



INSTRUCTOR CONTACT INFORMATION

Instructor: Cynthia McKinley

Email: camckinley@lit.edu

Office Phone: 409-247-5067

Office Location: 241

Office Hours: See Starfish

CREDIT

3 Semester Credit Hours (0 hours lecture, 18 hours lab)

MODE OF INSTRUCTION

Face to Face

PREREQUISITE/CO-REQUISITE:

BIOL 2301, BIOL 2101, BIOL 2302, BIOL 2102, MATH 1332, RSPT 1201, RSPT 1213, RSPT 1329, RSPT 1207, RSPT 2210, RSPT 1325, RSPT 1331, RSPT 1335, RSPT 1360, RSPT 1461, RSPT 2414, RSPT 1141, RSPT 2255, RSPT 2361

COURSE DESCRIPTION

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

COURSE OBJECTIVES

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

- Applies text book learning plans, theory, concepts and skills that are involved with the use of specialized materials and tools.
- Explains while demonstrating equipment procedures
- Maintains patient confidentiality by practicing regulations, laws and HIPPA standards
- Concentrates on safety practices through information from the chart and patient history by using the necessary precautions on ALL patients
- Works as a team member
- Demonstrates appropriate written (medical records) and verbal communication skills by using the correct terminology of the medical profession

- Review/Collect and evaluate patient records.
- Recommend Procedures to collect pertinent data.
- Evaluate and monitor patients' responses to Respiratory Care Procedures.
- Determine appropriateness/Recommend/perform modifications to Respiratory Care Procedures.
- Perform and demonstrate competency of the following procedures: Ventilator setup, routine ventilator check, ventilator parameter change, Ventilator graphic analysis, capnography, weaning parameters, weaning, non-invasive vent setup, non-invasive vent check, Pressure ventilation(neonatal or pediatric) routine ventilator check, Pressure ventilation- ventilator parameter change, arterial line sampling, setup and ventilation via mask, CPR- airway and ventilation, CPR compressions, extubation, capnography,
- Perform and demonstrate competency in all additional procedures as outlined in the RC handbook. Handwashing, Isolation procedures, vital signs, chest assessment, patient assessment, x-ray interpretation, nasal cannula, non-rebreather mask, air-entrainment mask, pulse oximetry, aerosol face mask, small volume nebulizer, pediatric vital signs, Incentive Spirometry, Chest Physiotherapy, Coughing, Breathing Exercises, Mucus Clearance adjuncts, Intrapulmonary Percussive Ventilation, Tracheal suctioning (nasal or endotracheal- sterile technique), Inline suctioning, Securing Artificial Airway, Tracheostomy Care, Transport with oxygen, Oxyhood, Peak Flow, Inline suctioning (Pediatric or Neonatal), HME, Inline MDI (pediatric or neonatal), Inline Small volume Nebulizer (adult, pediatric or neonatal), Bulb suctioning (Pediatric or neonatal), weaning parameters, Transcutaneous Monitoring, Manuel ventilation during transport, Bedside spirometry, Spirometry, Nitrogen washout or helium dilution, diffusion studies, Plethysmography, PFT Quality assurance, Arterial Blood gas sampling, Arterial blood gas analysis, ABG quality assurance, Arterial line sampling, Cuff management, High Flow Nasal Cannula

REQUIRED TEXTBOOK AND MATERIALS

- 1. Materials
 - a. Scrubs with LIT patch
 - b. Lab Coat with LIT patch
 - c. Watch with second hand
 - d. Goggles
 - e. Scissors
 - f. Stethoscope
 - g. Black pens
 - h. Calculator
 - i. Name badge- Hospital
 - j. LIT Patch
 - k. Clinical Notebook
 - 1. Face shield
 - m. N 95 mask with fit testing
- 2. Pocket Guide for Respiratory Care by Dana Oaks (ISBN # 0-932887-00-7)
- 3. Current Healthcare Provider Certification (CPR)
- 4. Tokens for modules- <u>www.ketteringseminars.com</u>
- 5. Dataarc access

