

RSPT 2147 5A1

CREDIT

1 Semester Credit Hours (0 Hours Lecture, 3 Hours Lab)



MODE OF INSTRUCTION

Face to Face

**LAMAR INSTITUTE
OF TECHNOLOGY**

PREREQUISITE/CO-REQUISITE:

BIOL 2301, BIOL 2101, BIOL 2302, BIOL 2102, MATH 1332, RSPT 1201, RSPT 1213, RSPT 1310, RSPT 1240, RSPT 1325, RSPT 1160, RSPT 2414, RSPT 1311, RSPT 1360, RSPT 1461, RSPT 2325, RSPT 2255, RSPT 2210, RSPT 2361

COURSE DESCRIPTION

Emerging and specialty practices in respiratory care.

COURSE OBJECTIVES

Upon completion of this course, the student will be able to

- Delineate the respiratory therapists' role in emerging and specialty practices.
- Applies textbook learning plans, theory, concepts and skills that are involved in the use of specialized diagnostic areas and disease management.
- Explains the role of the respiratory therapist in special diagnostic areas.
- Maintains patient confidentiality by practicing regulations, laws and HIPPA standards.
- Works as a team member.
- Demonstrates appropriate written and verbal communication skills by using the correct terminology of the medical profession.

INSTRUCTOR CONTACT INFORMATION

Instructor: Marla Dixon

Email: MDixon@lit.edu

Office Phone: 409-247-4942

Office Location: Gateway, Room 111

Office Hours: See Starfish

REQUIRED TEXTBOOK AND MATERIALS

- Fundamentals of Respiratory Care: by Egan ISBN: 978-0-323-03657-3
- NBRC Matrix Ref: Comprehensive Respiratory Therapy Exam Prep. Guide: 4th Ed.

ATTENDANCE POLICY

1. **Attendance.** If you do not attend class you miss very valuable information. Tests will include both textbook material and anything mentioned in class/lab. There will be a sign-in and sign-out sheet for each class.
2. Students are to follow the absenteeism policy for each course. If the policy is not followed the student may be cited with a Level I or Level II offense, as defined in the Code of Conduct and Disciplinary Policy.
3. Absences in lab will result in a grade of 0 for that lab day.
4. **Homework Assignments.** Please turn in homework assignments at the start of the next class meeting. NO LATE WORK ACCEPTED.
5. **Absences.** Attendance is expected. According to LIT policy students with approved absences shall be allowed to make up examinations and written assignments without penalty. This privilege does not extend to unapproved absences. Students are allowed **2 absences per semester**, with or without a Dr.'s excuse. Each absence in excess of the 2 allowable absences will result in a 10% reduction per absence, in the student's final class grade. Example: 3 total absences (2 allowed + 1 excessive) = 10% reduction in final class grade, 4 absences = 20% reduction in final class grade, etc. Deductions as a result of excessive absences will be applied to the student's final class grade at the end of the semester. If absences (whether approved or not) seriously interfere with student performance, the instructor may recommend to the Department Chair that the student be dropped from the course.
6. **Make-up Exam.** Students may make up an exam only if the absence is excused by the instructor. The make-up exam will be taken on the next class day that you return.
7. **Class Roll** will be taken on the first- and fourth-class days. If your name is not on the class roster on the fourth-class day, you will be asked to leave class until this matter is addressed.
8. **No eating, no drinking, turn off beepers, turn off cell phones, no texting, no disruptive behavior, and No children allowed in class.**
9. **During exams, please put all your belongings including electronic devices, such as cell phones, tablets, computers, smart watches, etc., against a wall in the classroom. If you have an electronic device out during the exam, then you will receive a zero on that exam. If you are caught cheating, then this can result in being dismissed from the program.**
10. **Remediation** – Refer to Respiratory Care Student Handbook.
11. **Cell phone Policy**
 - Cell phones must be silenced or turned off during class time.
 - Cell phones will be placed in the appointed cell phone pocket hanger.
 - Attendance will be taken from the cell phone hanger with assigned names.
 - Any cell phone use in class will result in your dismissal from class.
 - If cell phones are used during an exam, you will be dismissed from the Respiratory Care Program.
 - Computer usage not related to course content is prohibited and will result in your dismissal from the Respiratory Care Program.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified date as listed in the College Calendar on the [Student Success](#) web page. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

