for Egan's Fundamentals of Respiratory Care. 11th ed. St. Louis: Elsevier, 2017. ISBN: 9780323358521

Hinski. Respiratory Care Clinical Competency Lab Manual. St. Louis: Elsevier, 2014. ISBN:9780323100571

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

- A. Chapter reading assignments
- B. Workbook competencies related to course content

Discipline(s)

Respiratory Technologies