ATTENDANCE POLICY

- You are allowed two absent days from this course. You are only allowed two absences in post conference. You will only be allowed to makeup excessive absences if you provide valid documentation to support all absences. Use your allowed absences wisely in the event of illness or emergency.
- **2.** Absences beyond those stated in #2 will result in an immediate conference with Director of Clinical Education. And could result in possible dismissal from the program.
- **3.** Excessive approved absences must be made up at the end of the semester (provided that documentation is submitted to DCE. It will result in a reduction of 5 points per excessive absence in the final clinical grade.
- **4.** You are required to present your case presentations on the day scheduled. If you have to miss the day you are scheduled, you must notify your instructor prior to the class. You will be required to provide documentation (for absence) in order for you to be able to present and receive a grade.
- 5. This course requires a total of 18 hours per week. 16 hours per week in the assigned facility and 2 hours per week on campus for Post Conference. Daily assignments are distributed by the clinical instructor.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the <u>Academic Calendar</u>. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16-week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

COURSE CALENDAR

This course requires a total of 18 hours per week. 16 hours per week in the assigned facility and 2 hours per week on campus for Post Conference. Daily assignments are distributed by the clinical instructor.

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Modules:	10%
Final Exam:	20%
Physician contact: (20 points)	10%
Post Conference	30%
Evaluations (both daily and weekly and affective evaluation)	30%

Student must demonstrate competency in all procedures of the course outline. Student will receive an F in the course if competency is not maintained or obtained.

If you score below a 3 in any evaluation you will receive counseling with a plan for success created. If you do not improve (within a specified time frame) you will be dismissed from the Respiratory Care Program.

GRADING SCALE

90 - 100 - A 80 - 89 - B 70 - 79 - C 60- 69 - D less than 60 - F

LIT does not use +/- grading scales

ADDITIONAL COURSE POLICIES/INFORMATION

Co 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 relating 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.
- Comply with policies and procedures outlined in the Respiratory Care Handbook.

- Physician lectures are considered part of your clinical day. You are required to attend these lectures. If you do not attend you will be considered <u>absent</u> for that day of clinic. Attendance will be taken.
- Submit to Covid screening for clinical attendance if required
- Follow Covid policy and procedures for each clinical facility
- Comply with policies and procedures outlined in the Respiratory Care Handbook.
- Physician lectures are considered part of your clinical day. If you have physician lectures scheduled, you are required to attend. If you do not attend you will be considered <u>absent</u> for that day of clinic. Attendance will be taken.
- Follow COVID policy and procedures for each clinical facility and LIT

Classroom Behavior

- No eating, no drinking, no disruptive behavior, and no children allowed in class please!
- During exams please put all of your belongings that include electronic devices against a wall in the classroom. If you have an electronic device out, then you will receive a zero on 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, (a calculator in which its only function is calculate)- no additional functions

Course requirements

- 1. Competency in all procedures as outlined in the Respiratory Care Handbook.
- 2. Modules: (<u>www.ketteringseminars.com</u>). 5% of the grade is an average of module scores. If modules are not completed a "l" incomplete will be given in this course.
 - a) RRT- TMC
 - Special Procedures
 - b) RRT- ACCS
 - Special Procedures
 - Pharmacology
 - Pathology
 - c) RRT –CSE
 - Cardiac 1,4 and 6
 - Neonatal 1
 - Neurological 2 and 4
 - Pediatric 2 and 7
 - Pulmonary 1, 2 and 5
 - Trauma 4 and 6
- 3. Completion of two affective evaluations. If student receives a score of 3 or less, the RC handbook will be followed with appropriate sanction(s) and a improvement plan for success will be presented to student. If improvement is not demonstrated the student will continue to show deficiency in the area (s) noted and the student will not be allowed to continue in the Respiratory Care Program.

- 4. 20 Physician Contact points.
- 5. Final exam
- 6. Your daily evaluations (which are done weekly) should be viewed weekly on the Dataarc system. This allows you to access your grade in each of the 5 categories.
- 7. You are to view your affective evaluations. (done twice a semester- midsemester and end semester. This allows to you access your grade in each of the 14 categories.
- 8. Grades will not be entered into blackboard weekly.

