



**Purpose:** It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

**Course Title** – Emergency Pharmacology  
**Course Prefix and Number** – EMSP 2248  
**Department** – Public Safety Training

**Division** – Voc. Science

**Course Type:** (check one)

- Academic General Education Course (from ACGM – but not in WCJC Core)
- Academic WCJC Core Course
- WECM course (This course is a Special Topics or Unique Needs Course: Y  or N )

**Semester Credit Hours # : Lecture hours# : Lab/other hours #**    2 : 2 : 0

**Equated Pay hours for course** – 2

**Course Catalog Description** – A comprehensive course covering all aspects of the utilization of medications in treating emergency situations. Course is designed to compliment Cardiology, Special Populations and Medical Emergency courses.

List Lab/ Other Hours
Lab Hours
Clinical Hours 0
Practicum Hours 0
Other (list) 0

**Prerequisites/Corequisites** - THEA Reading requirement; EMSP 1401, EMSP 1260, EMSP 2260, EMSP 2261, EMSP1356, EMSP 1355, EMSP 1338, EMSP 2444, and concurrent enrollment in EMSP 2434, EMSP 2243, EMSP 2338, EMSP 2330 and EMSP 2262

**Approvals** – the contents of this document have been reviewed and are found to be accurate.

Prepared by Maggie Mejorado	Signature 	Date 9/16/10
Department Head 	Signature 	Date 9/16/10
Division Chair 	Signature 	Date 9/16/10
Vice President of Dean of Vocational Instruction	Signature 	Date 10-29-10



**I. Topical Outline** – Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction):

**I. Basic Pharmacology**

- A. Describe important historical trends in pharmacology.
- B. Differentiate among the chemical, generic, official and trade names of a drug.
- C. List the four main sources of drug products.
- D. List the authoritative sources for drug information
- E. List legislative acts controlling drug use and abuse in the United States.
- F. Differentiate among Schedule I, II, III, IV and V substances and list examples of substances in each schedule.
- G. Discuss standardization of drugs.
- H. Discuss special considerations in drug treatment with regard to pregnant, pediatric and geriatric patients.
- I. Discuss the paramedic's responsibilities and scope of management pertinent to the administrations of medications.
- J. Review the specific anatomy and physiology pertinent to pharmacology.
- K. List and describe the general properties of drugs, liquid and solid drug forms.
- L. List and differentiate routes of drug administration.
- M. Differentiate between enteral and parenteral routes of drug administration.
- N. Describe the mechanisms of drug action.
- O. List and differentiate the phases of drug activity, including the pharmaceutical, pharmacokinetic, and pharmacodynamic phases.
- P. Describe the processes called pharmacokinetics and pharmacodynamics, including theories of drug action, drug-response relationship, factors altering drug responses, predictable drug responses, iatrogenic drug responses, and unpredictable adverse drug responses.

**II. Drug Classifications**

- A. Describe how drugs are classified.
- B. Review the specific anatomy and physiology pertinent to pharmacology with additional attention to autonomic pharmacology.
- C. List and describe the common prehospital medications, including indications, contraindications, side effects, routes of administration, and dosages.
- D. Given several patient scenarios, identify medications likely to be prescribed and those that are likely a part of the prehospital treatment regimen.
- E. Given various patient medications, assess the pathophysiology of patient's condition by identifying classifications of drugs.

**II. Course Learning Outcomes**

Course Learning Outcome	Method of Assessment
<p>The student will be able to discuss general pharmacological terminology, administration routes and procedures, and drug dose calculations; and identify pharmacodynamics, pharmacokinetics, and drug profiles of various medications used in out-of-hospital medical care.</p>	<p>Written Exams, course schedules/syllabus, scenario assessments, clinical manuals, student handbooks, and assesment graphs.  Patient care assessments, oral interviews, critical thinking skills and decision making, and applying of pharmacology to patient treatment.  Conduct themselves in a professional manner at all times in dealing with patients, instructors and other public safety professionals.</p>

**III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.**

- Brady’s Essentials of Paramedic Care 2<sup>nd</sup> Ed.
- Brady’s Essentials of Paramedic Care 2<sup>nd</sup> Ed. Workbook
- Medical Dictionary
- WCJC EMS Student Handbook in a WCJC Red Binder
- Spiral notebook or similar for classroom notes and clinical site notes
- Black pens
- 2- #2 pencils
- Loose-leaf notebook paper for assignments (can be kept in the 3 ring binder)
- Uniform
- Stethoscope
- EMT scissors
- Penlight
- Physical Exam

**IV. Suggested Course Maximum - 30**

**V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.**

IV Lab equipped room

**VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course**

- Chapter Tests -10%
- Major Exams -40%
- Final Exam - 50%

**VII. Curriculum Checklist**

- **Academic General Education Course** (from ACGM – but not in WCJC Core)  
No additional documentation needed

- **Academic WCJC Core Course**

Attach the Core Curriculum Checklist, including the following:

- Basic Intellectual Competencies
- Perspectives
- Exemplary Educational Objectives

- **WECM Courses**

If needed, revise the Program SCANS Matrix & Competencies Checklist.