COURSE INFORMATION FORM

DISCIPLINE: Emergency Medical Services
COURSE TITLE: Paramedic Pharmacology
CR.HR: 4.0    LECT HR: 4.0    LAB HR: 0    CLIN/INTERN HR: 0    CLOCK HR: 0

CATALOG DESCRIPTION
This course introduces the student to the medications used in the prehospital management of medical and traumatic emergencies.

PREREQUISITES
EMS 200 Introduction to Paramedic Care

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)
Upon completion of this course, the student will be able to:

1. Perform conversion, dosage and flow rate calculations.
2. Provide appropriate medication and management of simulated victims of respiratory, cardiovascular, neurologic, metabolic, toxicologic, and traumatic emergencies.
3. Explain the physiologic mechanisms by which pharmacologic agents are active in the body as well as the means by which they are metabolized and excreted.

GENERAL EDUCATION OUTCOMES (ESO)
Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

Outcomes ESO

1.
PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

1. Emergency Medical Services Program Outcome number 4:
   “Demonstrates an understanding of basic Emergency Medical Systems operation.”

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes may be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Written Examination (1,2,3)
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Introduction.
II. Legal requirements.
III. Metrology.
   A. Solution calculations.
   B. Dosage calculations.
IV. Introduction to drug therapy.
   A. Pharmacodynamics.
   B. Pharmacokinetics.
   C. Mechanism of toxicity.
V. Drug administration techniques.
   A. Oral routes.
   B. Subcutaneous.
   C. Intramuscular.
   D. Intravascular.
   E. Inhalation.
   F. Rectal.
VI. Intravenous fluids and electrolytes.
   A. Agents acting on the central and peripheral nervous system.
   B. Agents acting on the respiratory system.
   C. Agents acting on the cardiovascular system.
   D. Agents acting on the renal system.
   E. Agents acting on the endocrine system.
   F. Agents used in emergency childbirth.
VII. Management of toxicity.