

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ACADEMIC AFFAIRS

Course Number: RSPC 305 Department: Respiratory Care

Course Title: Respiratory Function Testing Semester: Spring Year: 1999

Objectives/Competencies

Course Objective	Competencies
1. Chapter 1: Indications for pulmonary function testing.	1. Categorize PFT according to specific purposes. 2. List indications for spirometry testing. 3. Identify diseases that commonly require pulmonary function assessment. 4. Perform a patient history.
2. Chapter 2: Spirometry and related tests.	1. Identify changes in spirometry related to pathology. 2. Determine response to bronchodilators. 3. Recognize abnormal values for airway resistance and compliance. 4. Recognize flow volume loop curves normal and abnormal.
3. Chapter 3: Lung volumes and gas distribution tests.	1. Describe the measurement of lung volumes using the open and closed circuit technique. 2. Explain the advantage of using body plethymography for measuring lung volumes. 3. Identify uneven distribution of gas in the lungs using specialized measuring techniques.

Course Objective	Competencies
4. Chapter 4: Ventilation and ventilator control tests.	<ol style="list-style-type: none"> 1. Calculate tidal and minute volume. 2. Describe the tests for measuring the breathing response to oxygen and carbon dioxide. 3. Calculate dead space ventilation.
5. Chapter 5: Diffusion capacity test.	<ol style="list-style-type: none"> 1. Understand how to perform test. 2. Differentiate between obstructive and restrictive disease and the test. 3. Interpret test results.
6. Chapter 6: Blood Gases and related tests.	<ol style="list-style-type: none"> 1. Describe measurement of blood gases. 2. Understand equipment calibration.
7. Chapter 7: Cardiopulmonary exercise testing.	<ol style="list-style-type: none"> 1. Select the appropriate protocol for testing. 2. Describe normal and abnormal change with testing. 3. Identify indications for termination of test.
8. Chapter 8: Specialized test regimens.	<ol style="list-style-type: none"> 1. Describe methods of performing Bronchial Challenge Tests. 2. List indications for pre-op testing. 3. Suggest appropriate tests for identifying disabilities. 4. Contrast spirometry measurements between adults and children. 5. Name criteria for judging the acceptability of metabolic measurements.