Course Outline

- A. Ventilator setup
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- B. Routine ventilator check
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- C. Ventilator Graphic analysis
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- D. Ventilator parameter change
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)

- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- E. Capnography
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- F. Weaning Parameters
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- G. Weaning
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- H. Non-Invasive ventilator setup
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- I. Non-Invasive ventilator check
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response

- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- J. Pressure ventilation (pediatric or neonatal) routine check
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- K. <u>Pressure ventilation (pediatric or neonatal)- parameter check</u>
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- L. Pressure ventilation (pediatric or neonatal) parameter change
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- M. Arterial line sampling
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- N. Set- up and ventilation via mask

- 1. Equipment and patient preparation
- 2. Implementation of Procedure
- 3. Evaluate and monitor patient response
- 4. Follow up to implementation, evaluation and monitoring.
- 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- O. Set-up and ventilation via e-t tube
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- P. CPR airway and ventilation
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- Q. CPR compressions
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)
 - 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- R. Extubation
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.
 - 5. Cognitive knowledge of procedure (indications, contraindications, equipment, troubleshooting, evaluating patient response, expected outcomes)

- 6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.
- S. High flow nasal cannula
 - 1. Equipment and patient preparation
 - 2. Implementation of Procedure
 - 3. Evaluate and monitor patient response
 - 4. Follow up to implementation, evaluation and monitoring.

5. Cognitive knowledge of procedure (indications, contraindications, equipment,

troubleshooting, evaluating patient response, expected outcomes)

6. Satisfactory perform procedure. (Perform procedure accurately or be able to correct performance without injury to patient or decreasing effect of therapy given.

Mandatory Check offs for the Respiratory Care Program: You must have demonstrated competency within all the following areas and procedures in order to complete this course.

Adult Floor

Aerosol Mask, Breathing exercises, Bubble Humidifier, Chest Physical therapyChest X – ray interpretation, Cough Assist (in lab), Coughing, Dry Powder Inhaler, Facetent (in lab), Handwashing, Heated High Flow Nasal Cannula, Heated High flow Nasal Cannula System Check, Incentive Spirometry, Isolation Procedures, Metered dose Inhaler, Mucous Clearance Adjuncts, Nasal Cannula, Non rebreather, Oxygen check with pulse oximetery, Partial Rebreather (in lab), Patient Assessment, Simple Mask (in lab) Small volume Nebulizer, T tube, Trach Collar, Venturi mask (in lab), Vital Signs

Adult Critical Care:

Basic Life support, Capnography, Closed suction system, Cuff Management, Extubation, Inline Small volume Nebulizer, Intrahospital Transport, Intubation, Manual ventilation during transport, Mechanical Ventilation weaning, Nasopharyngeal Airway (lab) Nasotracheal suction (lab) Non invasive vent setup, non invasive vent check, oral care, Oropharyngeal airway (lab) Securing Artificial Airway, Setup and ventilation via mask, Spontaneous Breathing trial, Spontaneous Pulmonary Mechanics, Sterile Artificial Airway Suctioning, Tracheostomy Care, Vent Circuit Change (lab), vent Graphics Analysis, ventilator Parameter Change, Ventilator Setup, Ventilator system Check

Adult Diagnostics:

ABG analysis, ABG QA (observe), m ABG sample, Arterial line sampling, Bronchoscopy Observation, Diffusion testing Observation, Electrocardiography, Nitrogen washout (observation, Peak Flow (lab), Plethysomnography (Observation, Pulmonary Artery line sampling (observation), Spirometery Observation, Sputum Sample Collection

Pediatric Critical Care: Pediatric Critical care Nitric Oxide (observation), Pediatric BLS, Pedi set up ventilation via tube (lab), ventilator Parameter Change (lab), Pediatric Vent Setup (lab), Pediatric Vent Parameter Change (lab), Pediatric Vent setup (lab), Pediatric Vent Check (lab), Small volume Nebulizer via mask, mouthpiece or Blowy'

Neonatal Critical Care: NRP, Neo ventilator Parameter Change (lab), Neo Vent Setup (lab, Neo Pediatric Vent Check (lab) , Small volume Nebulizer via mask, mouthpiece or Blowby

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

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. 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 <u>special Populations@lit.edu</u>. You may also visit the online resource at <u>Special Populations -</u>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 <u>www.lit.edu</u>. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

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.