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

**Course Prefix and Number**: PRNU 120 **Credit Hours**: 1

**Course Title:** PN Dosage Calculation **Clock Hours Lecture/Lab/Clinical:** 15/0/0

Enrollment in the program courses (PRNU) is limited to those students who have been selected and admitted to the Practical Nursing program. Program courses are sequenced by semester and must be taken as a group each semester per program requirements and policies.

**Textbook(s):** Textbook of Basic Nursing, Eleventh Edition, Caroline Bunker Rosdahl, Mary T. Kowalski
Workbook for Textbook of Basic Nursing, Eleventh Edition, Caroline Bunker Rosdahl, Mary T. Kowalski
Dosage Calculations, Gloria D. Pickar
PN Pharmacology for Nursing, ATi

**Course Description**: A study of fundamental pharmacological and math concepts, medical math including whole numbers, fractions, decimals, roman numerals, ratios and proportions, simple equations, percentages, measurements, and U. S. Standard and metric conversions. It emphasizes critical thinking techniques to effectively, accurately and safely calculate dosages of medications. It includes reading, interpreting, and solving calculation problems encountered in the preparation of medication (15 hours lecture)

**Learning Outcomes**:
Upon successful completion of this course, the student will be able to:
A. Utilize basic mathematical functions to perform basic drug calculations;
B. Explain the fundamental units of the metric, apothecary, household and Fahrenheit/Celsius systems of measurement; and
C. Accurately calculate dosages for one-time doses for oral medications and parenteral medications.
D. Apply body weight dosage calculations to patients across the lifespan

**Course Objectives:**
Upon successful completion of this course with a minimum of 80% accuracy, the student will:
1. Explain why an understanding of basic mathematics is essential when studying pharmacology. (A, B)
2. Briefly state the historical uses of the household and apothecary systems of measurement. State one value in each system still used in healthcare. (B)
3. Describe the most commonly used system of measurement in healthcare; state why this system is used. (B)
4. State the basis of metric measurement.(B)
5. Demonstrate the ability to convert among milligrams, grams, and kilograms. (A, B)
6. Demonstrate the ability to convert between kilograms/grams and pounds; explain why this is necessary. (A, B)
7. Give examples of formerly used drug-related abbreviations and symbols that are no longer acceptable; state the reasons for this. (B)
8. Demonstrate the use of ratio and proportion to calculate medication dosages. (A)
9. Demonstrate the ability to multiply and divide simple fractions. (A)
10. Calculate the dose amount (number) of tablets or capsules required to administer oral prescribed dosages. (C)
11. Calculate the volume of liquid per dose when the prescribed dosage is in solution form. (C)
12. Apply Three-Step Approach to dosage calculation: convert, think, and calculate using D/H X Q = X. (C)
13. Calculate the amount of solute and solvent needed to prepare a desired strength and quantity of an irrigating solution or enteral feeding. (D)
14. Calculate medication dosage using body weight (E)

**Course Grading Scale**: The final grade will not be rounded up EX. 79.5 =79=D.
100-94 = A
93-87 = B
86-80 = C
79-73 = D
72-0 = F

**Course Requirements**: To earn a grade of "C" or higher the student must earn 80% of the total points for the course.

**Attendance Policy:** The attendance policy for the BPCC Practical Nursing Program is included in the program student handbook, which is also posted to the program page of the BPCC website.

**Nondiscrimination Statement:**
Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

**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
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
318-678-6056
tbashara@bpcc.edu
Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Reviewed by MPietsch 9/2021