COURSE CALENDAR

DATE	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
Week 1: 1/20-1/22	Special Exams (ACCS, PFT, NPS, SDS, AE-C)	NBRC Website – Exam specific Matrix for each specialty examination	Assignments will be given in class
Week 2: 1/27-1/29	Lab Data	Egan Chapters 13 & 17	
Week 3: 2/3-2/5	Analysis of Exhaled Gases; Inhalation of Differed Gases	AARC Web site	
Week 4: 2/10-2/12	Inspiratory Muscle Training; Transport Therapist	AARC Website	
Week 5: 2/17-2/19	Review / Exam #1		Exam 1 - 2/19 & Egan Workbook Ch. 13, 17 Due
Week 6: 2/24-2/26	Assisting the physician (Intubation, tracheostomy, chest tuber insertion, thoracentesis)	AARC Website	
Week 7: 3/3-3/5	Assisting the physician (venous/arterial catheter insertion, apnea testing, cardioversion)	AARC Website	
Week 8: 3/17-3/19	Assisting the physician (overnight POX, O2 titration w/ exercise)	AARC Website	
Week 9: 3/24-3/26	Assisting the physician (sleep studies, bronchoscopy); Exam 2	AARC Website	Exam 2 - 3/26 & Egan Workbook Chapter 22 Due
Week 10: 3/31-4/2	Rapid Response Teams, Disaster Management	AARC Website	

Week 11: 4/7-4/9	One Vision Conference: Disaster Management, Evidence Based Medicine	NHBL website, AARC website	
Week 12: 4/14-4/16	Review / Exam 3		Exam 3 - 4/16
Week 13: 4/21-4/23	Discontinuing Ventilatory Support	Egan – Chapter 53	
Week 14: 4/28-4/30	Discontinuing Ventilatory Support	Egan – Chapter 55	
Week 15: 5/5-5/7	Patient Education and Health Promotion; Ethics & End of Life / Exam #4	Egan – Chapter 53	Exam 4 – 5/5 & Egan Workbook Ch. 53, 55, 58 Due

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Exams (4-5 exams)	70%
Homework/Quiz/Assignment	10%
Presentations	<u>20%</u>
	100%

GRADE SCALE

- 90-100% A
- 80-89% B
- 77-79% C
- 68-76% D
- 0-67% F

ACADEMIC DISHONESTY

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at <http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty>.

TECHNICAL REQUIREMENTS

For the latest technical requirements, including hardware, compatible browsers, operating systems, etc., review the Minimum Computer and Equipment Requirements on the [LIT Online Experience](#) page. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

Course requirements:

1. You must attend class

2. No late work will be accepted
3. If you are going to miss an exam, you must notify the instructor prior to the exam time.

Course Policies

Exam dates and course schedule may be adjusted to facilitate student learning. If you must miss an exam, you must notify your instructor prior to the test time. Documentation for the missed exam must be provided to the instructor for an opportunity to take the exam. Exams must be taken on the first day of return. You must call and provide documentation for the missed exam, otherwise you will not be allowed to take the exam.

Cell Phone Policy for all courses within the Respiratory Care Program classroom and clinical

In the classroom setting:

- Cell phones must be silenced or turned off during class time.
- Cell phones will be placed in the appointed cell phone pocket hanger.
- Attendance will be taken from the cell phone hanger with assigned names.
- Any cell phone use in class will result in your dismissal from class.
- If cell phones are used during an exam, you will be dismissed from the Respiratory Care Program.
- Computer usage not related to course content is prohibited and will result in your dismissal from the Respiratory Care Program.

In the clinical setting:

- Cell phone use is prohibited, except for clinical communications.
- Personal cell phone usage within patient care areas will result in dismissal from the Respiratory Care Program.
- Unapproved usage from your clinical instructor in “non -patient” care areas will result in disciplinary action according to the Respiratory Care Handbook.

