Course Description: RSPT 1310 Respiratory Therapy Equipment and Procedures I: Provides the student with essential knowledge of the equipment and techniques used in the treatment of pulmonary disease and their clinical application. The following areas are discussed in-depth: oxygen therapy, humidity and aerosol therapy, hyperinflation therapy, CPT, pulse Oximetry, arterial puncture, and interpretation.

Prerequisites: None


Course Goals: The course goal is to mastery the learning objectives as outlined at the beginning of each chapter of the text. Assigned reading, lecture, class discussion, and media presentations will facilitate the learning of the objectives. The course will also incorporate a portion of the SCANS competencies to include basic skills and the application of critical thinking skills.

SCANS Competencies
Respiratory Therapy Program

SCANS is an acronym for Secretary’s Commission on Achieving Necessary Skills. Thus, SCANS incorporates basic workforce skills identified by the U.S. Department of Labor, Secretary’s Commission on Achieving Necessary Skills. The areas of competency identified by the commission include: enhancing basic skills, applying critical thinking skills, the utilization of information skills, the use of technology, the ability to maximize resources, the exhibition of appropriate interpersonal skills and personal qualities, and the comprehension and application of system knowledge.

1. Technology: C19 Applies Technology to Task

   Description:
   Understands the overall intent and the proper procedures for setting up and operating machines, including computers and their programming systems.

   Objective:
Student will be able to set up appropriate respiratory equipment and modality.

Description of Module:
Instruction of module consists of various volume ventilation vs. pressure ventilation modalities and there troubleshooting strategies.

2. **Basic Skills:** F3 Arithmetic
   
   Description:
   Performs basic computations; uses basic numerical concepts such as whole numbers and percentages in practical situations; makes reasonable estimates of arithmetic results without a calculator, and uses tables, graphs, diagrams, and charts to obtain or convey quantitative information.

   Objective:
   Explain how pressure, flow, and volume triggering mechanics work to begin the inspiratory phase of a breath.

   Description of Module:
   Student will be able to compute lung mechanics: inspiratory time, dynamic compliance, pressure support, etc...

3. **Thinking Skills:** F9 Problem Solving
   
   Description:
   Recognizes that a problem exits (i.e., there is a discrepancy between what is and what should or could be), identifies possible reasons for the discrepancy, and devises and implements a plan of action to resolve it. Evaluates and monitors progress, and revises plan as indicated by findings.

   Objective:
   From a clinical situation with a ventilated patient, differentiate between problems associated with the ventilator and those caused by a patient problem.

   Description of Module:
   Instruction consists of analyzing arterial blood gas results to determine patient ventilation vs. mechanical ventilator problem and making appropriate adjustments.
Instructor Information: Herbert Jackson MS, RRT RCP
Office: 384 – JB Coleman Health-Science Building
Office Hours: Tuesday and Thursday 10:30a.m.–12:30a.m.
Friday 10:00a.m.–1:00p.m.
(Other times by appointment)
Class Time: Tuesday/Thursday 12:30-2:00 p.m.
Room 367, JB Coleman Health-Science Building
Phone: Office – 713-718-7384

Textbook Information: *Egan's Fundamentals of respiratory Care, 9th Edition*:

Lab Requirements: Tuesday/Thursday 2:00 – 5:00 p.m.
Friday 10-1:00pm
Room 375, JB Coleman Health-Science Building

Students With Disabilities: Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at the respective college at the beginning of each semester. Faculty is authorized to provide only the accommodations requested by the Disability Support Service Office.

Academic Dishonesty: Students are responsible for conducting themselves with honor and integrity in fulfilling the course requirements. Scholastic dishonesty includes but is not limited to, cheating on a test, plagiarism, and collusion. Possible punishments may include a grade of 0 or F on the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the College System.

Attendance/Withdrawal: Attendance will be taken each class day. Students are required to sign the class roster daily to verify attendance.

Each student is allowed 2 absences. Absences in excess of 3 days will result in counseling with the instructor. Absences in excess of four (4) days will result in expulsion from the course. Students will be responsible for material covered on days that they missed. Also, the instructor will not reiterate content covered in class sessions that a student missed.
EGLS – Evaluation for Greater Learning Student Survey System

At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.

TARDIES: Three (3) tardies will be equivalent to one absence
LEAVING EARLY: Three (3) leaving early will be equivalent to one absence. The student will be responsible for obtaining all materials, notes, handouts, and making up assignments missed during any absences. The instructor will not be responsible for any materials not obtained during a student's absence.

Early Alert Syllabus Statement

The Houston Community College Early Alert program has been established to assist in the overall effort to retain students who are at risk of failing, withdrawing, or dropping a course. This process requires instructional faculty and student support staff to identify students who are performing poorly as early as possible and provide relevant support services to help students overcome their deficiencies. A student is identified when an instructor notices academic or personal difficulties that affect student’s academic performance. The possible problem(s) could be tardiness, missed/failed test scores, excessive absences, or a number of other circumstances. Once a referral is made counselors will then contact students to discuss the issues and possible solutions to their academic difficulties.

