

**INTERAMERICAN UNIVERSITY OF PUERTO RICO
METROPOLITAN CAMPUS
SCIENCE AND TECHNOLOGY FACULTY
CARMEN TORRES DE TIBURCIO NURSING DEPARTMENT**

SYLLABUS

I. GENERAL INFORMATION

| | | |
|------------------|---|--|
| Course Title | : | Professional Interventions in the Life Cycle |
| Number and Code | : | NURS 3190 |
| Credits | : | Four (4) |
| Academic Term | : | |
| Professor | : | |
| Class Hours | : | |
| Office Telephone | : | (787) 250-1912 ext. 2159, 2202 |
| Office hours | : | |
| Email | : | |

II. DESCRIPTION

Analysis of the nursing process as a tool for the professional, with emphasis on diagnostic and therapeutic reasoning for decision-making in professional interventions. Examination of interventions in the prevention levels for the management of human responses in the most frequent health-illness and chronic conditions situations. It includes the ethical-legal concepts and findings of the investigations. It requires a total of 30 hours of pediatric content and 30 hours of adult content. Requirements: NURS 3100, 3115, and 3120. Concurrent with NURS 3140 and NURS 4911.

III. OBJECTIVES

TERMINAL OBJECTIVES

1. Demonstrate theoretical and practical knowledge integrated into the safe and effective nursing care provided to individuals, families and communities.

GENERAL OBJECTIVES

1. Analyze the best practices to offer humanistic care, centered on the adult and pediatric patients, based on evidence throughout the life cycle, during the stages of chronic conditions and their sensitive decision moments, to maintain the quality of life and the continuity of care considering the family and caregivers. Offer patient-centered care to patient/clients throughout the lifecycle, their

families, and caregivers considering their needs, values, preferences, and cultural insights, which promote a continuous healing relationship, by assuming an active and leadership role. (Humanistic Care).

2. Choose evidence-based patient-centered therapeutic interventions to offer care to the geriatric and pediatric person, his/her family, and caregivers, as vulnerable patients/clients at the extremes of the life cycle. Show competence in therapeutic, evidence-based interventions while giving nursing care to patient/clients throughout the lifecycle along the continuity of care in wellness and illness continuum for the promotion, maintenance, and restoration of health.

(Communication)

3. Choose patient-centered therapeutic interventions to offer safe and effective preventive care to the adult and pediatric client with risk of healthcare-associated infections.

4. Apply the nursing process for decision-making, which demonstrates critical thinking skills while offering safe, effective, efficient, timely, and equitable direct and indirect¹ nursing care to patient/clients throughout the lifecycle for the continuity of care. (Nursing Process).

5. Show leadership and management competence while offering efficient and timely care, to facilitate patient/client safety and quality improvements. (Leadership)

a) Show responsibility and commitment to personal lifelong learning within the profession and for its advancement. (Leadership)

b) Integrate evidence-based knowledge for decision-making processes when offering nursing care to patient/clients throughout the lifecycle. (Research)

IV. CONTENT

Unit 1: Evidence-based professional interventions in the chronicity for the continuity of care in the adult and pediatric client

A. Chronicity as a health problem

1. Impact on the health system

2. Chronic care model

3. Comprehensive estimate of the patient with a chronic condition

4. Clinical problems and challenges

5. Interventions

6. Laboratory and exam values

B. The last stage of chronicity

1. Phases of a chronic condition

2. Death as the last stage

3. Components of the dying person's physical and emotional examination

4. When the dying person is a child

5. Clinical and pharmacological management of common problems

a. Weakness (fatigue)

b. Pain.

c. Dyspnea

d. Nausea and vomiting

e. Uneasiness and agitation

6. The healthcare professional's duties at life's end

a. DNR

b. Advanced directives

c. Advocacy for the dying patient's rights

C. Organ donation process

1. Brain death criteria

a. Brain death estimate and monitoring strategies

b. Family education

c. Laboratory and exam values

D. Discharge planning for the continuity of care

1. Therapeutic interventions to strengthen the ethic and cultural competency

- a. Common ethical dilemmas

Unit II: Professional interventions when caring for the client at the extremes of the life cycle

A. Care models for the pediatric patient

1. Health during the pediatric stages

- a. Pediatric health statistics
- b. Healthy People 2023
- c. Infant & Childhood Mortality

2. Health maintenance

- a. Vaccination (schedule birth through 19 years and older)

3. Most common chronic health problems

- a. attention deficit hyperactivity disorder
- b. Cerebral palsy
- c. Metabolic syndromes
- d. Abuse and neglect
- e. Growth and development retardation
- f. Laboratory and exam values

