

Intro Pre-hospital Emergency Pharmacology
EMT 121--001, 051, 501, 555, 556, 557, S01, S02
(TWO SEMESTER HOURS)

COURSE SYLLABUS

CATALOG

DESCRIPTION:

A discussion of pharmacology including both prescribed and over-the counter preparations. Discussion includes the therapeutic use of common medicines and specific drug interactions, actions, indications, precautions, contraindications, dosages and routes of administration. Emphasis is on select preparations, medications, and pharmacological agents routinely used in the pre-hospital setting to treat medical conditions.

FOR YEAR:

2012 (Spring)

Co REQUISITE:

EMT 101, EMT 101C, EMT 104

COLLEGE

CONTACTS:

EMS EDUCATION 615-230-23346

Robert W. Davis

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OFFICE HOURS:

BY APPOINTMENT

CLASS TIMES:

Wednesday & Thursday

12:00PM –12:50PM (Day Classes)

09:00PM - 09:50PM (Evening Classes)

TEXTBOOK:

Prehospital Emergency Pharmacology, 6th Ed., Bledsoe, Clayden, [et al.], 2005.

TEACHING

METHOD:

Teaching will be by lecture/discussion, videotape presentations, reading assignments, and self-paced computer based training modules. Students will also be presented with hypothetical scenarios where skill demonstration reinforces content presented.

**ASSESSMENT
TECHNIQUES:**

Mastery of specific outcome statements will be assessed through class participation, practical skills tests, written exams, written reports, and oral questioning. The objective exams will be over material presented and discussed in class, assigned reading materials, computer assisted instruction, AV material, and hand outs. Students will be given situational problems that they must solve using material presented in class. Mastery of specific outcome statements will also be assessed by successfully passing the State of Tennessee Emergency Medical Technician –IV Licensure written and practical exams.

GRADING POLICIES:	95 - 100	=	A
	85 - 94	=	B
	75 - 84	=	C
	less than 75	=	F

Note: There are no D's awarded in this class you must have 75 or above to successfully complete the course.

GRADE VALUES:	Class Participation	=	10% of total grade
	Quizzes -	=	10% of total grade
	Unit Tests	=	20% of total grade
	Mid-term exam	=	20% of total grade
	Final exam-	=	40% of total grade

**ATTENDANCE
POLICY:**

Students are permitted three absences. For each additional absence the student's grade will be reduced one letter grade. If a student misses five or more class sessions, the student will voluntarily withdraw from the course or receive a grade of "F". Students are responsible for all class information in the event of an absence.

MAKE-UP POLICY: Quizzes and unit tests may be made up at the discretion of the instructor with PRIOR approval. **Exam make-up must be requested in writing and approved by the Director of EMS Education.**

**CLASSROOM
POLICIES:**

1. Use of any type of tobacco product is **NOT** permitted in the classroom.
2. Food and drink may be allowed at the discretion of the instructor.
3. Students will maintain professional dress during class sessions and clothing that is vulgar, too revealing, or inappropriate will **NOT** be tolerated.

AMERICAN

**DISABILITIES
ACT:**

In compliance with the American Disabilities Act, it is the student's responsibility to contact the instructor concerning any special accommodations required for completion of the course requirements.

Volunteer State Community College is an equal opportunity Affirmative Action Educational Institution. No person shall be excluded from participation in, be denied benefit of, or be subjected to discrimination under any program or activity of the College because of race, color, national origin, or handicap.

It is the student's responsibility to self-identify with the Office of Disability Services to receive accommodations and services in accordance with Section 504 of The Rehabilitation Act and The Americans with Disabilities Act Amendments Act (ADAAA). Only those students with appropriate documentation and who are registered with the Office of Disability Services will receive accommodations. For further information, contact the Office of Disability Services at (615) 230-3472, online by visiting www.volstate.edu/disability, or visit the office which is located in Room 108, Wood Campus Center.

**ADDITIONAL
EXPENSES AND
FEES:**

The student will incur additional expenses during their matriculation through the EMT Program. These may include, but are not limited to the following:

- A. Travel to class and clinicals
- B. Student liability Insurance
- C. Criminal Background Check
- D. Physical Examination, TB test, Lab work
- E. Clinical uniforms
- F. Examination and testing fees
 - 1) National Registry exam fee
 - 2) State application fee
 - 3) State Licensing Fee
 - 4) State Cogent Fingerprinting Fee

EMT 121
Intro to Pre-Hospital Pharmacology

GOALS and OUTCOMES

**PRIMARY CAREER/
VOCATIONAL**

GOALS: Prepare competent entry-level Basic EMT practitioners that meet or exceed expected national standards in basic EMT skills

The primary career/vocational goals of this course are to provide leadership and training in the skills, technology, and decision-making processes needed to perform safely in dealing with medications used to treat medical emergencies at the EMT level.