Classroom Behavior

- No eating, no drinking, no disruptive behavior, and no children allowed in class.
- During exams, please put all of your belongings, including electronic devices against a wall in the classroom. If you have an electronic device out during an exam, then you will receive a zero for that exam. If you are caught cheating, then this can result in being dismissed from the program. Any calculator usage cannot be from a cell phone type device; calculator usage must be from a calculator in which its only function is calculate - no additional functions.

Course Outline:

I. Adult Critical Care Specialist (ACCS)

- A. Qualifications to take the exam.

- B. The content outlined by the National Board of Respiratory Care for the Adult Critical Care Specialist Exam.

II. CPFT/RPFT

- A. Qualifications to take the CPFT/RPFT exam.
- B. The content outlined by the National Board of Respiratory Care for the Certified Pulmonary Function Technician (CPFT) and RPFT exam

III. Neonatal Pediatric Specialist (NPS)

- A. Qualifications to take the NPS exam.
- B. The content outlined by the national Board of Respiratory Care for the Neonatal Pediatric Specialist exam.

IV. Sleep Disorder Specialist (SDS)

- C. Qualifications to take the SDS exam.
- D. The content outlined by the national Board of Respiratory Care for the Neonatal Pediatric Specialist exam.

V. Asthma Education Specialist (AE-C)

- E. Qualifications to take the AE-C exam.
- F. The content outlined by the national Board of Respiratory Care for the Neonatal Pediatric Specialist exam.

VI. Cardiopulmonary Emergencies (excluding CPR)

- A. MET Team (Rapid Response)

VII. Management

- A. The role of the Respiratory Care Department manager.
- B. The role of the respiratory therapy supervisor.
- C. The role of the lead therapists.

VIII. Disaster Management

- A. Preparation
- B. Training
- C. Execution

IX. Assisting in additional tasks and assisting the physician

- A. Discuss the role of acting as the assistant to the physician for the following procedures
- B. Recommend, Perform Procedures to gather additional Information and evaluate procedure results. Modifications to respiratory Care Plan
 - 1. Intubation
 - 2. Bronchoscopy (Diagnostic and Therapeutic), Broncho alveolar lavage, ENB
 - 3. Thoracentesis
 - 4. Tracheostomy
 - 5. Chest Tube Insertion
 - 6. Insertion of venous or arterial catheters

7. Moderate (conscious) sedation
8. Cardioversion
9. Withdrawal of life support
10. Apnea Test
11. Inspiratory Muscle Training
12. Apnea Monitoring
13. Overnight Pulse Oximetry
14. O₂ titration with exercise
15. Sleep studies
16. Analysis of exhaled gases. (Co₂, Co and FENO)
17. Analysis of radiographs to access line positions (ETT-Trach-CVP-Swanz Ganz, IABP, gastric tube).

X. Transport

- A. The role of the transport therapist by land.
- B. The role of the transport therapist by air (pressurized and non- pressurized).
- C. The role of the transport therapist within the hospital

XI. Hyperbaric Medicine

- A. The role of the hyperbaric Respiratory Therapist and the other team members.

XII. Utilizing evidence-based Medicine in Practice

- A. ARDS net
- B. NAEPP
- C. GOLD

XIII. Conduct Education (Disease condition and management)

- B. Homecare and related equipment
- C. Lifestyle change (smoking cessation, exercise)
- D. Pulmonary Rehabilitation
- E. Asthma
- F. COPD
- G. CF
- H. Ventilator dependency
- I. Trach Care

XIV. Recommend additional data to gather information and evaluate results

- A. CBC
- B. Culture and Sensitivity
- C. BUN and Creatine
- D. Clotting studies
- E. Sweat Chloride
- F. BNP
- G. Lactic
- H. Body Fluid Analysis
- I. Cardiac Markers (Troponin, CPK, CMB)

ADDITIONAL COURSE POLICIES/INFORMATION

- No food or drink, or use of tobacco products in class
- Ear buds, telephones, headphones, and other electronic devices must be turned off while in class
- On days of test, you will place personal items at the front of the classroom, no electronic devices may be used during an exam. If you have an electronic device during an exam you will receive a 0 for that exam.
- No children allowed in the classroom
- No late assignments will be accepted
- Pop quiz will not be able to be made up.
- Comply with LIT policies and policies in the Respiratory Care Handbook
- Comply with course and/or instructor policies, distributed on the first-class day