

Northern Essex Community College

Division of Health Professions

RSC101 Fundamentals of Respiratory Care I

Fall 2015

Time and Location: Monday 9:00 - 9:50, LC-216
Friday 8:00 - 9:50, LC-133

Instructor: Carolyn Emerson, RRT-NPS

Office: LC-312E

Office Hours: Monday 11a-12p; Wednesday 12p-1p; Friday 10a-11a

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COURSE DESCRIPTION: This 3 credit course introduces the profession of respiratory care. Content includes the professional and regulatory agencies that govern practice; legal issues and communication in the clinical setting; medical record documentation; gas laws that govern respiratory care modalities; and the physiologic basis for medical gas, humidity and aerosol therapy; and bronchopulmonary hygiene.

Prerequisite: Admission to the Respiratory Care program.

Corequisite: Anatomy & Physiology I (BIO121); Physiologic Chemistry (BIO115); Cardiopulmonary Physiology (RSC100); Respiratory Modalities I (RSC111) and Clinical I (RSC191).

Required Text:

Egan's Fundamentals of Respiratory Care, 10th Edition (2013) Kacmarek, Stoller, & Heuer. ISBN: 9780323082037

Recommended Texts/Journals/Resources:

- *Respiratory Care*, the official journal of the American Association for Respiratory Care (AARC): <http://rc.rcjournal.com/>
- AARC Clinical Practice Guidelines: <http://www.rcjournal.com/cpgs/>

** Students will need access to an email account and Blackboard, some information will be shared electronically

COURSE OUTCOMES:

Upon completion of this course, the student will:

1. Describe the development of respiratory care as a profession.
2. Identify the professional and regulatory agencies that govern the scope of practice for respiratory therapists.
3. Utilize critical thinking skills in the practice of Respiratory Care.
4. Communicate, both verbally and in writing, relevant clinical information to members of the health care team using conventional terminology as required by clinical and regulatory agencies.
5. Discuss management of a patient's medical record.
6. Describe the mechanics of breathing in the adult.
7. Define selected terms related to aerosol and humidity therapy.
8. Discuss the use of therapeutic aerosols.
9. Describe the indications, contraindications, therapeutic goals, hazards, assessment of outcomes, and monitoring associated with the administration of aerosol therapy.
10. Describe the indications, contraindications, therapeutic goals, hazards, assessment of outcomes, and monitoring associated with the administration of humidity therapy.
11. Describe the indications, contraindications, therapeutic goals, hazards, assessment of outcomes, and monitoring associated with the administration of medical gas therapy.
12. Describe the indications, contraindications, therapeutic goals, hazards, assessment of outcomes, and monitoring associated with the administration of bronchial hygiene therapy.

COURSE REQUIREMENTS:

Consistent class attendance and diligent study of the subject matter is critical to success in this course. The text material is certainly important however reading supplemental material i.e. professional publications will help to place the text information in context and enhance understanding of the concepts presented in class.

TEACHING METHODS:

Teaching and learning methods included in this course may include any or all of the following: lecture, explanation; small group discussion; audio-visual learning aids, computer based projects, and case studies. Major emphasis will be placed on answering questions in class related to the subject matter under current consideration.

POLICY REGARDING THE GIVING OR RECEIVING OF ASSISTANCE DURING EXAMINATIONS:

Examinations will be completed independently unless otherwise specified by the instructor. Assistance will be given only with reference to question clarification.

ACADEMIC ETHICS AND PLAGIARISM:

The college expects all students to maintain high standards of academic honesty and integrity. Plagiarism is clearly an example of a violation of academic ethics and is a major offense. Plagiarism is defined by the college to be the use of any other person's work or ideas as though the work or ideas were your own, without giving the appropriate credit. Instances of plagiarism will be dealt with first by the instructor who discovers or is made aware of the incident. There shall be a range of penalties at the discretion of the instructor, which may extend to a recommendation to the Dean of Students for expulsion from the college.

ATTENDANCE:

Regular attendance in class is critical to success in this course. Students are strongly advised to attend every class. If the student is absent, it is his/her responsibility to obtain any material discussed and any assignments from classmates before the next class meeting. Specific questions concerning the material should be addressed to the instructor.

COURSE EVALUATION:

The final grade for this course is determined as follows:

Quizzes: Quizzes will be given in lecture and/or online through Blackboard.

Assignments: A minimum of five (5) take-home assignments will be assigned. Assignments will include, but are not limited to: essay, short answer, and worksheet. Grading rubric will be provided for writing assignments.

Class participation: Unexcused absences or discussions in class where the student fails to participate will result in a 0.5% drop in the final grade.

Midterm: Will be given in class, Monday, October 26th.

Final Exam: Date TBA. To be given during Final Exam Week.

