Midland College
Syllabus
Fall 2018
RSPT 2255
Critical Care Monitoring
Lecture/Lab
(1-3-0)

Course Description: The student will be introduced to monitoring techniques used clinically to assess a patient in the critical care setting. These will include but will not be limited to: patient assessment, invasive vs. non-invasive monitoring, hemodynamic monitoring, lung compliance, airway resistance, and ventilator mechanics/graphics.

Text, References, and Supplies: Textbooks (Required textbooks are in bold print)


Course Goals/Objectives: The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives (Addendum A).

1. Explain advanced ventilator care techniques
2. Perform bedside patient/ventilatory assessment
3. Analyze patient/ventilatory system
4. Identify ventilator waveforms
5. Analyze ventilator waveforms
6. Perform cardiopulmonary assessment (including history, physical exam, Neuro assessment, labs, ABGs, PFTs, EKGs)
7. Demonstrate weaning techniques
8. Prepare any or all of the following ventilators: Bird Mark 7 ventilator, PB PR2, PB MA1, Hamilton G5, Draeger (Evita or XL), Siemens Servo 900C, Maquet Servo i, PB 840, Respironics BiPAP ST/D, Sechrist IV 100B
9. Explain mechanical ventilation modes
10. Calculate A-aDO2
11. Calculate flow
12. Calculate I:E ratio
13. Calculate shunt
14. Calculate VD/VT
15. Calculate CO2 change
16. Calculate FiO$_2$
17. Explain X-ray generation
18. Identify chest X-ray landmarks
19. Identify chest X-ray pathology
20. Describe ventilation/lung scan
21. Describe perfusion scan
22. Interpret lung/perfusion scan
23. Describe principles of intracranial pressure monitoring
24. Describe principles of chest tube drainage
25. Describe principles of counter pulsation
26. Describe principles of hemodynamics
27. Discuss techniques involved with intracranial pressure monitoring
28. Discuss techniques involved with chest tube drainage
29. Discuss techniques involved with counter pulsation
30. Discuss techniques involved with hemodynamics
31. Discuss diagnostic and therapeutic bronchoscopy
32. Discuss the nutritional assessment of a cardiopulmonary patient

Student Contributions and Class Policies:

Each student will spend at least 4 hours per week preparing for class. Attendance is critical in this class. The college attendance policy will be followed.

All classroom performance and behavior will be considered academic.

Evaluation of Students:

A minimum of four (4) tests will be given including a comprehensive final (unless otherwise designated by the instructor). The final exam will carry the same weight as other exams (not quizzes). Weekly quizzes will be averaged and will equal one exam. Test questions will come from lecture, reading assignments and homework assignments. Most tests will be objective in nature.

1. Tests (minimum of four) 400 points
2. Quiz average 100 points
3. Attendance 50 points
4. Homework 100 points

Total 650 points

A = 582+ points  B = 517+ points  C = 452+ points

Course Schedule:
The class meets for 2 lecture/2 lab hours per week on Wednesday morning 10:00-11:50 and 13:00-14:50 Wednesday afternoon.
Instructor's Information
Name: Robert Weidmann, M.Ed., RPFT, RRT-NPS, RCP
Office Location: A34 AMS
Office Telephone: 432/685-5549
Home Telephone: 432/697-4725
Cell Telephone: 432/853-6403
E-Mail Address: rweidmann@midland.edu
Office Hours: M/F clinical 8-10:30
T/R 8-10:30, 3-4:30
W 1-3

Division Dean: Dr. Carmen Edwards, Ed.D., MSN, RN
Division Secretary: Karen Harris
Division Office Location and Telephone: 208 DHS, 685-4600

Students are encouraged to contact the instructor at any time; however, making an appointment will guarantee the instructor's availability at a specific time.

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.

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individuals have been designated to handle inquiries regarding the non-discrimination policies: Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu. For further information on notice of non-discrimination, visit http://wdcrobcnlp01.ed.gov/CFAPPS/OCR/contactus.cfm or call 1 (800) 421-3481.

Spanish
Midland College no discrimina por motivos de raza, color, nacionalidad, sexo, discapacidad, o edad en sus programas o actividades. Las siguientes personas han sido designadas para responder a cualquier pregunta o duda sobre estas políticas no discriminatorias: Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu. Para más información sobre estas políticas no discriminatorias, visite http://wdcrobcnlp01.ed.gov/CFAPPS/OCR/contactus.cfm o llame al 1 (800) 421-3481.

Revised: 8/18
The above-named course syllabus and licensure eligibility notification has been received by and explained to me. I have read, understood, and will adhere to the same.

Student’s signature

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This sheet must be returned to your instructor by the end of the first week of class.