INSTRUCTOR: Tanya Kappes, RRT, CPFT, RCP  
E-MAIL: tkappes@alvcollege.edu  
OFFICE: S151  
PHONE: 281-756-5652  
OFFICE HOURS: 8am – 9am  
CELL: 281-844-2913

A. COMMUNICATING WITH THE PROFESSOR

The preferred method for communication is through ACC e-mail. The instructors will be available to meet with anyone who contacts them to set up an appointment via e-mail. If you need to speak with the Program Chair please call 281-756-5660 in order to set up an appointment.

Students will generally receive a response via e-mail within 48 hours on weekdays if their e-mail is sent before 2:00 p.m.

B. COURSE DESCRIPTION

This course includes theories and techniques involved in pulmonary function testing, diagnostics with emphasis on oximetry, and blood gas theory and analysis, quality control, capnography.

C. METHODOLOGY

RSPT 2305 is a 7-hour/week (4 lecture and 3 laboratory hrs/week). The objectives are met through classroom lecture, use of media, computer-assisted instruction, and demonstration. Each student is required to be checked off on pulmonary function procedures in the laboratory.

D. PRE-REQUISITES/CO-REQUISITES: RSPT 2210

E. CLASS ATTENDANCE POLICY

Students are expected to attend all classes, including lab, regularly. The student is responsible for being present and on time and for preparing adequately for each class by reading all assigned materials prior to class.

A student who accumulates more than two (2) weeks absences in one (1) class during a sixteen-week (16) semester or an equivalent time during a six-week (6) or twelve-week (12) session may be advised to drop that course or the absences will be reflected in the final grade average. (Does not pertain to clinical absences) Five (5) points will be deducted from the final grade average for each day of unexcused absence(s) after the accumulated two-weeks absence. (Does not pertain to clinical courses)
An unexcused absence is an absence which is not substantiated by a written doctor's excuse. These excuses do not include doctor, dentist, eye, etc., appointments. Students are held accountable for all missed work.

The student is responsible for contacting each course instructor regarding materials distributed in class, assignments made during class, and make-up assignments for any classes missed (excused or unexcused).

The student will not be allowed in clinical when the student does not attend class.

F. TEXTBOOKS

2. Lab Book, Indications for Pulmonary function and Lung Volume Tests. Workbook

Pulmonary Function Testing can be purchased at the ACC bookstore, which is open Monday through Thursday 7:30 a.m. to 7:00 p.m. and Friday 7:30 a.m. to 2:00 p.m. Bookstore hours can vary during holidays so please call the bookstore at 281-756-3681 for more information. The textbook can also be purchased online and mailed directly to your residence from: http://www.alvinccstore.com/

G. COURSE GOALS

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

1. Set up a variety of pulmonary function spirometers for patient use.  
   (C15, C18, C20, F9, F13, F16)
2. Perform the following tests on a spirometer and calculate the test results with 100% accuracy:  
   (C5, C6, C7, C8, C11, C16, C19, C20)  
   a. Forced vital capacity and forced expiratory volumes times parameters.  
   b. Forced expiratory flow 200-1200  
   c. Forced expiratory flow 25%-75%  
   d. Maximum voluntary ventilation  
   e. Peak expiratory flow rate  
   f. Tidal volume, minute ventilation, and respiratory frequency  
   g. All lung volumes and capacities
3. Perform a flow volume loop and calculate the test with 100% accuracy.  
   (C15, C16, C19, C20, F4, F8, F9)  
   a. Forced vital capacity and forced expiratory volume time parameters  
   b. Peak expiratory flow rate  
   c. Peak inspiratory flow rate  
   d. Forced expiratory flow at 25%, 50%, and 75%  
   e. Volume of isoflow
4. Given pulmonary function test data, calculate the functional residual capacity and residual volume using open and closed circuitry with 100% accuracy.  
   (C7, C8, C9, F4, F8, F9)
5. Using nomogram correctly, predict normal values for lung volumes, capacities, and flow rates. (C5, C6, C7, F8, F9)  
6. Obtain a complete pulmonary history from a patient.  (C5, C6, C7, C8, C11, F5, F6)
7. Calculate the closing volume and closing capacity from a single breath nitrogen elimination test.  
   (C5, C6, C7, C8, F4, F9)
8. Calculate the VD/Vt ratio from collected expired gas.  
   (C5, C6, C7, C8, C11, F4, F9)
9. Evaluate and interpret a pulmonary function test.  
   (C5, C6, C7, C8, F8, F9)
10. Set up and monitor a pulse oximeter and capnometer, and obtain/interpret results.  
    (C5, C18, C19, C20, F8, F9, F10)

H. ASSIGNMENTS, EXAMS & GRADING SUMMARY

1. **QUIZZES** - Quizzes (scheduled or unscheduled) cannot be made up if missed.

