



**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** - Vocational 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

**Prerequisites/Co requisites** – TSI Reading requirement met; EMSP 1401, EMSP 1260, EMSP 1338, EMSP 1355, EMSP 1356, EMSP 2260, EMSP 2444, EMSP 2261

Co-Requisites: EMSP 2338, EMSP 2243, EMSP 2330, EMSP 2434 and EMSP 2262

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

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**Date** 9/21/11

**Reviewed by department head** Maggie Mejorado

**Date** 3/27/2012

**Accuracy verified by Division Chair** Terry David Lynch

**Date** 3/27/2012

**Approved by Dean of Vocational Instruction or Vice President of Instruction** Lac

**Date** 11-9-12



**I. Topical Outline –**

**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 pharmacodynamics phases.

P. Describe the processes called pharmacokinetics and pharmacodynamics, including theories of drug action, drug-response relationship, factors altering drug responses, predictable drug responses, lactogenic 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
The student will be able to utilize the knowledge of pharmacological concepts to demonstrate safe administration of medications in emergency settings.	Written Exams, course schedules/syllabus, scenario assessments, clinical manuals, student handbooks, and assessments graphs. Patient care assessments, oral interviews, critical thinking skills and decision making, and applying of pharmacology to patient treatment.

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

AAOS Emergency Care in the Streets 6<sup>th</sup> Ed.  
AAOS Emergency Care in the Streets 6<sup>th</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, Data projector, Computer

## 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 -20%  
Major Exams -40%  
Final Exam - 40%

## 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.