

RESP 1120 - Introduction to Respiratory Therapy (version 201003L)

Course Title Course Development Learning Support

Introduction to Respiratory Therapy Standard No

Course Description

Provides students with an introduction and comprehensive survey of the respiratory care profession. Emphasizes the application of physics and chemistry as the foundation for specific modes of respiratory care principles employed in patient care, including indications, hazards, contraindications, evaluation of therapy, and patient assessment. Topics include: respiratory therapy chemistry and physics principles, patient assessment, medical gas therapy, , humidity and aerosol therapy, hyperinflation therapy, bronchopulmonary hygiene, infection control practices, and hospital safety.

Pre-requisites

Prerequisites are Program Admission, BIOL 2114, BIOL 2114L and completion of either MATH 1101 or MATH 1111. Pre-requisites Prerequisites are Program Admission, BIOL 2114, BIOL 2114L and completion of either MATH 1101 or MATH 1111.

Program Admission
BIOL 2114 - Anatomy and Physiology II (201003L)
BIOL 2114L - Anatomy and Physiology Lab II (201003L)
MATH 1101 - Mathematical Modeling (201003L)
MATH 1111 - College Algebra (201003L)

Regstr. Co-requisites

Regstr. Co-requisites: All Required

RESP 1130 - Respiratory Therapy Lab I (201003L)
RESP 1193 - Cardiopulmonary Anatomy and Physiology (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	2 hrs	Lab	2 hrs	N/A	0 hrs	4 hrs
Contact Min/Hrs Per Semester	1500 min		1500 min		0 min	60 hrs
	Lecture Credit Hours	Lab Credit Hours	Total Credit hours			WLU
Semester Credit Hours	2	1	3			105

Competencies & Outcomes

Order Description

1 Respiratory Therapy Chemistry and Physics Principles

Order	Description	Learning Domain	Level of Learning
1	Apply Apply principles of chemistry and physics to medical gases, humidity/aerosol, jet-nebulizer and metered dose inhaler, positive pressure breathing, incentive spirometry, postural drainage, and percussion/vibration therapy (as well as high frequency chest wall oscillation).	Cognitive	Application

2 Patient Assessment

Order	Description	Learning Domain	Level of Learning
1	Explain anatomical and physiological principles associated with patient assessment.	Cognitive	Comprehension
2	Explain respiratory and cardiac status assessment of the patient.	Cognitive	Comprehension
3	Explain laws and ethical principles that govern respiratory interviewing, touching the patient, privacy, and history taking.	Cognitive	Comprehension

3 Medical Gas Therapy

Order	Description	Learning Domain	Level of Learning
1	Identify equipment used in medical gas administration.	Cognitive	Knowledge
2	Characterize the clinical applications of medical gases and gas mixtures.	Cognitive	Analysis
3	Recognize tank type with gas type.	Cognitive	Analysis
4	Explain anatomical and physiological effects of medical gas therapy.	Cognitive	Comprehension
5	Describe medical gas administering technique.	Cognitive	Knowledge
6	Explain indications, contraindications, and hazards associated with medical gas therapy.	Cognitive	Comprehension

4 Humidity and Aerosol Therapy (including Medication Administration)

Order	Description	Learning Domain	Level of Learning
1	Explain the anatomical and physiological effects of humidity and aerosol therapy.	Cognitive	Comprehension
2	Explain humidity and aerosol therapeutic device principles of operation.	Cognitive	Comprehension
3	Explain therapeutic device operation.	Cognitive	Comprehension
4	Explain indications, contraindications, and hazards associated with humidity and aerosol therapy.	Cognitive	Comprehension

5 Hyperinflation Therapy

Order	Description	Learning Domain	Level of Learning
1	Explain principles of positive pressure breathing and devices.	Cognitive	Comprehension
2	Explain anatomical and physiological principles associated with positive pressure breathing.	Cognitive	Comprehension
3	Explain positive pressure breathing device principles of operation.	Cognitive	Comprehension
4	Explain indications, contraindications, and hazards associated with positive pressure breathing.	Cognitive	Comprehension

6 **Bronchopulmonary Hygiene**

Order	Description	Learning Domain	Level of Learning
1	Explain principles of postural drainage.	Cognitive	Comprehension
2	Explain anatomical and physiological principles associated with postural drainage.	Cognitive	Comprehension
3	Explain postural drainage techniques.	Cognitive	Comprehension
4	Explain indications, contraindications, and hazards associated with postural drainage and high frequency chest wall oscillation therapy.	Cognitive	Comprehension

7 **Infection Control Practices (Including Hand Washing)**

Order	Description	Learning Domain	Level of Learning
1	Discuss universal precautions including barrier technique, principles of microbiology, principles of microbe transmissions, isolation, reverse isolation, and respiratory and blood borne pathogens.	Cognitive	Comprehension
2	Discuss the transmission of HIV, hepatitis B, and tuberculosis, and precautions associated with these diseases.	Cognitive	Comprehension

8 **Hospital Safety**

Order	Description	Learning Domain	Level of Learning
1	Explain safety precautions to practice in the hospital setting.	Cognitive	Comprehension