Reese Campus

Course Syllabus

COURSE: RSPT 1331.200 Respiratory Care Fundamentals II

SEMESTER: Spring 2020 CLASS TIMES: 12:00 – 1:50 PM

Monday-Wednesday-Friday

INSTRUCTOR: Shanna Walkup, BS, RRT

OFFICE: Reese Center, Building 5, Room 520

OFFICE HOURS: Monday & Wednesday: 9:00 AM – 11:00 AM

Tuesday & Thursday: 11:00 - 1:00 PM

Friday 9:00-11:00 AM

Other times by appointment

OFFICE PHONE: 806-716-4624

E-MAIL: swalkup@southplainscollege.edu

Facebook: https://www.facebook.com/SouthPlainsCollegeRespiratoryCare

"South Plains College improves each student's life."

GENERAL COURSE INFORMATION

It is the responsibility of each student to be familiar with the content and requirements listed in the course syllabus.

COURSE DESCRIPTION

Provides a continued development of knowledge and skills for respiratory care. Topics include bronchial hygiene therapy, lung expansion therapy, artificial airways, manual resuscitation devices, suctioning, pulse oximetry, arterial sampling techniques, and blood gas analysis and interpretation.

COURSE OBJECTIVES – Outline form (correlated to Scans and Foundations Skills)

- Describe physiologic effects, goals, hazards, and techniques of lung inflation therapy (F1, 2, 3, 5, 6, 8, 9, C7, 18, 19, 20)
 - A. Identify the common types of atelectasis and list their causes
 - B. Identify patients that would benefit from lung expansion therapy
 - C. Describe clinical findings seen in atelectasis
 - D. Explain how lung expansion therapy works
 - E. List indications, hazards, and complications associated with the various modes of lung expansion therapy
 - F. Describe the function of the equipment utilized to treat atelectasis
 - G. List the primary responsibilities of the respiratory care practitioner in planning, implementing, and evaluating lung expansion therapy
- II. Demonstrate an understanding of the indications, rationale, contraindications, and techniques for bronchial hygiene therapy (F1, 2, 5, 6, 8, 9, 12, C7)
 - A. Describe how normal airway clearance mechanisms work and what can impair their function
 - B. Describe diseases associated with abnormal clearance of secretions
 - C. List goals and indications that apply to bronchial hygiene therapy
 - D. Assess the need for bronchial hygiene therapy
 - E. Select and perform various bronchial hygiene techniques including:
 - 1. Postural drainage, percussion and vibration
 - 2. Directed coughing and related expulsion techniques
 - 3. PEP therapy
 - 4. High-frequency oscillation methods
 - 5. Mobilization and exercise
 - F. Monitor and evaluate a patient's response to bronchial hygiene therapy

- G. Modify bronchial hygiene therapies on the basis of patient response
- III. Describe the function and application of manual resuscitators (F1, C18, C19, C20)
 - A. Identify resuscitator valve types
 - B. Discuss various type of manual resuscitators and discuss common hazards associated with using these devices
 - C. Describe the difference between flow-inflating and self-inflating manual resuscitators
 - D. Select different types of masks used on manual resuscitators
 - E. Identify devices on manual resuscitators and explain their function
 - F. Provide adequate manual resuscitation
- IV. Determine proper equipment utilized for airway management (F1, F3, F8, C18, C19,

C20)

- A. Describe the indications for artificial airways
- B. List the various types of airways
- C. Determine usage of each airway
- D. Demonstrate correct technique of airway insertion
- E. Identify markings on different airways
- F. Demonstrate correct care of each airway
- G. Identify common indications, contraindication and hazards associated with various airways
- V. Demonstrate proficiency in the technique for endotracheal intubation (F1, F3, F8,

C18, C19, C20)

- A. Identify indications for endotracheal intubation
- B. Determine how the route of intubation is determined
- C. Describe the technique for oral and nasal intubations
- D. Describe how to assess and confirm proper ET tube placement
- E. Describe the procedure for a tracheotomy
- F. List and describe the complications associated with airways and long term intubation
- VI. Explain the importance of the RCP in maintenance of the airway (F1, F3, F8, C18,

C19, C20)

- A. Demonstrate proper technique in securing the artificial airway
- B. Determine methods for providing for patient communication
- C. Ensure adequate humidification to the artificial airway
- D. Understand the importance of cuff care in the intubated patient
- E. Troubleshoot airway emergencies
- VII. Explain the function of the equipment and proper technique of suctioning (F1,F3,

F8, C18, C19, C20)

