

Introduction to Respiratory Care (RSPT 1201)



Credit: 2 semester credit hours (1 hour lecture, 4 hour lab)

Prerequisite: Acceptance into the Respiratory Care Program

Co-requisite: None

Course Description:

An introduction to the field of respiratory care.

Required Textbook and Materials

1. Respiratory Care Principles and Practice 3rd edition (ISBN # 978-1-284-050000-4)
2. BLS (Basic Life Support) for Healthcare Providers, American Heart Association # 80-1010
3. DataArc[®] access (information will be given on first class day to obtain access)

Course Objectives

The student will be able to :

1. Discuss/identify the history and future of the Respiratory Care Profession
2. Outline/identify the organization and function of hospital departments
3. Describe/ identify issues related to ethical and legal decisions
4. Describe/ identify/ perform and interpret basic vital signs and cardiopulmonary assessment
5. Describe/identify/perform proper body mechanics
6. Describe/identify and perform CPR
7. Describe/identify/ perform infection control techniques and management of patients with transmittable disease.

Course Outline

- A. The Respiratory Care Profession
 1. History of Respiratory Care
 2. Professional organization
 - a. American Association for Respiratory Care
 - b. NBRC- National Board for Respiratory Care
 - c. State organizations
 3. Respiratory Care Education
 4. Associate and Bachelor programs
 5. Accrediting Agency

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6. Requirements for NBRC eligibility
 7. Future of Respiratory Care
 8. Jobs
 9. Specialty exams
 10. License
 11. Quality and Evidence Based Respiratory Care
- B. Hospital organization
1. Types of facilities
 2. Internal organization
- C. Ethics/ Legal
1. AARC Code of Ethics
 2. Ethical theories and Principles
 - a. Autonomy
 - b. Veracity
 - c. Nonmaleficence
 - d. Beneficence
 - e. Confidentiality
 - f. Justice
 - g. Role duty
 - h. Formalism
 - i. Consenquentialism
 - j. Mixed approaches
 - k. Virtue ethics
 - l. Intuitionism
 - m. Decision making models
 - n. Systems of law
 - o. Health insurance Portability Protection Act
 - p. Negligence
 - q. Advanced directives
 - r. DNR status (in hospital and out of hospital)
 - s. Medical supervision
 - t. Scope of practice
 - u. Malpractice
- D. Patient safety/ Body mechanics
1. Movement and Ambulation
 2. Electrical safety
 3. Fire Hazards
- E. Cardiopulmonary assessment
1. Patient Interview
 2. Common cardiopulmonary signs and Symptoms
 - a. Dysnea
 - b. Cough
 - c. Sputum production
 - d. Hemoptysis
 - e. Chest Pain

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1. Pleuritic
2. Non-Pleuritic
- f. Temperature- core
 1. Hyperthermia
 2. Hypothermia
- g. Pedal edema
- h. Clubbing
- i. Accessory muscle use
3. Physical
 - a. General appearance
 - b. Level of Consciousness
 - c. Vital Signs
 1. Pulse
 - a. rate
 - b. rhythm
 - c. terminology-tachycardia,bradycardia
 2. Blood Pressure
 - a. Hypertension
 - b. Hypotension
 3. Respiratory rate
 - a. Bradypnea
 - b. Tachypnea
 - c. Eupnea
 - d. Capillary refill
 - e. Peripheral skin temperature
4. Four Parts of the Exam
 - a. Inspection
 1. Cyanosis
 2. JVD
 3. Thoracic Configurations
 - a. AP diameter
 - b. Pectus Carinatum
 - c. Pectus Excavatum
 - d. Scolosis
 - e. Kyphosis
 - f. Kyphoscoliosis
 4. Breathing Patterns
 - a. Apnea
 - b. Biots
 - c. Cheyne-Stokes
 - d. Kussmauls
 - e. Paradoxical
 - b. Palpation
 1. Vocal Fremitus
 2. Thoracic expansion
 3. Skin and Subcutaneous tissue

