

RSPT 56: ORIENTATION TO HOSPITAL & PATIENT CARE I

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2025
Units:	1
Hours:	3 laboratory per week (36 total per quarter) This is a clinical laboratory course.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Student Learning Outcomes

- Abide by proper infection control guidelines and standards associated with equipment and respiratory procedures.
- Demonstrate and state indications, contraindications, hazards, and methods of evaluating the effectiveness of all therapies administered.

Description

A comprehensive introduction to the hospital environment and the fundamentals of patient care. Students will learn to perform a wide variety of respiratory care procedures. Through direct patient interactions and hands-on practice, students will develop critical thinking skills and clinical reasoning skills. 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:

- Assess and monitor patient's vital signs and breath sounds.
- Perform basic bedside pulmonary function tests as indicated.
- Demonstrate safe handling of compressed gas equipment.
- Calculate duration of cylinder life.
- Demonstrate use of pulse oximeter.
- Demonstrate effective practices of infection control prevention.
- Administer oxygen and aerosol therapy to patients as indicated.
- Demonstrate the ability to perform basic life support procedures.
- Interpret clinical laboratory data.

Course Content

- Vital signs and breath sounds
 - Temperature
 - Heart rate
 - Blood pressure
 - Use of stethoscope
 - Examination of thorax and lungs
- Basic bedside pulmonary function tests
 - Forced vital capacity test
 - Peak flow test

- Compressed gas equipment
 - Compressed gas tanks
 - Compressed gas piping systems
 - Safe handling of compressed gases
 - Diameter-index safety system (DISS)
 - Pin-indexing safety system (PISS)
- Compressed gas regulation
 - Reducing valves
 - Bourdon gauges
 - Thorpe tubes
 - Regulators
 - Safety devices
- Oxygen analyzers
 - Indications of use of analyzers
 - Calibration of analyzers
- Infection control prevention
 - Hand hygiene
 - Sterile gloving
 - Applying and removing personal protective equipment (PPE)
 - Isolation precautions
 - Special precautions, e.g., airborne precautions
- Administer oxygen and aerosol therapy to patients
 - Oxygen therapy
 - Indications for therapy
 - Selecting proper oxygen delivery device
 - Complication/hazards of therapy
 - Evaluating effectiveness of therapy
 - Variable performance vs. fixed performance devices
 - High flow vs. low flow devices
 - Oxygen enclosures
 - Hyperbaric oxygen therapy
 - Oxygen-conserving devices
 - Pulse oximetry
 - Use of pulse oximetry
 - Limitations of pulse oximeters
 - Humidity and bland aerosol therapy
 - Use of bubble humidifier
 - Use of large-volume nebulizer
 - Sputum induction
 - Selection of appropriate device
 - Troubleshooting devices
 - Heat and moisture exchange
 - Specialty gas therapy
 - Heliox therapy
 - Nitric oxide therapy
 - Evaluation of effectiveness
 - Indications for application
 - Aerosol drug therapy
 - Selection of appropriate drug delivery device
 - Assessing patient's response to therapy
 - Recognizing complications/hazards of aerosol
 - Review physician's order to administer oxygen and aerosol therapy
- Cardio pulmonary resuscitation

- a. Basic life support certification
- 9. Clinical application of of laboratory data
 - a. Critical test values
 - b. Complete blood count
 - c. Electrolyte test
 - d. Enzymes test
 - e. Coagulation studies
 - f. Microbiology test
 - i. Sputum cultures
 - g. Arterial blood gas interpretation

Lab Content

1. Vital signs and breath sounds
 - a. Temperature
 - b. Heart rate
 - c. Blood pressure
 - d. Use of stethoscope
 - e. Examination of thorax and lungs
2. Basic bedside pulmonary function tests
 - a. Forced vital capacity test
 - b. Peak flow test
3. Compressed gas equipment
 - a. Compressed gas tanks
 - b. Compressed gas piping systems
 - c. Safe handling of compressed gases
 - d. Diameter-index safety system (DISS)
 - e. Pin-indexing safety system (PISS)
4. Compressed gas regulation
 - a. Reducing valves
 - b. Bourdon gauges
 - c. Thorpe tubes
 - d. Regulators
 - e. Safety devices
5. Oxygen analyzers
 - a. Indications of use of analyzers
 - b. Calibration of analyzers
6. Oxygen therapy
 - a. Indication for therapy
 - b. Selecting proper oxygen delivery device
 - c. Complication/hazards of therapy
 - d. Evaluating effectiveness of therapy
 - e. Variable performance vs. fixed performance devices
 - f. High flow vs. low flow devices
 - g. Oxygen enclosures
 - h. Hyperbaric oxygen therapy
 - i. Oxygen-conserving devices
7. Infection control prevention
 - a. Hand hygiene
 - b. Sterile gloving
 - c. Applying and removing personal protective equipment (PPE)
 - d. Standard isolation precautions
 - e. Special precautions

- i. Airborne
 - ii. Contact
 - iii. Droplet
8. Pulse oximetry
 - a. Use of pulse oximetry
 - b. Limitations of pulse oximeters
9. Humidity and bland aerosol therapy
 - a. Use of bubble humidifier
 - b. Use of large-volume nebulizer
 - c. Sputum induction
 - d. Selection of appropriate device
 - e. Troubleshooting devices
 - f. Heat and moisture exchange
10. Specialty gas therapy
 - a. Heliox therapy
 - b. Nitric oxide therapy
 - c. Evaluation of effectiveness
 - d. Indications for application
11. Aerosol drug therapy
 - a. Selection of appropriate drug delivery device
 - b. Assessing patient's response to therapy
 - c. Recognizing complications/hazards of aerosol
12. Arterial blood gas sampling

Special Facilities and/or Equipment

Students rotate through clinical affiliate accredited hospitals.

Method(s) of Evaluation

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

Student daily evaluation forms
 Trajecsys reporting system
 Case studies
 Clinical instructor observation and oversight
 Respiratory Therapy competency checklist

Method(s) of Instruction

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

Observation
 Discussion
 Demonstration
 Lab competencies as demonstrated in skills

Representative Text(s) and Other Materials

There are no textbooks for this course.

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

Students are expected to complete college-developed ICU competencies to demonstrate their understanding of each of their patient's conditions,

interventions, and treatments. Competency demonstration includes return demonstration, medical record documentation, and verbal narratives on patient assessment, delivery of respiratory modalities, and the development of patient care plans.

Discipline(s)

Respiratory Technologies