Course Description
This course is designed to give the student a basic understanding of critical care to include: maintenance of the patient’s airway, airway care, classification and application of mechanical ventilators, principles of operation, maintenance and repair of selected mechanical ventilators. The student will also gain an understanding of patient psychology as it relates to critical care.

Textbooks


Upon successful completion of the course the student will:
1. Describe and perform techniques of physical examination.
2. List the rationale, indications, contraindications and hazards of intubation/extubation and tracheostomy procedures.
3. List the equipment needed to successfully perform an endotracheal intubation/extubation or tracheostomy procedure.
4. Describe the different endotracheal and tracheostomy tubes used in hospitals today.
5. Describe and perform endotracheal intubation/extubation procedure on patient with 100% accuracy.
6. Describe the tracheostomy procedure.
7. Explain and perform proper tube care to include aspiration technique.
8. Define basic terms and concepts of mechanical ventilation
9. Explain physical aspects of mechanical ventilation
10. Demonstrate technique for setting up, monitoring and maintaining the ventilators listed below.
11. Demonstrate all modalities available on modern ventilators
12. Simulate management and stabilization of an ICU patient receiving ventilator care using the TTL.
13. List indications, contraindications and side effects for A/C, IMV, PEEP, and CPAP.
14. Describe techniques used to improve oxygenation.
15. Describe discontinuation of and weaning from mechanical ventilation.
16. Troubleshoot problems in equipment.
17. Calculate Cdyn, Cstat, Raw, Vt, Vd, Va, and compliance factor on equipment used in lab.
18. Perform basic interpretation of blood gases, chest x-ray, and ECG.
19. Other topics as provided in lecture
20. Ventilators used in Lab.
   A. Bird Mark 7 or 8
   B. Secrist IV 100B
   C. Hamilton G5
   D. Puritan Bennett 840
   E. Siemens Servo i

The student agrees to devote time, study and work toward the mission of the course.
1. Three (3) consecutive hours of unexcused absences or a total of six (6) hours unexcused absences may result in a student receiving an “F” in the course.
2. For qualifications as an excused absence, it is the obligation of the student to notify the instructor as soon as is practical in advance of that class period. If the instructor is not available, leave a message.
3. All classroom performance and behavior will be considered academic.

Evaluation of Students
A minimum of four (4) tests will be given plus a comprehensive final (unless otherwise designated by the instructor). You will be expected to complete any and all assignments given throughout the semester. Test questions will come from lecture, reading assignments and other assignments.

Grading Breakdown

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<tr>
<th>Item</th>
<th>Percent of Final Grade</th>
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<tbody>
<tr>
<td>Exams</td>
<td>50%</td>
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<tr>
<td>TH Quizzes</td>
<td>20%</td>
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<tr>
<td>Attendance</td>
<td>10%</td>
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<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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Curriculum and course advisement from the Respiratory Care staff will be provided during registration and during office hours posted at the instructor’s office. The instructor may give continual advisement to a student as needed and when required throughout the span of the course. Assessments are made of the student through testing. Students will also assess and evaluate their progress, their instructor, the program objectives, the learning strategies and the general competencies. The assessments are tools utilized to review, evaluate and if necessary implement changes to the learning materials, the delivery of said; and the strategies for instruction.

Course Schedule:
Monday and Wednesday from 0900 – 1125.

Safety Training:
Students receive annual training in the following: blood and air borne pathogens, electrical safety, back safety, hazardous chemicals, latex allergies, fire and disaster procedures, security and personal safety procedures and safety requirements of clinical facilities. Students must maintain current CPR, immunizations, and health insurance during all clinical courses.
Americans with Disabilities Act (ADA):
Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact the Counselor/Disability Specialist at 432-685-4505 as soon as possible. The office is located in the Scharbauer Student Center Building. These conditions may include documented physical or educational disabilities. Please be aware that services or accommodations are not automatic. Each student must request them and secure the proper authorizations/documentation.

Instructor Information

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Stan Middleton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>AMS Building, Room A 31</td>
</tr>
<tr>
<td>Office Phone</td>
<td>432-685-5570</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:Stanm58@yahoo.com">Stanm58@yahoo.com</a></td>
</tr>
<tr>
<td>Office Hours</td>
<td>As posted</td>
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Students are encouraged to contact their instructor; making an appointment will help facilitate an instructor’s availability at a specific time.

Division Information

<table>
<thead>
<tr>
<th>Division Dean</th>
<th>Program Chair</th>
<th>Division Secretary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carmen Edwards, PhD, RN</td>
<td>Bob Weidmann MS, RPFT, RRT-NPS, RCP</td>
<td>Karen Harris</td>
</tr>
<tr>
<td>DFHS Building, Room 234</td>
<td>AMS Building, Room A 34</td>
<td>DFHS Building, Room 206</td>
</tr>
<tr>
<td>432-686-4822</td>
<td>432-685-5549</td>
<td>432-685-4600</td>
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Licensure Eligibility Notification
Completion of Midland College degrees and/or certificates does not guarantee eligibility to take a certification/registry/licensure examination. The eligibility of each person is determined on an individual basis by the regulatory body of the specific discipline. If you have a conviction of a crime other than a minor traffic violation, physical or mental disability/illness, hospitalization/treatment for chemical dependency within the past five years, current intemperate use of drugs or alcohol or a previous denial of a licensure or action by a licensing authority, you will need to contact the specific regulatory body for an individual ruling. Some programs require a criminal background check and urine and drug screen.

Student Signature               Date

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