

RCT 1214
Respiratory Care Science
Fall 2017

Instructor: Doug Treanor
Office Hours: Daily 10:00 a.m. – 11:00 a.m.,
or by appointment
Class Time(s)/Sections: MWF 2:00 p.m. – 3:50 p.m. Email: jtreanor@coahomacc.edu
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Course Description:

This course is designed to introduce the student practitioner to fundamental elements important to the delivery of health care in a safe, efficient and professional manner. 4 sch: 3 hr. lecture, 2 hr. lab). Prerequisites: Anatomy and Physiology I and II (BIO 1514 and BIO 1524); program admission; or program director's approval.

Textbook(s) and Material(s):

1. Egan's Fundamentals of Respiratory Care, 11th ed. Robert M. Kacmarek, et al., Elsevier 2016 (ISBN: 978-0-323-34136-3)
2. Egan's Fundamentals of Respiratory Care Workbook, 11th ed. Sandra T. Hinski, Elsevier 2016 (ISBN: 978-0-323-35852-1)
3. Taber's Cyclopedic Medical Dictionary, 22nd Ed. FA Davis 2013 (ISBN: 978-0-8036-2977-6)
4. Mosby's Respiratory Care Equipment, 9th ed. JM Cairo, Elsevier 2014 (ISBN: 978-0-323-09621-8)
5. Mosby's Respiratory Care Equipment Workbook, 9th ed. Laurie A. Freshwater, Elsevier 2014 (ISBN: 978-0-323-09622-5)
6. Medical Terminology, 7th ed. Davi-Ellen Chabner, Elsevier 2015 (ISBN: 978-1-4577-5830-2)
7. Practical Math for Respiratory Care, 1st ed. Raymond Sibberson, Elsevier 1996 (ISBN: 978-0-8151-8001-2)
8. Lab Exercises for Competency in Respiratory Care, 3rd ed., Thomas Butler, F A Davis 2013 (978-0-8036-2679-9)

Student Learning Outcomes:

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

By the end of this course, the student will be proficient in the following:

1. Patient Safety
 - a. Discuss disaster planning and bioterrorism responses
 - b. Discuss understanding of OSHA regulations and standard precautions
 - c. Discuss and demonstrate proper use of body mechanics
 - d. Discuss fire and electrical safety
 - e. Discuss principles of accident prevention
2. Patient comfort
 - a. Discuss cultural diversity
 - b. Apply effective communication skills in the various health care settings
 - c. Discuss patient management in regard to death and dying

3. Aspects of the health care delivery system
 - a. Discuss the role of various health care providers, including rcp's
 - b. Discuss the organization and functions of a respiratory care department
 - c. Discuss the legal aspects of respiratory care, including licensure and credentialing
 - d. Discuss the history of respiratory care
 - e. Discuss ethical considerations in respiratory care
 - f. Discuss professional considerations in respiratory care
 - g. Discuss medical billing and reimbursement

4. Discuss related medical terminology
 - a. Discuss terms related to anatomy and physiology
 - b. Discuss terms related to human disease
 - c. Discuss terms related to patient assessment and diagnosis
 - d. Discuss terms related to the treatment of disease

5. Describe the role infection control and microbiology play in health care
 - a. Describe the major classifications of microorganisms and the pathological role of each in human disease
 - b. Describe how microorganisms are identified and the role identification plays in treatment
 - c. Describe sputum sampling, gram stain, culture and sensitivities
 - d. Describe infection control methods used in respiratory care
 - e. Describe the elimination of infectious sources
 - (1) Proper methods of equipment decontamination
 - (2) Sterilization and disinfection methods
 - (3) Monitoring infection control practices
 - (4) Apply isolation procedures
 - (5) Describe the spread of infection and how to break the chain of contamination

6. Demonstrate mathematics as applied to respiratory care
 - a. Perform metric conversions
 - b. Perform decimal and percent conversions
 - c. Calculate ratio and proportions
 - d. Solve linear equations
 - e. Apply proper order of math functions
 - f. Apply graphic interpretation by plotting data on an x-y coordinate axis system
 - g. Perform temperature conversions

7. Discuss chemistry and physics as related to respiratory care
 - a. Discuss states of matter and how each state changes
 - b. Discuss gas laws
 - c. Discuss fluid dynamics
 - d. Discuss acids, bases and the pH scale
 - e. Discuss temperature scales and solve conversion problems
 - f. Discuss absolute and relative humidity

8. Discuss methods of data management in respiratory care
 - a. Discuss computer applications in respiratory care
 - b. Apply various aspects, methods and formats of record keeping and research

School Attendance:

Regular class attendance and punctuality are expected. All arrangements for completing missed work are to be made with the instructor. It is the student's responsibility to initiate these arrangements.

