

**BOSSIER PARISH COMMUNITY COLLEGE**  
**Master Syllabus**

**Course Prefix and Number:** NURS 205

**Credit Hours:** 1

**Course Title:** Pharmacology I

**Prerequisites:** Admission to the Nursing Program

**Co-requisites:** NURS 200, NURS 201, NURS 202

**Textbooks**

Wolters Kluwer-Henke's Med-Math: Dosage Calculation, Preparation, and Administration-  
Susan Buchholz, MSN, RN, CNE-9<sup>th</sup> edition

**Course Description**

This course begins by introducing the first-semester nursing student to pharmacotherapeutics in the nursing field. The process of pharmacodynamics and pharmacokinetics is explored, including the effect of drugs on pediatric, pregnant, and elderly patients. Safe medication administration principles are taught with regard to cultural and life-span diversity and best current evidence. Measurement requirements, system conversions, oral and parenteral dosage calculations, intravenous fluid therapy, and intravenous fluid flow rates are covered in detail. Nursing implications for drug administration and the use of technology in documentation are emphasized in every unit including an overview of drug label interpretation. Dosage calculation emphasizes the importance of collaboration among team members to effectively, accurately and safely calculate dosages of medications. It includes reading, interpreting and solving calculation problems encountered in the preparation of medication. *Enrollment in the 200 Level of Nursing (NURS) courses is limited to those students who have been selected and admitted to the program. Program courses are sequenced by semester and must be taken as a group each semester per program requirements and policies*

**Student Learning Outcomes (SLO)**

1. Professional behaviors including commitment to continued quality improvement, ethical and legal standards of practice, efficient management of resources, patient advocacy and lifelong learning
2. Promote safety in the workplace to minimize risk of harm to self, patients, family members and coworkers.
3. Use of therapeutic communication techniques which result in optimal relationships with patients and families and teamwork and collaboration with interdisciplinary team members.
4. The ability to provide patient-centered care with regard to cultural and life-span diversity in a variety of healthcare settings
5. Evidence-based practice to inform the nursing process for clinical judgment and critical decisions making.
6. Use of informatics and technology to document, manage patient records and support decision making.

7. Competency with the nursing process to assess, plan, implement and modify patient care to promote positive outcomes.

### **Course Student Learning Outcomes (CSLO)**

At the end of this course, the student will be able to:

- A. Plan diverse culturally-sensitive patient-centered care in regard to medication administration. (SLO: 4)
- B. Analyze current evidence as a basis for nursing judgment to administer medications and provide patient education, adjusting for use in special populations. (SLO: 4, 5)
- C. Apply knowledge to improve the quality and safety of pharmacotherapy. (SLO: 1, 2)
- D. Utilize technology for the enhancement of medication administration safety. (SLO: 6)

### **Objectives**

To achieve the Course Student Learning Outcomes, the student will meet the following objectives:

1. Differentiate between generic and brand-name drugs, over-the-counter and prescription drugs. (CSLO: B, C)
2. Explain benefits and risks associated with the use of over-the-counter drugs in a culturally diverse society. (CSLO: A, B, C)
3. Describe how body cells respond to the presence of drugs that are capable of altering their function. (CSLO: C)
4. Explain the meaning of half-life of a drug. (CSLO: C)
5. Describe the six rights of safe medication administration. (CSLO: B, C, D)
6. Identify common abbreviations used in medication administration. (CSLO: C)
7. Describe the forms in which medications are supplied. (CSLO: B, C)
8. Identify and interpret the components of a Physician's Order and a Medication Administration Record. (CSLO: C, D)
9. Interpret information found on drug labels. (CSLO: B, D)
10. Convert units of measurement between the metric and household systems. (CSLO: C)
11. Solve simple and complex dosage problems for oral medications using Dimensional Analysis. (CSLO: C)
12. Identify the parts of a syringe and needle. (CSLO: C)
13. Interpret the calibrations on syringes of various sizes. (CSLO: C)
14. Measure insulin dosages and combine two types of insulin in one syringe. (CSLO: C, D)
15. Find the strength of a solution as a ratio, as a fraction, and as a percent. (CSLO: C)
16. Calculate doses for parenteral medications in liquid form. (CSLO: C)
17. Interpret instructions on package inserts for reconstituting medications supplied in powdered form. (CSLO: C, D)
18. Convert flow rates between gtt/min and ml/hr. (CSLO: C)
19. Calculate the flow rates and durations of enteral and IV infusions. (CSLO: C, D)
20. Describe intravenous medication administration. (CSLO: B, C, D)

21. Demonstrate a basic understanding of the differences between a crystalloid and colloid IV infusion. (CSLO: B, C)
22. Determine safe dose ranges for pediatric dosages. (CSLO: A, B, C, D)
23. Calculate pediatric oral and parenteral dosages based on body weight. (CSLO: A, B, C, D)

## Course Requirements

**In order to receive a grade of “C” the student must earn 76% of the total possible points for the courses and achieve all of the course requirements listed below.**

The student will:

- Participation in/satisfactory completion of all classroom experiences (such as quizzes; dosage calculation assignments; web-site assignments; reading and research assignments; case studies).
- The final exam is mandatory, will be cumulative, and worth 25% of the overall grade for the course.
- Be required to achieve a minimum overall average of 76% on unit exams and a minimum score of 76% on the final exam to receive credit for this course. **(Earn a minimum average of 76% on unit exams.)**
- **Complete the comprehensive ATI assessments**

## Grading Scale

93	–	100%	=	A
85	–	92%	=	B
76	–	84%	=	C
68	–	75%	=	D
0	–	67%	=	F

**Attendance Policy:** The college attendance policy, which is available at <http://www.bpcc.edu/catalog/current/academicpolicies.html>, allows that “more restrictive attendance requirements may apply to some specialized classes such as laboratory, activity, and clinical courses because of the nature of those courses.” The attendance policy of the Nursing program is described in the Nursing Program Clinical Handbook.

## Nondiscrimination Statement

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COORDINATOR FOR SECTION 504 AND ADA  
Angie Cao, Student and Disability Services Specialist

Disability Services, F254, 6220 East Texas Street, Bossier City, LA 71111  
318-678-6511

[acao@bpcc.edu](mailto:acao@bpcc.edu)

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Equity/Compliance Coordinator

Teri Bashara, Director of Human Resources

Human Resources Office, A-105

6220 East Texas Street

Bossier City, LA 71111

Phone: 318-678-6056

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

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