

NorthWest Arkansas Community College Standard Course Outline

EMTP 1011 Emergency Respiratory Care I

Prerequisite: Admission into the paramedic program and enrolled as a student at NWACC

Course Description: The pathophysiology, assessment, and prehospital emergency treatment of the most common respiratory emergencies encountered by field paramedics. Will include discussion, interactive lecture, simulations and practical skills labs focusing on asthma, COPD, pneumonia, CHF/pulmonary edema, pulmonary embolus, toxic inhalation, ARDS, and hyperventilation syndrome as encountered in the adult patient. (Pediatric respiratory emergencies will be covered in Emergency Medical Care II.) Also, anaphylaxis will be covered in the shock module.

Target Audience: Students admitted to the Paramedic Program

Credit Hours: 1 credit hour / non-transferable

Instructional Material: Current edition of paramedic text and workbook. Paramedic National Standards Review text. Citations from the literature base and course handouts. ALS Field Guide.

Course Objectives: Upon successful completion of course the student will be able to:

1. Describe the basic physiology of pulmonary respiration/oxygenation.
2. Describe the physiology of pulmonary gas exchange and diffusion.
3. Identify basic respiratory anatomical structures.
4. List measures of respiratory functions and normal values for each.
5. Perform effective auscultation of the chest.
6. Identify abnormal breath sounds per auscultation.
7. Select appropriate oxygenation adjuncts and settings for various problems.
8. Explain parameters for pulse oximetry and limitations of use.
9. Perform a complete and rapid patient assessment for a respiratory complaint.
10. Describe the underlying patho-physiological basis for asthma, COPD, CHF, pneumonia, pulmonary embolus, and hyperventilation syndrome.
11. List appropriate treatment methodology for the above mentioned entities.

12. Identify, calculate, draw-up, and administer appropriate pharmacological regimens for the treatment of specific respiratory emergencies in adults.
13. Develop an effective prehospital, emergency care treatment plan for adult patients presenting with respiratory problems.