



De La Salle – Health Sciences Institute  
College of Rehabilitation Sciences  
Department of Physical Therapy



**PULMONARY REHABILITATION part 1**

**Date:** September 26, 2012 (Wednesday)

**Time:** 2:00 – 6:00 pm

**Schedule:**

2:00 – 2:30	Pre Lab Pracs
2:30 – 5:00	Discussion (45min/rotation)
5:00 – 5:20	Practice Time for ALL topics
5:20 – 6:00	RET DEM

**PULMONARY REHABILITATION part 2**

**Date:** September 27, 2012 (Thursday)

**Time:** 8:00 – 12:00 pm

**Schedule:**

8:00 – 11:00	Discussion (1 hr / rotation)
11:00 – 11:20	Practice Time for ALL topics (students)
11:20 – 12:00	RET DEM

**INSTRUCTIONS for part 1 & 2**

1. Study the report assigned to you (see attached file for report assignments). During your report you are expected to:

- a. State the RATIONALE of the activity
  - b. Perform / Demonstrate the Activity to the group
2. You will be graded using the Rubric (same rubric w/ TX 3, see moodle for reference).
  3. Your grade in the report will serve as your CLASS PARTICIPATION.
  4. Please study all of the activities for the PRE LAB PRACS (part1 only)
  5. Please watch the video of ACBT & Incentive spirometer (IS). See link given. Each group is required to have a downloaded copy of the ACBT & Incentive spirometer video. You have to play this on the computer in the room during the ACBT & IS station. Though these topics do not have reporters. (part 2 only)
  6. Each student will be asked to submit his or her hw (articles) in a specific station where it will be discussed. Make sure to have your hardcopy by the lab session (part 2 only).
  7. A supplementary hand out is given to help. But this should not be used as a reference. You can double check the content of the handouts in your books. Books are still used as a reference.
  8. Materials to bring:

Part 1 & 2:

- a. Towels & pillows (atleast 1-2/student)
- b. Mask & gloves (1/student)
- c. Tissue (1 roll / group) – use this during the demo
- d. Sputum cup (can be modified sputum cup or container) see picture attached. It doesn't have to be exactly the same as in the picture. It can be a modified sputum cup/container or anything similar to that. (1 / group)

Part 2 only:

- a. Bring your own Incentive Spirometer (1 per student). See picture attached. It doesn't have to be exactly the same as in the picture. (1/student).



Section	4-1			4-2			4-3		
Rooms <b>(PART 1 &amp; 2)</b>	8506	8506	8507	8507	8509	8509	CRS SL	CRS SL	CRS SL
Group	1	2	3	1	2	3	1	2	3

Study the following techniques:

**PART 1**

**BREATHING EXERCISES (Chapter 25: pp. 861-866)**

- Guidelines for teaching breathing exercises
- Diaphragmatic breathing
- Segmental breathing
  - Bilateral lateral costal expansion—supine
  - Bilateral lateral costal expansion—sitting
  - Independent lateral costal expansion
  - Posterior basal
- Pursed-lip breathing
- Glossopharyngeal breathing
- Positive expiratory pressure breathing
- Preventing and relieving episodes of dyspnea

**CHEST MOBILIZATION EXERCISES (Chapter 25: pp. 867-868)**

- To mobilize one side of the chest
- To mobilize the upper chest and stretch the pectoralis muscles
- To mobilize the upper chest and shoulders

**COUGHING EXERCISES (Chapter 25: pp. 868-870)**

- Teaching an effective cough
- Manual-assisted cough
  - Therapist-assisted techniques
  - Self-assisted techniques
- Splinting
- Tracheal stimulation

**POSTURAL DRAINAGE (Chapter 25: pp. 870-875)**

- Goals and indications for postural drainage
- Relative contraindications for postural drainage
- Manual techniques used in PD therapy
  - Percussion
  - Relative contraindications to percussion
  - Vibration
  - Shaking
- Preparation for postural drainage
- Postural drainage sequence
- Postural drainage positions
  - Anterior apical segments
  - Posterior apical segments
  - Anterior segments upper lobe
  - Posterior segment upper lobe (Left)
  - Posterior segment upper lobe (Right)
  - Lingula
  - Middle lobe
  - Anterior segments lower lobe
  - Posterior segments lower lobe
  - Lateral segment lower lobe (Left)
  - Lateral segment lower lobe (Right)
  - Superior segments lower lobe
- Concluding a treatment
- Modified postural drainage
- Home program of postural drainage



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## **PART 2**

### **RESPIRATORY RESISTANCE TRAINING (Chapter 25: p. 866)**

- Inspiratory resistance training
- Incentive respiratory spirometry (also see video), play the videos in class
  - <https://docs.google.com/open?id=0BwB7enu3pGzLc3N3QklBQzBuRVU>
  - <https://docs.google.com/open?id=0BwB7enu3pGzLQ0taVkNUZmxnQkE>

### **DYSPNEA RELIEVING POSITIONS**

- Kisner, 5<sup>th</sup> Ed, page 858 fig 25.6
- (Christenbery, 2005).

### **WORK SIMPLIFICATION AND ENERGY CONSERVATION TECHNIQUES**

- (Velloso, 2006).
- Cite examples / cases wherein work simplification & energy conservation is applied to a pulmo patient.

### **ACTIVE CYCLE OF BREATHING (see handout and video)**

- <https://docs.google.com/open?id=0BwB7enu3pGzLYXZNeVBnNnA3RWs>
- (Villegas, 2011)
- To be discussed by the faculty.

### **AUTOGENIC DRAINAGE**

- To be discussed by the faculty.

**REFERENCE:** *Kisner, C. & Colby, L.A. (2007). Therapeutic Exercise Foundations and Techniques, 5th ed.*