

JEFFERSON COLLEGE

COURSE SYLLABUS

PAR 205 Paramedic Pharmacology

4 credit hours

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PAR205 Paramedic Pharmacology

I. CATALOGUE DESCRIPTION

A. Prerequisites

1. EMT206, or one year, documented, full-time patient care experience
2. ENG101, with a grade of “C” or better
3. BIO116 or BIO212, with a grade of “C” or better
4. Reading proficiency
5. Current American Heart Association Healthcare Provider CPR certification
6. Current Missouri EMT license
7. Criminal background check
8. Current immunizations required: MMR, PPD, Flu, Hepatitis B series, Tdap, and Varicella series

Co-requisites

1. PAR200 Paramedic Advanced Care and Terminology
2. PAR220 Paramedic Clinical Practicum I
3. PAR225 Paramedic Internship I

B. 4 credit hour award

- C. Paramedic Pharmacology prepares the student to identify emergency medications used in the treatment of the sick and injured. The student must understand the category of the medication, indications and contraindications, and the proper administration of the medication. The student will learn the proper techniques of administering an intravenous catheter, intramuscular injections, subcutaneous injections, and intraosseous infusion. (F)

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

Learning Outcome	Assessment Measures
Identify proper medications, routes of administration, and correct dosages for the patient	Written exams, quizzes, class discussions, practical applications
Demonstrate administering proper medication using routes of administration, and correct dosages for the patient	Written exams, quizzes, class discussions, practical applications
Demonstrate proper aseptic techniques and safety procedures for starting an intravenous catheterization	Written exams, quizzes, class discussions, practical applications

Identify proper procedures for securing and disposal of used catheters	Written exams, quizzes, class discussions, practical applications
Explain proper documentation before and after intravenous catheterization, including the rights of the patient	Written exams, quizzes, class discussions, practical applications
Demonstrate proper procedures of administering medications through intravenous catheter	Written exams, quizzes, class discussions, practical applications

III. OUTLINE OF TOPICS

- A. General principles of pharmacology
 - 1. Basic pharmacology
 - 2. Drug classifications
 - 3. Legal aspects

- B. Intravenous access and medication administration
 - 1. Principles and routes of medication
 - 2. Intravenous access, blood sampling, and interosseous infusion
 - 3. Medical math

- C. Pharmacokinetics
 - 1. Review of physiology of transport
 - 2. Passive transport
 - 3. Active transport

- D. Fluids, electrolytes, and the intravenous therapy
 - 1. Types of fluids
 - 2. Electrolytes and function
 - 3. Insertion of IV catheter
 - 4. Collection of blood samples

- E. Medications used in the treatment of cardiovascular emergencies
 - 1. Sympathomimetic
 - 2. Adrenergic antagonists
 - 3. Antiarrhythmic
 - 4. Analgesics
 - 5. Anticoagulants

- F. Medications used in emergency medical treatment
 - 1. Metabolic-endocrine
 - 2. Respiratory

3. Neurological
4. Gastrointestinal
5. Sedation and pain medications

IV. METHOD(S) OF INSTRUCTION

- A. Lecture
- B. Psychomotor practice and simulation
- C. Classroom discussions
- D. Student participation
- E. Homework

V. REQUIRED TEXTBOOK(S)

- A. Bledsoe, B., Porter, R., & Cherry, R., *Essentials of Paramedic Care Update*. Upper Saddle River, NJ: Prentice Hall, Current ed
- B. Bledsoe, B. & Clayton, D., *Prehospital Emergency Pharmacology*. Upper Saddle River, NJ: Prentice Hall, Current ed

VI. REQUIRED MATERIALS

- A. Uniform for lecture/lab
 1. Navy blue color polo with EMS logo embroidered
 2. Dark blue or black EMS pants
 3. Dark socks
 4. Black shoes
 5. Black belt
 6. Jefferson College Student ID badge
- B. Stethoscope
- C. Wristwatch with second hand capabilities
- D. Computer with internet access (available through Jefferson College Labs)

VII. SUPPLEMENTAL REFERENCES

- A. Library Resources: IPAD
- B. Miller, C.D., *Paramedic National Standards Self Test*. Upper Saddle River, NJ: Prentice Hall, Current ed
- C. All students review and sign a Contract of Understanding outlining the additional rules applied to all Paramedic courses

VIII. METHOD OF EVALUATION

- A. Didactic
 - 1. Quizzes
 - 2. Homework
 - 3. Module exams
 - 4. Classroom participation
 - 5. Class project (Drug Cards)
- B. Psychomotor
 - 1. Student portfolio
 - 2. Practical evaluations
 - 3. Independent labs
 - 4. Professionalism
- C. Assignment of Final Letter Grades
 - A = 92 - 100
 - B = 85 – 91.9
 - C = 80 – 84.9
 - D = 75 – 79.9
 - F = Below 75

IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Library; phone 636-481-3169).

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College website, <http://www.jeffco.edu>).

XI. ATTENDANCE STATEMENT

Regular and punctual attendance is expected of all students. Any one of these four options may result in the student being removed from the class and an administrative withdrawal being processed: (1) Student fails to begin class; (2) Student ceases participation for at least two consecutive weeks; (3) Student misses 15 percent or more of the coursework; and/or (4) Student misses 15 percent or more of the course as defined by the instructor. Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.

XII. OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically related activities such as reading, studying, and completing assignments. Specifically, time spent on academically related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.