

University of Texas Medical Branch at Galveston
Department of Respiratory Care
RESC 3315- Respiratory Therapeutics
Course Syllabus- Fall, 2009

Course description:

This course provides the beginning student with knowledge and skills in therapeutic procedures and equipment applied to sub-acute patient care. The students study clinical procedures and equipment in the classroom.

3 SH credit

3 hrs lectures,

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Textbooks: Wilkins RL, Stoller JK, Scanlan CL, Egan's Fundamentals of Respiratory Care, (8th ed.) C.V. Mosby, 2003, Study Guide to accompany Egan's Fundamentals of Respiratory Care, Steohen F Wehrman, (8th ed.).
Branson RD, Hess DR, Chatburn RL, Respiratory Care Equipment, Lippincott Williams & Wilkins, 1999,

Course Objectives:

1. Develop knowledge of the history of Respiratory Care, and the organizations and individuals contributing to the profession.
2. Develop knowledge of the medical record, its components, and the rules for documentation in the record.
3. Provide for comprehensive understanding of microbiological hazards, and infectious disease prevention.
4. Provide for knowledge and skills in delivery of medical gas therapy, and equipment used for this therapeutic.
5. Provide for knowledge and skills in delivery of aerosol and humidity therapy, and equipment used for this therapeutic.
6. Provide for knowledge and skills in delivery of hyperinflation techniques, and equipment used for this therapeutic.
7. Provide knowledge and skills in chest physical therapy, and equipment used for this therapeutic.

Course grades:

Grades for the course are derived as follows:

Participation	10%
Quizzes	20%
Module examinations (4)	40%
Final examination	30%

Letter grades are assigned according to the total points accrued for the course as follows:

90-100 points	=	A
80-89 points	=	B
70-79 points	=	C
60-69 points	=	D
Below 60 points	=	F

¹All procedures listed on the Laboratory Competency Summary are required to complete this course. Non-completion of a procedure will result in a grade of incomplete for the course.

Class Schedule Fall, 2009

Lecture and Laboratories will be as scheduled below.

Week 1	History of RC, health care organizations, Hospital organization & medical records
Week 1 Lab	John Sealy Hospital- services, personnel, general policies, scrub orders
Week 2	Labor Day Holiday- enjoy!!
Week 2	No Laboratory
Week 3	Medical microbiology and epidemiology
Week 3 Lab	Aseptic & isolation procedures
Week 4	EXAMINATION ONE Medical gases, properties & storage (PM) Pressure and flow regulation of gases
Week 4 Lab	Gas cylinders, regulators, flow meters, Blenders
Week 5	Pressure and flow regulation of gases (cont'd) Medical gas appliances, blenders
Week 5 Lab	Appliances, gas analyzers
Week 6	Medical gas therapy- rationale, hazards, procedure
Week 6 Lab	Oxygen therapy procedures, High flow nasal Cannula

Week 7	EXAMINATION TWO
Week 7 Lab	Humidifiers and nebulizers
Week 8	MDI
Week 8 Lab	MDI therapy & Meta-Neb
Week 9	Physics and physiology of aerosols
Week 9 Lab	Aerosol therapy, demonstration and practice
Week 10	Aerosol therapy and procedures
Week 10 Lab	High flow nasal cannula with humidification system
Week 11	EXAMINATION THREE- Aerosol and humidity therapy
	Physics and physiology of hyperinflation therapy
Week 11 Lab	Bird and Bennett pressure ventilators, Hyperinflation therapy; Mucous clearance adjuncts procedures- demonstration, and practice
Week 12	Hyperinflation therapy & Mucous Clearance Adjuncts and Chest Physical Therapy
Week 12 Lab	Evaluation on hyperinflation therapy procedures and mucous clearance adjuncts; Demonstration and practice of chest physical therapy
Week 13	EXAMINATION FOUR- Hyperinflation therapy
	Chest physical therapy: rationale & hazards
Week 13 Lab	Demonstration of vest therapy; Evaluation on chest physical therapy procedures
Week 14	TBA
Week 14 Lab	TBA
Monday Finals Week	Study Day - No Classes
TBA	Final exam

NOTE: All laboratory procedures MUST be satisfactorily completed by the end of the semester. Students unable to pass procedures during their regular laboratory time must make an appointment with Program Faculty for re-evaluation at another time, and are responsible for bringing a "patient" with them.