**CAREER/VOCATIONAL
OUTCOMES:**

Students who successfully complete this course will have demonstrated the ability to:

1. discuss the effects and implications of the effects of life-span developmental changes and the relationship to responses to medical treatment choices prescribed by the National Standard Curriculum for the EMT-Basic.
2. record and communicate pertinent data to the designated medical command authority pertinent to the patient's age and developmental status.
4. initiate and continue emergency medical care under medical control; including the recognition for the need of and type of medication for presenting conditions and selection of appropriate delivery modalities for medical emergencies as related to patient's age and developmental status.
5. Accurately discuss the action of medications used to treat airway and respiratory problems, cardiac dysrhythmias, cardiac stand-still, and Psychological crises, endocrine emergencies, hypotensive states, and assess the response to that treatment, modifying medical therapy as directed.
6. Exercise personal judgement in cases where medical direction is disrupted by communication failure or in cases of immediate life-threatening conditions and provide such emergency care as has been authorized in advance.
7. Direct and coordinate the transport of the patient by selecting the best positions and available method(s) in conjunction with medical command authority.
8. record, in writing or dictation, the details related to the patient's emergency care and the incident and developmental status.

OTHER GOALS:

To provide experiences that will enhance the development of the student's independent judgement, self-actualization, and leadership.

To introduce the student to bioethical and professional concerns as they relate to emergency care.

To insure that the student has an understanding of human physiology and pathophysiology that is commensurate with the level of care that is expected of professional paramedics.

To expose students to "State of the Art" diagnostic and therapeutic theories, technologies and procedures; even when those theories, technologies and procedures are not yet considered to be the standard of care.

To promote academic debate of the controversial issues through open discussion and class participation.

TERMINAL INSTRUCTIONAL OBJECTIVE

At the end of this lesson the EMT student will be able to integrate pathophysiological principles of pharmacology and the assessment findings to formulate a field impression and implement a pharmacologic management plan.

COGNITIVE OBJECTIVES

1. Review the specific anatomy and physiology pertinent to pharmacology with additional attention to autonomic pharmacology.
2. Define the specific terminology of pharmacology.
3. Define the specific abbreviations used in pharmacology.
4. Discuss the development of drugs to the history of pharmacology.
5. Discuss the relationship of pharmacology to health and illness.
6. Differentiate among the chemical, generic, nonproprietary, official, trade, and proprietary names of a drug product.
7. List the four main sources of drug products.
8. List the authoritative sources for drug information.
9. List legislative acts controlling drug use and abuse.
10. Differentiate among Schedule I, II, III, IV, and V substances.
11. List examples of substances in each schedule.
12. Discuss standardization of drugs.
13. Discuss international drug control.
14. Discuss investigational drugs, including the Food and Drug Administration (FDA) approval process and the FDA classifications for newly approved drugs.
15. Discuss pregnancy safety categories.
16. Discuss the Paramedic's responsibilities and scope of management pertinent to the administration of medications.
17. List and describe general principles of drugs.
18. List and describe drug forms.
19. List and differentiate among routes of drug administration.
20. Differentiate between enteral and parenteral routes of drug administration.
21. Describe mechanisms of drug action.
22. List and differentiate among the phases of drug activity, including the pharmaceutical, pharmacokinetic, and pharmacodynamic phases.
23. Describe pharmacokinetics, including theories of drug action, drug-response relationship, factors altering drug responses, predictable drug responses, iatrogenic drug responses, and unpredictable adverse drug responses.
24. Differentiate among drug interactions.
25. Discuss considerations for storing drugs.
26. List and describe classifications of drugs.
27. List and describe drugs which the Paramedic may administer according to local protocol.
28. Discuss obtaining a history by identifying classifications of drugs.
29. Discuss identifying the pathophysiology of a patient's condition by identifying classifications of drugs.
30. Discuss considerations for administering a drug when combined with a drug the patient may have taken.

PSYCHOMOTOR OBJECTIVES

31. Practice use of terminology of pharmacology.
32. Practice use of abbreviations of pharmacology.
33. Perfect identification of the classifications of drugs.
34. Perfect identification of the drugs administered by a Paramedic.
35. Perfect obtaining a history by identifying classifications of drugs.

AFFECTIVE OBJECTIVES

36. Serve as a model for obtaining a history by identifying classifications of drugs.
37. Assess the pathophysiology of a patient's condition by identifying classifications of drugs.
38. Defend the administration of drugs by a Paramedic to effect positive therapeutic affect.
39. Advocate drug education through identification of drug classifications.

INTEGRATION

40. Integrate pathophysiological principles of pharmacology with patient assessment.
41. Synthesize patient history information and assessment findings to form a field impression.
42. Synthesize a field impression to implement a pharmacologic management plan.