



UNIVERSITY OF ARKANSAS  
**PULASKI TECH**

**Academic Year: 2020-2021**  
**RES 2403: CARDIOPULMONARY**  
**DIAGNOSTICS & TESTING**  
**(Spring)**



1. Name of course:     \_RES 2403: Cardiopulmonary Diagnostics & Testing\_\_\_\_\_
2. Name of individual(s) compiling report:     Danah Beard\_\_\_\_\_
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4. Academic year:     \_\_2020-2021\_\_\_\_\_

## Course-Level Learning Outcomes-

### 1. What are the Course-Level Outcomes (CLOs)?

1. List the 3 categories of pulmonary function tests.
2. State the primary purpose of pulmonary function testing.
3. Describe the pathophysiologic patterns associated with obstructive and restrictive lung disease.
4. State what is meant by the term *spirometer*, and list the parameters that can be measured by it.
5. List and describe the four general principles that should be considered for pulmonary function tests.
6. List and describe the measurements that indicate the pulmonary mechanics.
7. Describe the purpose and technique for the bronchoprovocation test.
8. List and describe the 4 volumes and four capacities that can be measured with pulmonary function testing.
9. Describe the purpose and techniques used to measure diffusion capacity.
10. Interpret simple spirometry.
11. Identify the difference between obstructive and restrictive abnormalities based on pulmonary function reports.
12. Identify and understand terminology and definitions of pulmonary function testing.
13. Describe the purpose and technique used to perform lung volume tests, gas distribution tests, ventilation tests, diffusion tests, and pulmonary mechanics tests.
14. Demonstrate proper use of pulmonary function equipment.
15. Provide quality assurance and quality improvement for pulmonary function testing.

16. Demonstrate proper use of gas analyzers for CO, O<sub>2</sub>, He, and N<sub>2</sub> gases.
17. Medical imaging and other tests related to cardiopulmonary diagnoses.

## 2. Which CLOs were addressed for this academic year? (2019-2020)

All CLOs are addressed each year as they are imperative to competence of students performing patient care.

## 3. Which CLOs are being addressed in your assessment plan next academic year? (2020-2021)

All CLOs are addressed each year in the assessment plan. All CLOs are assessed with written exams and live student evaluations of competencies prior to performance on patients.

## 4. Explain the assessment cycle.

Didactic evaluations are with paper/pencil tests and all laboratory competencies are evaluated one-on-one with students in the laboratory prior to performance of competency in patient care. Students are required to perform a second competency evaluation with preceptors at the bedside prior to autonomy with patients in care delivery.

## 5. What are the assessment methods? Are they direct or indirect?

All assessment methods are direct and require satisfactory performance on both written assessments and clinical competencies demonstrated in all laboratory experiences.

## 6. What are the assessment goal(s)?

To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of

respiratory care practice as performed by registered respiratory therapists (RRTs).

## 7. What were the findings for this academic year? (2020-2021)

74% of 2021 graduates were both clinically and didactically successful and obtained employment in local hospitals. Goal: > 70 % of students graduate and obtain employment in area hospitals.

## 8. What is your analysis of the findings?

All didactic and clinical training is sufficient to meet CoARC standards for respiratory care practice.

## 9. What is the action plan for the next academic year? (2020-2021) Explain.

1. To continue to present didactic, laboratory, and clinical materials and rotations currently utilized for students to ensure successful completion of the program.
2. Currently added tutoring on Fridays to assure retention of students in the program.
3. Recently added 3 hospitals and 1 DME to clinical rotations for student to ensure variety of clinical experiences is obtained by respiratory students