B. Care for the older adult

1. Focused estimate of priority health problems

- a. Health statistics
- b. Typical changes in the older adult
- c. Common priority health problems
 - 1. Risk of harm due to falls
 - 2. Risk of pressure ulcers
 - 3. Polypharmacy in the older adult

4. Alterations in nutrition: less than what is required
 5. Deterioration in physical mobility
 6. Urinary incontinence
 7. Abuse
 8. Relocation stress syndrome
2. Effective intervention strategies for the older adult
 - a. Health education
 - b. Risk identification and protection
 - c. Medication Management
 - d. Promotion of wellness practices

Unit III: Interventions based on evidence for the prevention and management of healthcare associated infections

A. Microbiology principles

1. Colonization vs. infection
2. Resistant microorganisms
3. Use of antibiotics
4. Laboratory and exam values

B. Prevention of Hospital acquired infections in adult and pediatric clients: recommendations based on evidence offered by the CDC.

1. Ventilator associated pneumonia (VAP)
2. Urinary tract infections (UTI)
3. Surgical-site infections (SSI)
4. Catheter-related bloodstream infections (CRBSI)
5. Catheter associated urinary tract infection in adults (CAUTI)

C. Oncology

1. Cancer pathophysiology

2. Treatment modalities
 - a) Surgical
 - b) Radiation
 - c) Pharmacological treatment for adults and pediatric patients
3. Laboratory and exam values
4. Nursing diagnosis
5. Nursing interventions to manage side effects and outcomes

Unit IV – Evidence-based professional interventions in the management of cases that are specific to the adult and pediatric client for the continuity of care

A. Diagnostic and therapeutic reasoning in cases of high-incidence healthcare problems in adults and pediatric patients due to cardiovascular responses

1. Focus on the adult client
 - a. Cardiovascular estimate
 - b. Medication guide using in the ACLS (Guides 2015-2020)
<https://acls-algorithms.com/acls-drugs/>
 - c. Medication guide using in the PALS (Guides 2019)
<https://www.acls-pals-bls.com/algorithms/pals/>
 - d. Laboratory and exam values
2. Medication management for medication knowledge and patient safety
 - a. Vasodilators: IV Nitroglycerine
 - b. Adrenergic beta blockers
 - c. Calcium antagonists (blockers)
 - d. Antiarrhythmic
 - e. Anticoagulants: heparin, lovenox
 - f. Thrombolytic: tissue plasminogen activator (t-PA)
 - g. Analgesics: morphine sulfate

h. Digitalis drugs (careful monitoring)

i. Diuretics

B. Deterioration in gas exchange due to respiratory responses

1. Anatomy and physiology independent review

2. Pulmonary function

3. Arterial blood gases

4. Oxygen saturation

C. Health problems in adults and children

1. Chronic obstructive pulmonary disease (COPD)

2. Asthma and Asthmatic status in adults and children

3. Laboratory and exam values

D. Specific nutritional-metabolic imbalance due diabetes and its complications

1. Pathophysiological and biochemical fundamentals

a. Obesity as a problem and risk factor

1. Incidence and epidemiology (CDC)

2. Achieving Healthy People 2030

3. Pathophysiology

4. Strategies to prevent obesity (CDC)

E. Diabetes Mellitus

1. Incidence and epidemiology (statistics)

2. Achieving Healthy People 2030

3. Programs (CDC)

F. Nutrition management

G. Ineffective cerebral tissue perfusion

1. Ineffective cerebral perfusion: brain strokes in adults

a. Pathophysiology

1. Ischemic stroke
2. Hemorrhagic stroke
3. Increase in intracranial pressure (ICP)
4. Laboratory and exam values

H. Urinary and fecal incontinence

1. Etiology: altered levels of consciousness, damage to nerve innervations, inability to communicate
2. Bladder and intestine training program
3. Laboratory and exam values

V. ACTIVITIES

- A. Conference or Lecture
- B. Special assignments and written exercises
- C. Group discussion
- D. Web sites (Informatics and Technology)
- E. Electronic communication

VI. EVALUATION

| Evaluation | Points | Percentage |
|----------------------|--------|------------|
| 1.Exam 1 | 100% | 15% |
| 2.Exam 2 | 100% | 15% |
| 3.Assignments | 100% | 10% |
| 4.Essay | 100% | 15% |
| 5.Group Presentation | 100% | 20% |
| 6.Attendance | 100% | 5% |
| 7.Final exam | 100% | 15% |

| | | |
|--------|------|------|
| 8.ATI | 100% | 5% |
| Totals | 800 | 100% |

VII. SPECIAL NOTES

A. Auxiliary services or special needs

All students who require auxiliary services or special assistance must request these at the beginning of the course or as soon as they know that they need them, through the proper registry, in the Guidance Office with Dr. María de los Ángeles Cabello at email mcabello@metro.inter.edu

B. Honesty, fraud, and plagiarism

Dishonesty, fraud, plagiarism, and any other inappropriate behavior in relation to academic work constitutes major infractions sanctioned by the General Student Regulations. The major infractions, as stated in the General Student Regulations, may have as a consequence, 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 telephones and any other electronic device that could interrupt the teaching and learning processes or alter the environment leading to academic excellence will be deactivated. Any urgent situation will be dealt with, as appropriate. The handling of electronic devices that allow students to access, store or send data during evaluations or examinations is prohibited.