- A. Describe the use of various suction catheters
- B. Identify the indications for suctioning
- C. Identify and minimize the hazards associated with suctioning
- D. Demonstrate proper technique for suctioning
- E. Determine appropriate suction catheter size
- F. Determine appropriate suction pressure
- VIII. Describe the process of extubation (F1,F3, F8, C18, C19, C20)
 - A. Demonstrate procedure of orotracheal and nasotracheal extubation
 - B. Understand removal of tracheostomy tubes
 - C. Identify hazards associated with extubation
 - D. Explain the rationale of applying appropriate oxygen, humidity therapy, and medication therapy post extubation
- IX. Identify how gas exchange is analyzed and monitored and demonstrate ability of ABG interpretation (F1, 2, 8, C7, 18, 19, 20)
 - A. Differentiate and describe the characteristics of various types of oxygen analyzers
 - B. Identify techniques used to assess gas exchange and when they are indicated
 - C. Select equipment for monitoring procedures and ensure its proper function

- D. Understand blood gas analysis via blood gas machines
- E. Identify indications, contraindications, hazards of arterial blood gas sampling
- F. Describe when and how to perform co-oximetry
- G. Interpret pulse oximetry results
- H. Interpret blood gas results

EVALUATION METHODS

Written exams, written assignments, and other projects as assigned.

ACADEMIC INTEGRITY

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension.

Cheating - Dishonesty of any kind on examinations or on written assignments, illegal possession of examinations, the use of unauthorized notes during an examination, obtaining information during an examination from the textbook or from the examination paper of another student, assisting others to cheat, alteration of grade records, illegal entry or unauthorized presence in the office are examples of cheating. Complete honesty is required of the student in the presentation of any and all phases of coursework. This applies to quizzes of whatever length, as well as final examinations, to daily reports and to term papers.

Plagiarism - Offering the work of another as one's own, without proper acknowledgment, is plagiarism; therefore, any student who fails to give credit for quotations or essentially identical expression of material taken from books, encyclopedias, magazines and other reference works, or from themes, reports or other writings of a fellow student, is guilty of plagiarism.

BLACKBOARD

Blackboard is an e-Education platform designed to enable educational innovations everywhere by connecting people and technology. This educational tool will be used in this course throughout the semester.

FACEBOOK

The Respiratory Care Program has a Facebook page at https://www.facebook.com/SouthPlainsCollegeRespiratoryCare. In addition to the South Plains College website, this Facebook page will be used to keep students up-to-date on program activities, weather delays, South Plains College announcements and will help with program recruitment. "Liking" the Respiratory Care Program Facebook page is not mandatory, nor is personal Facebook accounts, in order to access this page.

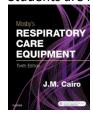
SCANS and FOUNDATION SKILLS

Refer also to Course Objectives. Scans and Foundation Skills attached

SPECIFIC COURSE INFORMATION

TEXT AND MATERIALS

Students are required to obtain the following:





Cairo, J.M. Respiratory Care Equipment, 10th Ed. (2018). ISBN: 978-0-323-41636-8 Kacmarek, Robert. Egan's Fundamentals of Respiratory Care, 11th Ed. (2017). ISBN: 978-0-323-34136-3 Data Arc License

EVALUATION METHODS

- 1. Unit Examinations
- 2. Assignments
- 3. Lab Competencies
- 4. Final Examination

ATTENDANCE POLICY

Class Attendance

Students are expected to attend all classes in order to be successful in a course. The student may be administratively withdrawn from the course when absences become excessive as defined in the course syllabus.

When an unavoidable reason for class absence arises, such as illness, an official trip authorized by the college or an official activity, the instructor may permit the student to make up work missed. It is the student's responsibility to complete work missed within a reasonable period of time as determined by the instructor. Students are officially enrolled in all courses for which they pay tuition and fees at the time of registration. Should a student, for any reason, delay in reporting to a class after official enrollment, absences will be attributed to the student from the first class meeting.

Students who enroll in a course but have "Never Attended" by the official census date, as reported by the faculty member, will be administratively dropped by the Office of Admissions and Records. A student who does not meet the attendance requirements of a class as stated in the course syllabus and does not officially withdraw from that course by the official census date of the semester, may be administratively withdrawn from that course and receive a grade of "X" or "F" as determined by the instructor. Instructors are responsible for clearly stating their administrative drop policy in the course syllabus, and it is the student's responsibility to be aware of that policy.

