## **Emergency Pharmacology**

3 Credit Hours 45 Clock Hours

## Course Description:

Introduces students to the paramedic's role and responsibilities of medication administration and the basic principles of pharmacology. Presents introductory core concepts of pharmacology including drug regulations, classifications, schedules, categories, delivery systems, calculations, and drug administration. Covers core concepts of emergency clinical pharmacology including major body systems, illness and injury, and methods drugs are used therapeutically to manage affected individuals. Integrates appropriate anatomy and physiology, medical terminology, and ethical and legal behaviors.

## Upon completion of this course, the student can:

- 1. Express foundational concepts associated with pharmacology, including medication safety and legislation.
- 2. Relate knowledge of pharmacokinetics and pharmacodynamics of emergency medicine.
- 3. Identify the principles of naming and classifying drugs.
- 4. Associate drug classifications to relative body systems.
- 5. Describe drug schedules, controlled substances, and security in the emergency setting.
- 6. Recognize common medication interactions and signs and symptoms of drug toxicity.
- 7. Identify commonly used emergency and prescription drugs and their actions.
- 8. Apply mathematical principles in written calculation and problem solving while preparing drug dosages.
- 9. Compute accurately drug dosages for administration.
- 10. Explain the principles of drug administration.
- 11. Exercise sufficient judgment and accept responsibility in therapeutic procedures based on observation of patients and knowledge of anatomy, physiology, pharmacology and clinical medicine.
- 12. Recognize the necessity of modifying therapeutic procedures based on patient's response.
- 13. Appraise the initiation or modification of drug administration in the emergency setting.
- 14. Demonstrate personal and professional behaviors for sound legal and ethical practice.