



INTER AMERICAN UNIVERSITY OF PUERTO RICO
METROPOLITAN CAMPUS
FACULTY OF SCIENCES AND TECHNOLOGY
SCHOOL OF NURSING CARMEN TORRES DE TIBURCIO

SYLLABUS

I. GENERAL INFORMATION

Course Title	:	Pharmacology Aspects in Nursing
Number and Code	:	NURS 1130
Credits	:	Three (3)
Academic term	:	
Professor	:	
Office hours and place	:	
Office Telephone	:	(787) 250-1912 Ext. 2159, 2202
Email	:	

II. COURSE DESCRIPTION

Discussion of relevant aspects of the study of the pharmacology including the biochemical, physiological, research and legal aspects. Use of the principles and skills of posology. Application of the nursing process in medication administration. Requires 45 hours of lecture and 30 hours of classroom lab. Co-requisite: NURS 1111.

III. TERMINAL OBJECTIVES

At the end of the course, it is expected that the students will:

1. Discuss the general concepts of pharmacology and its implications for the practice of nursing safe and efficient. **(Safety)**.
2. Use the principles and skills of dosage calculations for a safe and efficient administration of medications. **(Safety)**.
3. Apply the nursing process with a focus humanist in the safe administration of medications considering their needs, values, preferences and cultural beliefs. **(Humanist care)**
4. Administration of drugs taking into considerations patient's needs, values, beliefs and cultural preferences. **(Cultural)**
5. Effectively use verbal and non-verbal communication including information technology skills to support quality care to the patient/client and among the interdisciplinary team. **(TEAM STEPS)**

6. Apply evidence-based knowledge in the decision-making process in the administration of medication, when providing nursing care to the patient/client and family. **(Research)**

IV. PHARMACOLOGY CONTENT

A. BASIC CONCEPTS OF PHARMACOLOGY

1. Background History of Pharmacology
2. Definition of terms
3. Cultural Aspects
4. Drug regulation
5. Drug categories
6. Drug Names
7. U.S. Controlled Substance Act of 1970
8. Emergency Preparedness
9. Pharmacokinetics
10. Pharmacodynamics
11. Medication reactions

B. NURSING PROCESS IN SAFETY MEDICATION ADMINISTRATION

1. Role and responsibility of the nurse in the administration of medications
2. The ten (10) rights and the impact on safety medication administration
3. Assessment
4. Nursing Diagnosis- NANDA
5. Planning
6. Intervention
7. Evaluation

C. HERBAL THERAPY

D. MEDICATION ERROR PREVENTION

E. IMPORTANCE OF NURSING RESEARCH IN PHARMACOLOGY

F. THERAPEUTIC CATEGORIES OF THE FUNCTIONAL HEALTH PATTERNS

1. Nutritional-metabolic health pattern
2. Elimination pattern
3. Perception-Management health pattern
4. Cognitive-perceptive pattern
5. Activity-exercise health pattern

V. POSOLOGY CONTENT

A. PRINCIPLES AND SKILLS OF DRUG ADMINISTRATION AND POSOLOGY

1. Interpretation of medical orders
2. Medical labels and containers
3. Dosage systems

4. Equipment and materials needed to prepare dosages
5. Topical and oral medications
 - a. Solid and liquid medication calculation
 - b. Medication administration by oral and mucus membrane administration
6. Parenteral route
 - a. Liquids for injections
 - b. Injection administration techniques
7. Intravenous drips
 - a. IV drip rate calculation
 - i. Short form
 - ii. Long form
 - b. Special intravenous calculations
8. Transcription and documentation in the administration of medications

VI. ACTIVITIES

- A. Small and large group discussions
- B. Assignments on line (Blackboard)
- C. Study guides on line (Blackboard)
- D. Assigned lectures
- E. Independent study
- F. ATI Tests
- G. News and published articles discussion

VII. EVALUATION

CRITERIOS	PUNTOS	PORCIENTO DE LA NOTA FINAL
Partial exam #1	100	25
Partial exam #2	100	25
Comprehensive final exam # 3	100	25
Quizzes and/or assignments, oral presentations with evaluation criteria, portfolio, modules, learning, reading assignments or study guides	100	15
Attendance	100	10
TOTAL	500	100

VIII. SPECIAL NOTES

A. Supporting Services or Special Needs

All students who require ancillary services or special assistance must request them at the beginning of the course or as soon as they acquire knowledge that they need them, through the corresponding registration in the Office of University Orientation of the Campus. This process must be carried out through the corresponding registration in the office of **Professional Counselor José Rodríguez, Coordinator of Services to Students with Disabilities**. His office is located in the University Orientation Program on the first floor of the Campus. Your email is jrodriguez@metro. You can also call 787-250-1912, EXT. 2306

B. Honesty, Fraud and Plagiarism

The lack of honesty, fraud, plagiarism and any other inadequate behavior in relation to academic work constitute major infractions sanctioned by General Student Regulations. Major infractions, according to General Regulation Students, may result in suspension from the University for a definite period greater than one year or the permanent expulsion from the University, among others sanctions.

C. Use of Electronic Devices

Cellular (mobile) telephones, IPODS, and any other electronic device that could interrupt the teaching-learning process or disrupt a milieu favorable for academic excellence will be deactivated. Critical situations will be dealt with in an appropriate manner. The use of electronic devices that permit the accessing, storing or sending of data during tests or examinations is prohibited.

D. Compliance with the provisions of Title IX

If an institution receives federal funding, the law on graduate higher education as amended prohibits discrimination on the basis of sex in any academic activity, education, extracurricular, athletic or any other program or employment sponsored or controlled by an institution of higher education independently of it being celebrated within or out of the territories of the institution, if the institution receives federal funding. In accordance to the federal regulations, our academic unit has designated a coordinator Title IX auxiliary, which will offer assistance and orientation in regards to any a ledge incident related to discrimination based on sex or gender, sexual harassment or sexual assault. Contact the Auxiliary Coordinator George Rivera, Security Director, at phone number 787-250-1912, extension 2147, or email grivera@metro.inter.edu

IX. Educational References

COURSE TEXT

Adams, M.nP. Holland, J. L. & Bostwick, P. M. (2013). *Pharmacology for nurses- A Pathophysiologic Approach 4th ed.* New Jersey: Pearson Prentice Hall. ISBN 10-0133026183-944

Adams, M. P., Holland, J. L. & Bostwick, P. M. *Study Guide for Pharmacology for Nurses: A Pathophysiological Approach 4th ed.* New Jersey: Pearson Prentice Hall. ISBN 978-0133389722

Buchholz, S, & Henke, Sister G. (2015). *Henke's MED-MATH: Dosage Calculation, Preparation & Administration* (8th ed.). Lippincott Williams & Wilkins. ISBN 978-1496302847

Karch, Amy M., (2015) *Lippincott's Nursing Drug Guide*. Philadelphia: Lippincott Williams & Wilkins. ISBN

McGraw-Hill Saunders (2014) *Comprehensive Review NCLEX-RN Examination* Silvestri
6th ed. Elsevier Mosby ISBN 978-1-4557-2755-1

Faculty approved: August 2018