It is the student's responsibility to verify administrative drops for excessive absences through MySPC using his or her student online account. If it is determined that a student is awarded financial aid for a class or classes in which the student never attended or participated, the financial aid award will be adjusted in accordance with the classes in which the student did attend/participate and the student will owe any balance resulting from the adjustment.

Regular attendance is necessary to successfully meet the course objectives. The student is responsible for all class work covered during absences from class. Students are expected to be in class, on time. A student is tardy if he/she arrives more than 5 minutes after class begins. If a student is tardy to class three times, it will be counted as one absence. It is the student's responsibility to inform the instructor of the reason for an absence and to do so in a timely fashion. A student may be administratively withdrawn from the course if he/she has more than <u>five</u> absences from class and the instructor determines the student is unable to successfully meet the course objectives.

Students who are tardy are asked to respect their peers and enter the classroom quietly in order not to disrupt the class. Students who are late to a class starting with an examination <u>will not</u> be given additional time to complete the exam. The exam will be finished when the last on-time student has completed.

ASSIGNMENT POLICY

Students are expected to maintain a reading schedule at home to keep current with classroom discussions. Late assignments will not be accepted.

1. Workbook Assignments: Details of workbook assignments will be posted on Blackboard.

COMPUTER USAGE

As computer technology in the field of health occupations continues to become more popular, computers will be used in this course for several assignments. All students have access to computers and printers on the South Plains College campus. Students will be expected to utilize computers to access assignments and classroom resources. All registered students are supplied with a working email account from South Plains College. In order to take exams, students must have their user name and password.

ALL STUDENTS ARE EXPECTED TO KNOW THEIR SPC STUDENT USER NAME AND PASSWORD.

COMPUTER LAB USAGE

The computer lab(s) on any campus may be used by students during scheduled open hours or as assigned by an instructor. Printer paper will not be provided for students to print materials but students may seek assistance from faculty or staff to request lab paper from the college if needed. Lack of computer lab paper is not an excuse for not having homework assignments, skills lab sheets, or any other required documents. Students should come prepared for class.

LAB COMPTENCIES

- 1. Students must complete laboratory exercises during lab time, individually or in small groups, as assigned. Laboratory exercises and skills practice allow the student to apply the reading and lecture material to actual performance of skills.
- 2. Students will be required to successfully complete the following competencies in lab:

Adult CPT Nasotracheal suctioning-adult

IPPB Cuff Management

Mucous Clearance Adjuncts Endotracheal intubation-Adult

Incentive Spirometer Extubation-Adult

Setup and ventilate via mask-adult Endotracheal suction-adult

Setup and ventilate via ETT-adult Inline suction-adult Pulse oximetry Aerosol T-piece

Securing artificial airway

All competencies will be documented in DataArc by the clinical instructor/preceptor evaluating the student. The student is not considered proficient in a lab competency until a satisfactory rating has been achieved. The student will be evaluated as:

- -Satisfactory (100%)- ready for clinical application with minimal supervision. Performed procedure accurately.
- **-Unsatisfactory performance** not ready for clinical application. Requires remediation under one of the following categories:
 - Minor Unsatisfactory (75%): Needs to review fundamental concepts or requires re-evaluation of
 minor deficiency(s) (ex. forgets to wash hands during the Follow-up stage. Must be re-evaluated on this
 step not the whole procedure). May re-attempt on the same day.
 - Major Unsatisfactory (50%): Requires additional lab practice and complete re-evaluation of the procedure. If the student receives an unsatisfactory rating (major), the student may attempt the competency on another laboratory day when he/she has reviewed the procedure and feels prepared.
 - Each competency attempt will be scored (as indicated above). Ex: If a student scores a 75% on the first attempt and then a 100% on second attempt, the score entered into the grade book is 87.5 for that particular competency.
 - If a student is unable to successfully complete a competency after 2 attempts, remediation will be required. Please see 'Remediation' below for details.

GRADING POLICY- Grades in this course will be determined using the following criteria:

Unit Exams 60%
Assignments 10%
Lab Competencies 5%
Comprehensive Final 25%

A = 90 - 100
B = 80 - 89
C = 75 - 79
D = 65-74

Students will be allowed to drop their lowest unit exam grade. Make-up exams will not be given.

Successful completion of this course requires:

F= < 65

1. A final grade of 'C' (75%) or better.

CONFERENCES

If at any time a student is not satisfied with their overall performance, he/she is encouraged to schedule an appointment with the DCE. If necessary, a plan can be developed to help the student improve in their areas of weakness.