***In general, there are NO make-ups for exams in this class. If the student is absent on the day of an exam, he or she MUST NOTIFY THE INSTRUCTOR AT LEAST ONE HOUR PRIOR TO THE SCHEDULED EXAM in order to be considered for a make-up exam. In extenuating circumstances this may be allowed, however, the instructor is the sole determinant of "extenuating circumstances."*

Quizzes	20 %
Assignments	25 %
Class participation	10 %
Midterm	20 %
Final	25 %

Student Assessment for Program/Course Evaluation: Northern Essex Community College's commitment to student success involves the evaluation of student work to help ensure that students are achieving the learning outcomes targeted by our programs. This process may involve the collection of student classroom products for evaluation at the program and department levels. When collected for this purpose, students' names will be removed from the products so that the assessing is done anonymously. Evaluations carried out at the program or department levels will not impact students' course grades. The process of assigning grades will continue to be the responsibility of the course instructor.

Information/services for students with documented disabilities: If you require any accommodations, either with the presentation of course materials or with testing, please meet with an instructor at your earliest convenience. In addition, if there is a student in this class who has needs because of a disability or is Deaf or Hard of Hearing, please feel free to come discuss this with an instructor and/or directly contact the appropriate office below:

Learning Accommodations Center: Serving students with documented disabilities such as; learning disabilities, attention deficit disorders, autism spectrum disorders, brain injuries, chronic illness, low vision/blind, physical disabilities, psychiatric disabilities and seizure disorders.

Visit us in the Student Center SC111, call (978) 556-3654

Or email lacenter@necc.mass.edu

Deaf and Hard of Hearing Services:

Visit us in the Student Center SC110, call 978-241-7045 (VP/Voice)

Or email deafservices@necc.mass.edu

***** The Instructor may alter the syllabus during anytime in the course to enhance content or organization. *****

Course Schedule: Reading assignments are to be completed prior to class

Week / Date	Reading Assignment	Topic
Week 1 Friday Sept. 11		<ul style="list-style-type: none"> History of respiratory care Different roles of a respiratory therapist Discuss the professional and regulatory agencies that govern the field of respiratory care
Week 2 Monday Sept. 14	Egan's Ch. 5 – Ethical and Legal Implications of Practice	<ul style="list-style-type: none"> The Health Insurance Portability and Accountability Act (HIPAA) AARC Code of Ethics
Friday Sept. 18	Egan's Ch. 4 – Principles of Infection Prevention and Control	Principles of Infection Prevention and Control
Week 3 Monday Sept. 21	Egan's Ch. 15 – Bedside Assessment of the Patient	Patient assessment
Friday Sept. 25	Egan's Ch. 18 – Analysis and Monitoring of Gas Exchange pp. 403-409	Patient assessment cont. <ul style="list-style-type: none"> Pulse Oximetry CPG
Week 4 Monday Sept. 28	Egan's Ch. 3 – Patient Safety, Communication, and Recordkeeping	Communication in Health Care
Friday Oct. 2	Egan's Ch. 6 – Physical Principles of Respiratory Care	Gas Laws related to respiratory care
Week 5 Monday Oct. 5	Egan's Ch. 6 – Physical Principles of Respiratory Care	Gas Laws related to respiratory care, continued
Friday Oct. 9	Egan's Ch. 37 – Storage and Delivery of Medical Gases	Storage and Delivery of Medical Gases

Week 6 <i>No Class Mon. Oct. 12</i> Friday Oct. 16	Egan's Ch. 38 – Medical Gas Therapy	Medical Gas Therapy <ul style="list-style-type: none"> • Oxygen Therapy CPG • Precautions and Hazards of O₂ therapy • Low flow, high flow, & reservoir systems
Week 7 Monday Oct. 19 Friday Oct. 23	Egan's Ch. 38 – Medical Gas Therapy	Medical Gas Therapy cont.
Week 8 Monday Oct. 26 <i>No Class Fri. Oct. 30</i>	Study for Midterm	Midterm
Week 9 Monday Nov. 2 Friday Nov. 6	Egan's Ch. 18 – Analysis and Monitoring of Gas Exchange	Blood Gases <ul style="list-style-type: none"> • Analyzing • Quality Assurance ABG Interpretation
Week 10 Monday Nov. 9 Friday Nov. 13	Egan's Ch. 36 – Aerosol Drug Therapy	Aerosol Therapy
Week 11 Monday Nov. 16 Friday Nov. 20	Egan's Ch. 35 – Humidity and Bland Aerosol Therapy	Humidity Therapy
Week 12 Monday Nov. 23 <i>No Class Fri. Nov. 27</i>	Supplemental reading material to be provided	<ul style="list-style-type: none"> • Critical Thinking • Evidence-based practice
Week 13 Monday Nov. 30 Friday Dec. 4	Egan's Ch. 33 – Airway Management (Specific pages to be given)	Introduction to Airway Management
Week 14 Monday Dec. 7 Friday Dec. 11	Egan's Ch. 33 – Airway Management (Specific pages to be given)	Introduction to Airway Management, continued
Week 15 Monday Dec. 14	Study for Jeopardy and final exam	Jeopardy!
Final Exam TBA		