RESP 2130 - Mechanical Ventilation and Airway Management (version 201003L)

Course Title	Course Development	Learning Support
Mechanical Ventilation and Airway Management	Standard	No

Course Description

Provides instruction in the theory, set-up, operation, and maintenance of mechanical ventilators and equipment used to establish and maintain both adult and pediatric airways and emergency airway disorders. Topics include: ventilator operation, ventilator maintenance, emergency airway disorders, adult airway establishment and maintenance, pediatric airway establishment and maintenance, fiberoptic bronchoscopy, thoracentesis, chest tube maintenance, arterial blood gas sampling, and noninvasive positive pressure ventilation.

Pre-requisites

Pre-requisites: All Required

RESP 1120 - Introduction to Respiratory Therapy (201003L)
RESP 1130 - Respiratory Therapy Lab I (201003L)
RESP 2120 - Critical Respiratory Care (201003L)

Regstr. Co-requisites

Regstr. Co-requisites: All Required

RESP 2120 - Critical Respiratory Care (201003L)

True Co-requisites

True Co-requisites: None

Course Length

	Lecture Contact Time	Regular Lab Type	Reg. Lab Contact Time	Other Lab Type	Oth. Lab Contact Time	Total Contact Hrs
Contact Hours Per Week	**0 hrs**	**Lab**	**8 hrs**	**N/A**	**0 hrs**	**8 hrs**
Contact Min/Hrs Per Semester	**0 min**		**6000 min**		**0 min**	**120 hrs**

	Lecture Credit Hours	Lab Credit Hours	Total Credit hours	WLU
Semester Credit Hours	**0**	**4**	**4**	**150**

Competencies & Outcomes

Order	Description

1 **Ventilator Operation**

Order	Description	Learning Domain	Level of Learning
1	Set up and operate common pressure limited ventilators.	Psychomotor	Mechanism
2	Set up and operate common volume limited ventilators.	Psychomotor	Mechanism

2 **Ventilator Maintenance**

Order	Description	Learning Domain	Level of Learning
1	Monitor commonly used infant, pediatric, and adult ventilators.	Cognitive	Knowledge

2	Maintain commonly used infant, pediatric, and adult ventilators.	Cognitive	Knowledge

3 **Emergency Airway Disorders**

Order	Description	Learning Domain	Level of Learning
1	Explain emergency airway disorder etiology, clinical manifestations, diagnosis, and treatment.	Cognitive	Comprehension

4 **Adult Airway Establishment and Maintenance**

Order	Description	Learning Domain	Level of Learning
1	Use orpharyngal and nasopharyngeal artificial airways.	Psychomotor	Mechanism
2	Demonstrate oral and nasal endotracheal intubation.	Psychomotor	Guided Response
3	Maintain endotracheal tubes.	Cognitive	Knowledge
4	Demonstrate tracheostomy care and troubleshooting airway emergencies.	Psychomotor	Guided Response

5 **Pediatric Airway Establishment and Maintenance**

Order	Description	Learning Domain	Level of Learning
1	Use orpharyngal and nasopharyngeal artificial airways.	Psychomotor	Mechanism
2	Demonstrate oral and nasal endotracheal intubation.	Psychomotor	Guided Response
3	Maintain endotracheal tubes.	Cognitive	Knowledge
4	Demonstrate tracheostomy care and troubleshooting airway emergencies.	Psychomotor	Guided Response

6 **Fiberoptic Bronchoscopy**

Order	Description	Learning Domain	Level of Learning
1	Explain fiberoptic bronchoscopy indications, contraindications, procedures, and hazards.	Cognitive	Comprehension
2	Explain the role of the respiratory therapist in fiberoptic bronchoscopy assisting.	Cognitive	Comprehension

7 **Thoracentesis**

Order	Description	Learning Domain	Level of Learning
1	Explain thoracentesis indications, contraindications, procedures, and hazards.	Cognitive	Comprehension
2	Explain the role of the respiratory therapist in thoracentesis assisting.	Cognitive	Comprehension

8 **Chest Tube Maintenance**

Order	Description	Learning Domain	Level of Learning
1	Contrast one chamber, two chamber, and three chamber chest tube drainage systems.	Cognitive	Analysis
2	Explain chest tube maintenance procedures.	Cognitive	Comprehension

9 **Arterial Blood Gas Sampling**

Order	Description	Learning Domain	Level of Learning
1	Demonstrate techniques for radial and brachial arterial blood gas sampling.	Psychomotor	Guided Response
2	Explain technique for arterial line sampling.	Cognitive	Comprehension
3	Explain arterial blood gas sampling indications and hazards.	Cognitive	Comprehension

10 **Noninvasive Positive Pressure Ventilation**

Order	Description	Learning Domain	Level of Learning
1	Set up and operate common ventilators.	Psychomotor	Guided Response