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- c. Percussion
 - 1. Normal resonance
 - 2. Hyperresonance
 - 3. Hyporessonance
 - d. Auscultation
 - 1. The stephoscope
 - 2. Technique
 - 3. Normal sounds
 - a. Vesicular
 - b. Bronchovesicular
 - c. Tracheal
 - 4. Adventitious Sounds
 - a. Wheezing
 - b. Rales
 - c. Stridor
 - d. Pleural friction rub
 - e. Abdominal examination
 - 1. Quadrants
 - 2. Tenderness
- F. Infection control
- 1. Hand hygiene
 - a. Importance
 - b. Soaps vs. alcohol based products
 - c. Technique
 - 2. Personal Protective equipment
 - a. Gloves
 - b. Respiratory Protection
 - c. Gowns
 - d. Isolation
 - e. Technique
- G. Cardiopulmonary resuscitation
- 1. Causes and Prevention of Sudden death
 - 2. Hazard and complications
 - 3. Contraindications
 - 4. Determine unresponsiveness
 - 5. Restoring airway (adult, child and infant)
 - a. Head tilt chin lift
 - b. Jaw thrust
 - c. Obstructed airway
 - 1. Abdominal thrusts
 - 2. Back blows
 - 3. Chest thrusts
 - 4. Foreign body removal
 - 6. Restoring ventilation (adult, child and infant)

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- a. Assessing for Ventilation
 - b. Providing ventilation
 - c. Mouth to mouth
 - d. Mouth to nose
 - e. Bag –valve- mask
 - f. Depth
 - g. Rate
 - h. Evaluating effectiveness
7. Restoring circulation (adult, child and infant)
- a. Assessing for circulation
 - b. Providing Chest compressions
 - c. Position
 - d. Depth
 - e. Rate
 - f. Evaluating effectiveness

Grade Scale

93 – 100	A
85 – 92	B
77 – 84	C
68 – 76	D
0 – 67	F

Course Evaluation

Final grades will be calculated according to the following criteria:

4 Exams	80%
5-10 quizzes or homework	10%
Lab	10%

Course Requirements

1. 4 exams
2. Homework assignments/ quizzes will be given in class
3. Demonstrate competency in Hand washing, Isolation techniques, vital signs (heart rate, respiratory rate, blood pressure)
4. Sign and submit the “Statement of Understanding” of the Respiratory Care Handbook
5. Sign and submit the “Individual Instructor Requirements” for course

Course Policies

1. No food or drink, or use of tobacco products in class

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2. Telephones, headphones, and other electronic devices must be turned off while in class
3. No children allowed in the classroom
4. No late assignments will be accepted
5. Abide by LIT policies
6. Abide by policies within the Respiratory Care Handbook
7. Abide by instructor specific policies; this will be distributed on the first class day.
8. Exam dates will be distributed the first class day.

Disabilities Statement

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

Course schedule:

Week	Topic	Required Reading
1	History of RC/ Future of RC	Chapter 56
2	Professional Organizations	Chapter 57
3	Ethics of Healthcare Delivery	Chapter 58
4	Patient Safety	Chapter 28
5	Infection Control Principles, Exam#1	Chapter 31
6	Heart rate, respiratory rate, blood pressure	Chapter 1
7	Patient assessment- Inspection, Palpation	Chapter 1
8	Patient assessment- Percussion, Auscultation Exam #2	Chapter 1
9	Chapter 2 CPR	
10	Exam #3 Final Comprehensive	Chapter 2

This scheduled may be adjusted to facilitate student learning.

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Lab schedule:

Week	Topic	Required Reading
1	Dealing with death and dying, Non-verbal Communication and Culture, Cross Cultural Communication: How Culture Affects Communication. Professional Organizations	
2	HIPPA Age Specific	
3	Isolation procedures practice	DataArc©- Hand washing competency- Isolation procedure competency
4	Infection Control	
5	Vital Signs	DataArc©- vital signs competency
6	Moving and Turning	
7	Chest Assessment	<u>DataArc©</u> - chest assessment
8	Chest Assessment	
9	Competency check off	
10	Competency check off	

Contact Information:

Instructor: Barbara Cummings

Office: 238 MPC

Telephone: 409-951-5718

E-mail: blcummings@lit.edu

Office hours: Posted outside office. Additional times are available with appointment. Available for remediation or tutoring.