D. Compliance with the Provisions of Title IX

The Federal Higher Education Act, as amended, prohibits discrimination because of sex in any academic, educational, extracurricular, and athletic activity or in any other program or function, sponsored or controlled by a higher education institution, whether or not it is conducted within or outside the property of the institution if the institution receives federal funds.

In harmony with current federal regulations, in our academic unit an Assistant Coordinator of Title IX has been designated to offer assistance and orientation in relation to any alleged incident constituting discrimination because of sex or gender, sexual harassment or sexual aggression. The Assistant Coordinator, Mr. George Rivera, can be reached by phone at (787) 250-1912 extension 2147, or by e-mail grivera@metro.inter.edu.

The Normative Document Titled **Norms and Procedures to Deal with Alleged Violations of the Provisions of Title IX** is the document that contains the institutional rules to direct any complaint that appears to be this type of allegation. This document is available in the Web site of Inter American University of Puerto Rico (www.inter.edu).

VIII. RESOURCES

Text Book

Smeltzer Brunner & Suddarth's (2021) Textbook of Medical Surgical Nursing, 15th ed. Lippincott

Wong, D.L.& Hockenberry-Eaton. (2021). Essentials of pediatric nursing, (11th ed.). St. Louis: Mosby.

Other texts books from previous courses: NANDA, NIC, NOC

References and Electronic Resources

Edelman, C. & Handle, C. (2010). *Health promotion throughout the lifespan*. (7th ed.). St. Louis: Mosby.

Skidmore-Roth, L. (Consultant). (2012). *Mosby's nursing drug reference*, (25th ed.). St. Louis: Mosby.

American Public health association (APHA);

<http://www.apha.org>

Center for disease control and prevention (CDC)

<http://www.cdc.gov>

Centers for Disease Control and Prevention (2017). Catheter-associated Urinary Tract Infections (CAUTI)

https://www.cdc.gov/hai/ca_uti/uti.html

Immunization Schedules. Centers for Disease Control and Prevention (2019)

<https://www.cdc.gov/vaccines/schedules/index.html>

Diabetes Data & Statistics. Centers for Disease Control and Prevention (2018)

<https://www.cdc.gov/diabetes/data/index.html>

Center for International Health Information

<http://www.cihi.com>

Cultural Competence Compendium:

<http://www.ama-aassn.org>

Culture and Diversity:

<http://www.amsa.org>

Health Literacy Initiative (NIH):

<http://www.nih.gov/icd/od/ocpl/resorces/improvinghealthliteracy1.htm>

National Center for Health Education:

<http://www.nche.org/>

National Center for Health Statistics:

<http://www.cdc.gov/nchs>

National Council of State Boards of Nursing (NCSBN)

<https://www.ncsbn.org/index.htm>

National Institutes of Health (NIH):

<http://os.dhhs.gov>

National Institute of Nursing research:

<http://www.nih.gov/ninr>

Office for Disease Prevention

<http://www.odphp.osophs.dhhs.gov>

Online Journal of Nursing Informatics:

<http://www.eaa-knowledge.com/ojni/>

The Cochrane Collaboration

www.cochrane.org

The Joint Commission-National Patient Safety Goals

<http://www.jointcommmission.org/PatientSafety/NationalPatientSafetyGoals/>

U.S. Department of Health and Human Services

<http://os.dhhs.gov>

U.S. Department of Health & Human Services

Agency for Healthcare Research & Quality

<http://teamstepps.ahrq.gov/>

U, S, Department of Health & Human Services

Office of Minority Health

Program of Culturally Competent Nursing Care-Cornerstone of Caring
www.thinkculturalhealth.org

World Health Organization
<http://www.who.ch>

IX. BIBLIOGRAPHY

Campinha-Bacote, J. (2007). *The process of cultural competence in the delivery of healthcare services: A culturally competent model of care*. Transcultural C.A.R.E. Associates.

Carpenito-Moyet, L.J. (2009). *Handbook of nursing diagnosis*, (12th ed.). Philadelphia: Lippincott,

Williams & Wilkins.

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