REMEDIATION

Please refer to the 2019-2020 Respiratory Care Program student handbook for the remediation policy for exams and clinical competencies.

COMMUNICATION POLICY

Electronic communication between instructor and students in this course will utilize the South Plains College "My SPC", REMIND and email systems. Instructor will not initiate communication using private email accounts. Students should regularly check blackboard for specific clinical assignments/announcements.

If necessary, students may contact me on my personal cell phone between the hours 8:00 am-8:30 pm M-F. On the weekends/holidays, please do not contact me before 10:00 am and after 6:00 pm. If you need to reach me after the hours listed, please send a message or an email to my SPC email. If you will be absent from clinic, do not contact me on my personal cell phone.

CAMPUS CARRY

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations and Frequently Asked Questions, please refer to the Campus Carry page at: http://www.southplainscollege.edu/campuscarry.php

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

PREGNANCY ACCOMMODATIONS STATEMENT

If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To <u>activate</u> accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact the Director of Health and Wellness at 806-716-2362 or email cgilster@southplainscollege.edu for assistance.

STUDENT CONDUCT

Rules and regulations relating to the students at South Plains College are made with the view of protecting the best interests of the individual, the general welfare of the entire student body and the educational objectives of the college. As in any segment of society, a college community must be guided by standards that are stringent enough to prevent disorder, yet moderate enough to provide an atmosphere conducive to intellectual and personal development. A high standard of conduct is expected of all students. When a student enrolls at South Plains College, it is assumed that the student accepts the obligations of performance and behavior imposed by the college relevant to its lawful missions, processes and functions. Obedience to the law, respect for properly constituted authority, personal honor, integrity and common sense guide the actions of each member of the college community both in and out of the classroom. Students are subject to federal, state and local laws, as well as South Plains College rules and regulations. A student is not entitled to greater immunities or privileges before the law than those enjoyed by other citizens. Students are subject to such reasonable disciplinary action as the administration of the college may consider appropriate, including suspension and expulsion in appropriate cases for breach of federal, state or local laws, or college rules and regulations. This principle extends to conduct off-campus which is likely to have adverse effects on the college or on the educational process which identifies the offender as an unfit associate for fellow students.

Any student who fails to perform according to expected standards may be asked to withdraw. Rules and regulations regarding student conduct appear in the current Student Guide.

http://catalog.southplainscollege.edu/content.php?catoid=49&navoid=1321

SPECIAL REQUIREMENTS (* Read Carefully-Cell Phone, Pagers, and other Electronic Devices)

Cell phones distract from the learning environment. For this reason, they should be turned off and put away out of view upon entering the classroom. If you must carry a pager or phone to class for emergency purposes, please see me in advance. If you bring a laptop to class, it should not be used for purposes other than taking notes in class. You may not record lectures in this class.

COURSE DISCLAIMER

In order to better prepare students for a career in Respiratory Care profession, there will be times during this course where students will be exposed to training scenarios and situations that will be unpleasant to the average college student. If the student does not feel they can tolerate this type of learning environment, they should discuss this with me immediately before continuing the course.

CHANGES and AMENDMENTS TO SYLLABUS

The program director or clinical coordinator reserves the right to make reasonable changes to the syllabus at any time during the semester. If this occurs, the students will be notified and furnished a copy of all applicable changes or amendments.

COURSE OUTLINE

Unit 1 Airway Clearance Therapy

Reading Assignment: Egans Chapter 43

Competencies: Chest Physiotherapy, Mucous Clearance Adjuncts

Exam 1

Unit 2 Lung Expansion Therapy

Reading Assignment: Egans Chapter 42

Cairo Chapter 7

Workbook assignment posted on Blackboard

Competencies: Incentive Spirometer, IPPB

Exam 2

Unit 3 Airway Management I

Reading Assignment: Egans Chapter 36 Pg 739-749

Cairo Chapter 5 Pg 117-124; 147-154 Workbook assignment posted on Blackboard

<u>Competencies:</u> Naso-tracheal suctioning-Adult; Endotracheal suctioning- Adult; In-line suctioning-Adult; Setup and ventilate via mask- Adult; Setup and ventilate via ETT- Adult

Exam 3

Unit 4 Airway Management II

Reading Assignment: Egans Chapter 33 Pg 749-789

Cairo Chapter 5 Pg 124-147

Workbook assignment posted on Blackboard

<u>Competencies:</u> Endotracheal intubation- Adult; Extubation- Adult, Cuff Management- Adult; Aerosol T-Piece;