2. **HOMEWORK ASSIGNMENTS** - There are seven (7) assignments that the student must complete during the course. The assignments will be over the following topics:
   
   1. Pulmonary Function Article
   2. Lung Volume Graph
   3. Upper Airway Obstruction Article
   4. Ohio 822 Spirometry Graph
   5. Pulmonary Mechanics Check-off
   6. Module II Worksheet
   7. Calculations Homework

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**GRADING SUMMARY**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>% of final grade</th>
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<tbody>
<tr>
<td>Unit I Test</td>
<td>11%</td>
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<tr>
<td>Unit II Test</td>
<td>11%</td>
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<tr>
<td>Unit III Test</td>
<td>11%</td>
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<tr>
<td>Unit IV Test</td>
<td>11%</td>
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<tr>
<td>Unit V Test</td>
<td>11%</td>
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<tr>
<td>Unit VI Test</td>
<td>11%</td>
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<tr>
<td>Quizzes</td>
<td>10%</td>
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<tr>
<td>Assignments</td>
<td>13%</td>
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<tr>
<td><strong>Final</strong></td>
<td><strong>11%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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<table>
<thead>
<tr>
<th>Grading Scale</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>80-89</td>
<td>B</td>
</tr>
<tr>
<td>75-79</td>
<td>C</td>
</tr>
<tr>
<td>Any grade below 75</td>
<td>F</td>
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</tbody>
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The final grade is based on the average received on all course assignments and activities. The student must have a passing test average to pass the class. **If the test average is less than 75, the student will not pass**, even if the overall average is 75. Always notify your instructor if you are concerned with your grades or your status in the class.

**I…Incomplete.** No Incompletes or “I” grades will be given except for extreme circumstances. If an “I” grade is assigned and the course work is not completed by the pre-arranged time limit, this grade will convert to an “F.”

**W….Withdrawal.** Students who file withdrawal requests by the published deadline will receive a grade of “W.” If a decision is made to withdraw, the student must start the process at the Enrollment Services Center, room A-100, before the deadline. Failure to withdraw may result in a grade of F.
LATE COURSE WORK POLICY: All assignments are to be completed and turned in on the date specified in class. Five (5) points will be deducted from each assignment for every scheduled class-day that the assignment is late. Students will be granted one (1) late assignment for illness (per course) provided the student notifies the instructor prior to class.

EXAM POLICY: Students may miss one (1) unit examination which must be made up on the date of return, prior to the scheduled class, ONLY if the student has an EXCUSED ABSENCE. In the event of an unexcused absence, no make-up exam will be given. Only one (1) make-up examination will be given for this course. All make-up exams, whether taken early or after assigned test day, will be essay exams.

I. EXPECTATIONS
   1. Students are expected to obtain required textbooks before the end of the first week of class.
   2. Students are expected to come to class having read the designated reading assignments from the syllabus for each class, and will be held accountable for all reading assignments.

J. TECHNICAL SUPPORT
   1. Computers are available for use by all registered ACC students in many of the 23 ACC/PCC computer labs, including the Cyber Lab, room A-173. Cyber Lab hours are: Mon-Thurs. 8:00 a.m.- 8:00 p.m., Friday 8:00 a.m. – 5:00 p.m. and Sunday 4:00 p.m.- 8:00 p.m. Call 281-756-3544 for more information about all ACC computer labs. Students will not be penalized if there is interruption in MyBlackboard, if the instructor is notified of such an issue from the Distance Education Department.
   2. The ACC Library website is: http://www.alvincollege.edu/library/default.htm
   3. The ACC Learning Lab and Writing Center, A-235, is for tutoring, exams, and additional computer access: http://www.alvincollege.edu/resources/learning_lab.htm
   4. MyBlackboard-Any technical problems or issues with MyBlackboard should be directed to the Distance Education Department at de@alvincollege.edu. Include your first and last name, student ID number and a description of the problem.
   5. WEBACCESS, Passwords or Computer Labs-contact the IT Dept. Help Desk at 281-756-3544

K. AMERICANS WITH DISABILITIES ACT- ACC complies with ADA and 504 Federal guidelines by affording equal access to individuals who are seeking an education. Students who have a disability and would like classroom accommodations must register with the Office of Disability Services, A 136, (281)756-3533. Instructors are not able to provide accommodations until the proper process has been followed.
L. **CODE OF ACADEMIC INTEGRITY AND HONESTY** - Students at Alvin Community College are members of an institution dedicated to the pursuit of knowledge through a formalized program of instruction and learning. At the heart of this endeavor, lie the core values of academic integrity which include honesty, truth, and freedom from lies and fraud. Because personal integrity is important in all aspects of life, students at Alvin Community College are expected to conduct themselves with honesty and integrity both in and out of the classroom. Incidents of academic dishonesty will not be tolerated.

M. **COURSE SCHEDULE** – The Course schedule is found under course content on MyBlackboard.