Excessive absences may result in loss of credit for the course concerned as well as loss of grant refunds and/or financial aid eligibility.

The nature of the educational programs at Coahoma Community College is such that it is necessary for every student to attend class regularly. Instructors will keep accurate class records, and those records will become part of the student's official record.

NOTE: In the event of inclement weather, the President may cancel classes. Students are advised to listen to the TV or radio for an announcement. Absence without an official closure is treated as an unexcused absence unless there is a danger for the student to drive.

Respiratory Care Attendance:

The student is expected to attend class 100% of the time. In case of an unavoidable absence, the student is required to submit in writing the requested absence.

An absence will be handled as follows: Telephone notification must be made to the Instructor one hour prior to the scheduled class time. The student must speak directly to the Instructor, Program Director, Clinical Director, or secretary. **Leaving messages is not sufficient notification. Failure to follow these instructions will result in immediate disciplinary action according to school and program policy.**

Students shall not schedule conference times with other faculty or councilors during class time. **Any class time missed due to 'appointments' with councilors or other faculty will not be treated any differently from other types of tardy or absences.**

TARDIES:

A tardy is considered arriving at any time past the designated class time. Proper notification must be made (see attendance policy). If the student is tardy without proper notification, they may be refused entry into class resulting in the student counted absent.

ALL ABSENCES AND TARDIES will result in a grade reduction as follows:

- Three (3) tardies equals 1 absence. Three (3) occurrences of leaving class before the class period is complete equals one (1) absence.
- Greater than 3 absences will result in the student being dropped from the class.

Absence from Class for School Sanctioned Activities

Students who are absent from class due to participation in an officially sanctioned school activity must present notice of the event to the instructor (at least one week prior is desirable) and request advance assignments. If the student is passing the course, the request for make-up will be honored. If missing the class will endanger the student's academic success, the instructor will notify the activity sponsor; the sponsor and the instructor will determine a decision regarding the student's participation in the activity. In general, the decision will reflect the philosophy that students attend college for educational purposes, and participation in activities outside the classroom is recognized as a lower priority.

Canvas

Students are responsible for checking announcements and course postings on the Canvas course sites.

Make-up Policy:

There are no make-up examinations. Depending on the number of tests, up to 2 grades may be dropped at the end of the semester. With the approval of the Program Director and/or Dean of Health Science, with a valid, written explanation of absence, the Final Exam can be made-up within 5 days of the date the exam is given.

Students are responsible for any information taught during their absence so they should check with classmates to read or borrow class notes, and make a copy of any handouts. The student should also make an appointment to see the instructor for clarifications, questions, etc. **Any missed material will not be re-taught by the instructor.**

Cheating Policy/Plagiarism/Academic Misconduct:

Cheating, Plagiarism and Academic Misconduct will not be tolerated. All offenders will be referred to the Vice President for Health Sciences for disciplinary action. Repeated offenses will result in expulsion from the program. Cheating, Plagiarism and Academic Misconduct, includes, but is not limited to, the following:

1. Copying from another student's test paper
2. Using the course textbook or other materials such as a notebook normally brought to a class meeting but not authorized for use during a test by the person giving the test. Having such forbidden material open and in sight of the student will be considered prima facie evidence of use
3. Attempting to commit, or to be an accessory to the commission of, an offense listed above
4. Collaborating during a test with any other person by giving or receiving information without authority
5. Using specially prepared materials, e.g., notes, formula lists, notes written on the student's body or clothing, during a test. Bringing such forbidden material to a test will be considered prima facie evidence of use or attempted use
6. Stealing, buying or otherwise obtaining, all or part of an unadministered test, including answers to an unadministered test
7. Possession/distribution of all or part of an unadministered test
8. Submitting as one's own, in fulfillment of academic requirements, any theme, report, workbook assignment, term paper, essay, other written work, drawing, or other scholastic work prepared totally or in part by another
9. Selling, giving or otherwise supplying to another student for use in fulfilling academic requirements any theme, report, workbook assignment, term paper, or other work
10. Plagiarizing is the unacknowledged inclusion, in work submitted for credit, of someone else's words, ideas, work or data

Electronic Devices in Class:

The use of cellular phones, pagers, CD players, radios, and similar devices is prohibited in the classroom and laboratory facilities. Cellular phones may not be used as a calculator in class. **All cell phones will be placed on silent (vibrate mode will be turned off) and placed in the designated container at the front of the classroom prior to the beginning of the class period.** Phones may be retrieved at the beginning of a break. However, the above policy will apply again once the break period is completed. If a student is seen with a cell phone during a test, the student's test will be stopped and a zero given for the test.

