RESP 2120 - Critical Respiratory Care (version 201512L)

Course Title	Course Development	Learning Support
Critical Respiratory Care	Standard	No

Course Description

Provides students with knowledge on all phases of adult critical care and continuous mechanical ventilation. Topics include: mechanical ventilation history, principles of mechanical ventilation, continuous mechanical ventilation, ventilator implementation, ventilation monitoring, ventilator weaning, ventilator discontinuance and special techniques.

Pre-requisites

Pre-requisites: All Required

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

Regstr. Co-requisites

Regstr. Co-requisites: None

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	**1 hrs**	**Lab**	**2 hrs**	**N/A**	**0 hrs**	**3 hrs**
Contact Min/Hrs Per Semester	**750 min**		**1500 min**		**0 min**	**45 hrs**

	Lecture Credit Hours	Lab Credit Hours	Total Credit hours	WLU
Semester Credit Hours	**1**	**1**	**2**	**71.25**

Competencies & Outcomes

Order	Description

1 **Mechanical Ventilation History**

Order	Description	Learning Domain	Level of Learning
1	Review historical perspectives of mechanical ventilation.	Cognitive	Comprehension

2 **Principles of Mechanical Ventilation**

Order	Description	Learning Domain	Level of Learning
1	Describe clinical management of commonly encountered cardiopulmonary disorders in adult critical care.	Cognitive	Knowledge

3 **Continuous Mechanical Ventilation**

Order	Description	Learning	Level of

		Domain	Learning
1	Review physiological considerations associated with mechanical ventilation.	Cognitive	Comprehension
2	Describe basic principles of ventilator operation.	Cognitive	Knowledge
3	Compare and Contrast all modes of mechanical ventilation.	Cognitive	Evaluation

4 **Ventilator Implementation**

Order	Description	Learning Domain	Level of Learning
1	Describe indications for mechanical ventilation.	Cognitive	Knowledge
2	Evaluate patient situations to determine need for mechanical ventilation.	Cognitive	Evaluation
3	Explain factors associated with the initial ventilator choice.	Cognitive	Comprehension
4	Describe initial ventilator settings including mode, tidal volume, frequency, oxygen percentage, and PEEP/CPAP.	Cognitive	Knowledge
5	Describe methods of altering oxygenation on the ventilator patient.	Cognitive	Knowledge
6	Determine appropriate methods for altering patient arterial carbon dioxide tension.	Cognitive	Application
7	Explain methods to achieve cardiovascular stability and appropriate fluid balance.	Cognitive	Comprehension

5 **Ventilation Monitoring**

Order	Description	Learning Domain	Level of Learning
1	Summarize techniques for physical assessment of ventilator patients.	Cognitive	Comprehension
2	Describe ventilator parameters to be monitored.	Cognitive	Knowledge
3	Interpret results of alterations.	Cognitive	Comprehension
4	Explain pulmonary mechanic monitoring techniques.	Cognitive	Comprehension
5	Describe physiologic, cardiovascular, and blood gases of the ventilator patient.	Cognitive	Knowledge
6	Describe techniques for monitoring the airway.	Cognitive	Knowledge
7	Recognize common complications of mechanical ventilation.	Cognitive	Analysis
8	Know how to troubleshoot the mechanical ventilator and patient interface.	Cognitive	Knowledge

6 **Ventilator Weaning**

Order	Description	Learning Domain	Level of Learning
1	Evaluate weaning criteria.	Cognitive	Evaluation
2	Describe methods to achieve ventilator weaning.	Cognitive	Knowledge
3	Explain common causes of failure to achieve ventilator weaning.	Cognitive	Comprehension

7 **Ventilator Discontinuance**

Order	Description	Learning Domain	Level of Learning
1	Explain the assessment of the patient for ventilator discontinuance.	Cognitive	Comprehension
2	Understand the ethics, criteria and process of discontinuing mechanical ventilation in end-of-life situations.	Cognitive	Comprehension
3	Describe the steps to achieve ventilator discontinuance.	Cognitive	Knowledge
4	Explain criteria for patient extubation.	Cognitive	Comprehension
5	Describe procedures for removal of artificial airways.	Cognitive	Knowledge

8 **Specialized Techniques**

Order	Description	Learning Domain	Level of Learning
1	Understand the newer modes of ventilation.	Cognitive	Comprehension
2	Understand the application of specialized techniques of ventilation.	Cognitive	Comprehension