Securing Artificial Airway

Exam 4

Unit 5 Analysis and Monitoring of Gas Exchange

Reading Assignment: Egans Chapter 19

Cairo Chapter 10

Workbook assignment posted on Blackboard

Competencies: Pulse oximetry

Exam 5

Comprehensive Final Exam

ACCOMMODATIONS

DIVERSITY STATEMENT

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

DISABILITIES STATEMENT

Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

NON-DISCRIMINATION STATEMENT

South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination

policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

FOUNDATION SKILLS

BASIC SKILLS-Reads, Writes, Performs Arithmetic and Mathematical Operations, Listens and Speaks

- F-1 Reading—locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
- F-2 Writing—communicates thoughts, ideas, information and messages in writing and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
- F-3 Arithmetic-performs basic computations; uses basic numerical concepts such as whole numbers, etc.
- F-4 Mathematics—approaches practical problems by choosing appropriately from a variety of mathematical techniques.
- F-5 Listening—receives, attends to, interprets, and responds to verbal messages and other cues.
- F-6 Speaking—organizes ideas and communicates orally.

THINKING SKILLS—Thinks Creatively, Makes Decisions, Solves Problems, Visualizes and Knows How to Learn and Reason

- F-7 Creative Thinking-generates new ideas.
- F-8 Decision-Making—specifies goals and constraints, generates alternatives, considers risks, evaluates and chooses best alternative.
- F-9 Problem Solving—recognizes problems, devises and implements plan of action.
- F-10 Seeing Things in the Mind's Eye-organizes and processes symbols, pictures, graphs, objects, and other information.
- F-11 Knowing How to Learn—uses efficient learning techniques to acquire and apply new knowledge and skills.
- F-12 Reasoning—discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

PERSONAL QUALITIES-Displays Responsibility, Self-Esteem, Sociability, Self-Management, Integrity and Honesty

- F-13 Responsibility-exerts a high level of effort and perseveres towards goal attainment.
- F-14 Self-Esteem-believes in own self-worth and maintains a positive view of self.
- F-15 Sociability–demonstrates understanding, friendliness, adaptability, empathy and politeness in group settings.
- F-16 Self-Management—assesses self accurately, sets personal goals, monitors progress and exhibits self-control.
- F-17 Integrity/Honesty-chooses ethical courses of action.

SCANS COMPETENCIES

- C-1 TIME Selects goal relevant activities, ranks them, allocates time, prepares and follows schedules.
- C-2 MONEY Uses or prepares budgets, makes forecasts, keeps records and makes adjustments to meet objectives.
- C-3 MATERIALS AND FACILITIES Acquires, stores, allocates, and uses materials or space efficiently.
- C-4 **HUMAN RESOURCES** Assesses skills and distributes work accordingly, evaluates performances and provides feedback.

INFORMATION - Acquires and Uses Information

- C-5 Acquires and evaluates information.
- C-6 Organizes and maintains information.
- C-7 Interprets and communicates information.
- C-8 Uses computers to process information.

INTERPERSONAL-Works With Others

- C-9 Participates as member of a team and contributes to group effort.
- C-10 Teaches others new skills.
- C-11 Serves Clients/Customers—works to satisfy customer's expectations.
- C-12 Exercises Leadership—communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.
- C-13 Negotiates-works toward agreements involving exchanges of resources; resolves divergent interests.
- C-14 Works With Diversity—works well with men and women from diverse backgrounds.

SYSTEMS–Understands Complex Interrelationships

- C-15 Understands Systems—knows how social, organizational, and technological systems work and operates effectively with them.
- C-16 Monitors and Corrects Performance—distinguishes trends, predicts impacts on system operations, diagnoses systems performance and corrects malfunctions.
- C-17 Improves or Designs Systems—suggests modifications to existing systems and develops new or alternative systems to improve performance.

TECHNOLOGY–Works with a Variety of Technologies

- C-18 Selects Technology—chooses procedures, tools, or equipment, including computers and related technologies.
- C-19 Applies Technology to Task—understands overall intent and proper procedures for setup and operation of equipment.
- C-20 Maintains and Troubleshoots Equipment–prevents, identifies, or solves problems with equipment, including computers and other technologies



RESPIRATORY CARE Course Agreement RSPT 1331.200 Spring 2020

I have received a copy of the course syllabus for understand the course format, course competen my responsibilities and rights, as explained by th requirements as stated in the course syllabus.	cies, attendance policy, and examination syst	em. I further understand
Printed Name	Signature	 Date