Course Requirements, Grading Policy, and Make-Up Policy:
The primary focus will be to provide an understanding of basic respiratory care principles, equipment and procedures to include the following:
1. Principles of Infection Control
2. Physical Principles in Respiratory Care
3. Production, Storage & Delivery of Medical Gases
4. Humidity & Aerosol Therapy
5. Medical Gas Therapy
6. Lung Expansion Therapy
7. Chest Physiology
8. Airway Care
This course is required of all respiratory care students. The major goals of the course include: 1) understanding basic functioning of respiratory care equipment and 2) becoming familiar with the basic respiratory care procedures.

<table>
<thead>
<tr>
<th>Source</th>
<th>% of Total Grade</th>
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<tbody>
<tr>
<td>5 Exams</td>
<td>50%</td>
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<tr>
<td>2 Lab Exams</td>
<td>20%</td>
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<tr>
<td>1 Final Exam</td>
<td>30%</td>
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<td>TOTAL</td>
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Course grades will be assigned on the following bases:

- A = 89.5% - 100%
- B = 79.5% - 89.5%
- C = 74.5% – 79.4%
- F = 00 - 74.4%

**Exams**

Any regularly scheduled or unscheduled course exam **will not** be made up. If the student must be absent on the day an exam is given then a grade of 50% will be given. If the student knows in advance that he/she will be absent on an exam day they should make arrangements with the instructor prior to the exam date.

The Final Exam must be taken at the scheduled time on the schedule day. The **only** exceptions to this are hospitalization or a physician's statement prohibiting the student from taking the exam. The make-up Final for these exceptions will be at the discretion of the instructor and must be taken within thirty (30) days after the end of the semester.

If you are late to any exam (scheduled or unscheduled), the following applies:

a. You must complete the exam within the class time allocated for the exam. You will not have additional time in which to complete the exam. For example, if the exam is scheduled from 9 to 10 a.m., you must complete the exam by 10:00 a.m.

b. If you arrive after any student has completed the exam and left the room you **WILL NOT** be allowed to take the exam.

The score marked by the Scantron Test Scorer (machine) on your form will be the score you receive. Any stray marks, incomplete erasure, or blanks, which are sensed by
the machine and result in a "wrong grade", are your hardship. A change will not be made on your Scantron score.

**Lab Exams**
In this course you will have 2 practical exams. These performance exams are designed to cognitive (understanding) and psychomotor (manual-mechanical) skills. Each practical will consist of answering questions, patient assessment and simulated performance of clinical procedures. You will have to answer all questions and perform task/skills within a given period of time.

**Final Exam**
There will be a comprehensive final exam testing the content areas of the course. The date for the exam is set for the week of **FINAL EXAMS**.

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**Course Content/Calendar/Reading Assignments:**

**Tentative Schedule**

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Activity</th>
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<tbody>
<tr>
<td><strong>August</strong></td>
<td>30</td>
<td>Introduction &amp; chapter 1</td>
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<td></td>
<td>1</td>
<td>Chapter 1 foundations in Resp</td>
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<td>06</td>
<td>Chapter 4 infection control</td>
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<td>08</td>
<td>chapters 4</td>
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<td>13</td>
<td>chapters 4</td>
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<td><strong>15</strong></td>
<td><strong>Exam 1 – chapters 1&amp;4</strong></td>
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<td></td>
<td>20</td>
<td>review exam #1/chap 4</td>
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<td></td>
<td>22</td>
<td>chapters 6</td>
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<td></td>
<td>27</td>
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<td>29</td>
<td>chapter 37</td>
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<td><strong>September</strong></td>
<td>04</td>
<td>Exam 2 – Chapters 6 &amp; 37</td>
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<td>Review exam #2/chapter 38</td>
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<td>20</td>
<td>Chapter 35</td>
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<td><strong>Exam 3 – Chapter 38 &amp; 35</strong></td>
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<td><strong>November</strong></td>
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<td>01</td>
<td>Chapter 36</td>
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<td>08</td>
<td>Chapter 39</td>
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<td>23</td>
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<td>24</td>
<td><strong>Thanksgiving Holiday</strong></td>
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<td><strong>December</strong></td>
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<td><strong>Exam #5 Chapter 40 &amp; 33</strong></td>
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<td>08</td>
<td>Review for final</td>
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<tr>
<td>12-18</td>
<td><strong>Final Exam Week</strong></td>
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*Last Day for Student & Administrative Withdrawal*

- RT = Nov. 3
- SS = Nov. 11
- F8 = Sept. 30
- S8 = Nov. 28
- Mini = Dec. 30
Respiratory Care Equipment & Procedures I
RSPT 1310
Student Signature Page (Return to Instructor)

The instructor discussed with the class and I have read the Spring 2002 course syllabus for RSPT 1310-Respiratory Care Equipment & Procedures I. I am familiar with the contents there in and I will abide by the stated rules / policies for the course.

I am aware of the required textbook and materials and I realize that the reading and coming prepared to class is critical for my success in this course.

Student Name (Print) _____________________________________________
ID (SS#)________________________________________________________
Student Signature (Ink) ____________________________________________
Date Signed _____________________________________________________
Current Telephone Number __________________________________________