Audio and video recordings of lecture and lab classes are prohibited.

Students whose electrical devices disrupt class may be asked to leave class, marked absent and will not be permitted to return for the session. If the electrical device disrupts an exam or quiz, the student will receive a score of zero (“0”) for the exam or quiz.

Non-Discrimination/Disability Policy

Coahoma Community College is an equal opportunity institution in accordance with civil rights and does not discriminate on the basis of race, color, national origin, sex, disability, age, or other factors prohibited by law in any of its educational programs, activities and employment opportunities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Michael Houston, Director of Employee Services/Coordinator for 504/ADA, Title IX Compliance Officer, Office #A100, Vivian M. Presley Administration Building, 3240 Friars Point Road, Clarksdale, Mississippi 38614, Phone: (662)621-4853, Email: mhouston@coahomacc.edu.

Instructional Techniques:

- Classroom Lecture
- Demonstration
- Canvas
- Laboratory Practice

Method(s) of Evaluation:

The student's semester average will come from quizzes, assignments and class room participation. The final average will be assigned a letter grade according to the grading scale listed below:

Quizzes/Assignments/Exams/Tests	80%
Professional Characteristics*	10%
Final Examination (comprehensive)	10%

*Professional Characteristics includes Attendance, Dress (See Dress Code in Student Program Manual) and classroom preparation/participation.

Grading Scale/System:

In the Respiratory Care Program the grading system is:

- A - Excellent 94 - 100
- B - Good 87 - 93
- C – Average 80 – 86
- F - Failure 79 and below

NOTE: Students must have a final grade of 80 in each subject (lecture, lab, and clinical) in order to progress in the Respiratory Care Program.

NOTE: The student is responsible for completing Egan’s Fundamentals of Respiratory Care Workbook for each chapter utilized from the textbook. **Each student will submit his/her workbook prior to the final exam starting.** Each workbook will be graded for completeness and up to 100 points may be awarded.

Points to pay particular attention to:

I do not offer ANY make-up work. Your exams/quizzes/tests are when they are – not early nor later.

If you miss an exam/quiz/test due to: ANY REASON ... you miss the exam/quiz/test and do not have the right to take it at a later date

No EXTRA CREDIT is available and after reading this, you will not ask if there is any extra credit available.

If you chat in class, I may do any of the following: wait until you are quiet (which will not impact the material we will be scheduled to discuss that class – the student will be responsible for any part we do not cover); request you leave the class and mark you absent. If you are habitually chatting in class, you may be asked to refrain from attending class.

The Respiratory Care Technology faculty expects honest behavior from students in relation to written or computerized examinations, quizzes, tests, papers, or any other assignment. The faculty considers sharing testing instruments, past or present, as a violation of academic honesty. Every student and faculty member has the responsibility to promote the highest standards of honesty.

Each student in the classroom is on the honor system and is responsible for his/her own actions, as well as others. Any student aware of another student cheating must inform the instructor within twenty four (24) hours.

This outline is intended as a guideline for the course. The university/college/institution and the instructor reserve the right to make modifications in content, schedule, and requirements as necessary to enhance each student's educational experience and student learning outcomes.

TENTATIVE SCHEDULE OF CLASS ASSIGNMENTS/TESTS

WEEK	ASSIGNMENTS/TESTS	Reading Assignments
1	Math Concepts/Medical Terminology	Sibberson Chap 1 Chabner 1-22
TBD	Med Terminology & Abbreviations	Chabner 23-46
TBD	Med Term/Gas Laws	Chabner 47-83 Egan Chap 6 Mosby Chap 1 Sibberson Chap 2
TBD	Med Term & Abbreviations	Chabner 85-108
TBD	Med Term/ History of Resp Care	Chabner 108-128 Egan Chap 1
TBD	Med Term	Chabner 129-150
TBD	Med Term	Chabner 151-174

TBD	Med Term/Quality & Evidence Based Resp Care	Chabner 175-194 Egan Chap 2
TBD	Med Term/Patient Safety, Communication & Recordkeeping	Chabner 195-214 Egan Chap 3
TBD	Infection Control	Egan Chap 4 Mosby 2
TBD	Ethical & Legal Implications of Practice	Egan Chap 5
TBD	Cultural Diversity	Handout
TBD	E-Medicine in Resp Care Fundamentals of Resp Care Research	Egan 7 Egan 8
	Labor Day Holiday	Sept 4
	Fall Break	Oct 16-17
	Thanksgiving Break Final Exam	Nov 20-24 TBA