

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

SYLLABUS

I. GENERAL INFORMATION

Course Title	:	Fundamentals of Pediatric Care
Course Code and Number	:	2351 NURS
Credits	:	Three (3)
Level		
Academic Term	:	
Professor	:	
Office Hours	:	
Office Telephone	:	787-250-1912 EXT. 2202
Email	:	

II. DESCRIPTION

Discussion of the essential aspects in client care from the late normal neonatal stages to adolescence. Analysis of the dysfunctions in the functional patterns of health by using the nursing process. Use of the physiopathological and environmental concepts and the conceptual framework of the curriculum. Pre-requisites: NURS 2141, 2142, 2233. Corequisite: NURS 2352, 2361, 2362, 2970.

III. OBJECTIVES

END OF PROGRAM STUDENT LEARNING OUTCOMES (GRADUATE PROFILE OF COMPETENCIES)

1. Demonstrate responsibility and ethical-legal commitment with humanistic care in response to the changing needs of society. (AAS)
2. Apply humanistic care in the nursing practice to promote protection, optimization, and the preservation of human dignity. (BSN)

GENERAL OBJECTIVES (COURSE STUDENT LEARNING OUTCOMES)

It is expected that, at the end of the course, the student will be able to:

1. Demonstrate communication and critical thinking skills when applying the nursing process in the care of a pediatric client with dysfunctions in functional health patterns.
2. Use knowledge of theories of growth and development, and physiological, social, cognitive, moral, and spiritual changes when providing client care from the normal late neonatal stages to adolescence.

3. Discuss evidence-based nursing therapeutic interventions for the management of dysfunctions affecting the pediatric client through normal late neonatal stages up to adolescence.
4. Analyze how the needs, culture, genetics, values, and impact of the community influence the health of the pediatric client and the family.
5. Use legal ethical principles in oral, written, and technological communication when providing care to the pediatric client and her family.
6. Examine current trends and health guidelines that are designed to meet the promotion, maintenance, and restoration of the health of the pediatric client and his or her family.

IV. COURSE CONTENT

A. Pediatric Nursing Fundamentals.

1. Child Health
2. Pediatric Nursing
 - a. Evolution and philosophy.
 - b. Roles of Pediatric Nursing.
 - c. Standards of Care and Practice.
3. Legal ethical aspects related to childcare.
4. Factors Influencing Child Health
 - a. Genetics
 - b. Health status and lifestyle.
 - c. Culture
 - d. Spirituality and religion.
 - e. Community and society.

B. Health Promotion of the Growing Child and Family.

1. Growth and development.
 - a. Newborn and Infant.
 - b. Toddler
 - c. Preschoolers
 - d. School - Age Child.
 - e. Adolescent

C. Nursing Care of the Child with an Alteration in Comfort–Pain Assessment and Management.

1. Physiology of pain.
2. Types of pain.
3. Factors influencing pain.
4. Developmental considerations.
5. Pain management (Non-pharmacologic and Pharmacologic).

D. Nursing Care of a Child with an Infection.

1. Infectious process.
2. Variations in pediatric anatomy and physiology.
3. Common medical treatments.
4. Nursing process.

- E. Dysfunctions in functional patterns of health.
 - 1. Pattern of perception and management of health.
 - a. Caring for a Special Needs Child.
 - i. Effects of special needs on the child.
 - ii. Effects on the family.
 - b. Caring for children in Diverse Settings.
 - 2. Metabolic nutritional pattern
 - a. Variations in anatomy and physiology.
 - b. Nursing process
 - i. Assessment
 - ii. Laboratory and Diagnostic Testing.
 - iii. Nursing Diagnoses.
 - iv. Common Medical Treatments.
 - c. Disorders in the metabolic nutritional pattern.
 - i. Pituitary Disorders.
 - ii. Disorders of Thyroid Function.
 - iii. Disorders Related to Parathyroid Gland.
 - iv. Polycystic Ovary Syndrome.
 - v. Diabetes Mellitus.
 - vi. Burns
 - 3. Pattern Elimination
 - Alteration in Bowel Elimination/Gastrointestinal Disorders.
 - a. Variations in anatomy and physiology.
 - b. Nursing process
 - i. Assessment
 - ii. Laboratory and Diagnostic Testing.
 - iii. Nursing Diagnosis.
 - iv. Common Medical Treatments.
 - c. Elimination
 - i. Structural Anomalies of the Gastrointestinal Tract
 - ii. Cleft lip and palate
 - iii. Esophageal Atresia and Tracheoesophageal Fistula
 - iv. Omphalocele and Gastroschisis
 - v. Meckel Diverticulum
 - vi. Inguinal and Umbilical Hernias
 - d. Acute Gastrointestinal Disorders
 - i. Dehydration
 - ii. Vomiting
 - iii. Diarrhea
 - iv. Hypertrophic Pyloric Stenosis
 - v. Intussusception
 - vi. Malrotation and Volvulus
 - vii. Appendicitis
 - e. Chronic Gastrointestinal Disorders
 - i. Gastroesophageal Reflux Disease
 - ii. Peptic Ulcers Disease
 - iii. Constipation and Encopresis

- iv. Hirschsprung's Disease (Congenital Aganglionic Megacolon)
 - v. Short Bowel Syndrome
 - vi. Inflammatory Bowel Disease
 - vii. Celiac Disease
 - viii. Enterocolitis Necromans
 - f. Hepatobiliary disorders
 - i. Pancreatitis
 - ii. Inflammation of the gallbladder
 - g. Urinary Tract and Renal Disorders
 - i. Hypospadias/Epispadias
 - ii. Urinary Tract Infections
 - iii. Renal Failure
 - iv. Nephrotic Syndrome
 - v. Reproductive Organs Disorders
4. Pattern of activity and exercise
- a. Variations in anatomy and physiology
 - b. Nursing process
 - i. Assessment
 - ii. Laboratory and Diagnostic Testing
 - iii. Nursing Diagnoses
 - iv. Common Medical Treatments
 - c. Respiratory Disorders
 - i. Alteration in Gas Exchange/Respiratory Disorders
 - ii. Acute infectious disorders
 - Influenza
 - Tonsillitis
 - Croup
 - Laryngitis
 - Bronchitis
 - Pneumonia
 - Infectious Mononucleosis
 - d. Acute Noninfectious Disorders
 - i. Foreign Body Aspiration
 - ii. Respiratory Distress Syndrome
 - e. Chronic Respiratory Disorders
 - i. Allergic Rhinitis
 - ii. Asthma
 - iii. Cystic Fibrosis
 - iv. Apnea
 - f. Cardiovascular Disorders
 - i. Congenital Heart Disease
 - Tetralogy of Fallot
 - ii. Atrial Ventricular Septal Defect
 - iii. Coarctation of the Aorta
 - iv. Pulmonary/Aortic Stenosis

- v. Atrioventricular Canal Defect
- g. Acquired Cardiovascular Disorders
 - i. Acute Rheumatic Fever
 - ii. Cardiomyopathy
 - iii. Hypertension
 - iv. Kawasaki Disease
 - v. Dyslipidemia
- h. Hematologic and Immunity or Immunologic Disorders
 - i. Anemia
 - ii. Iron-Deficiency Anemia
 - iii. Sickle Cell Disease
 - iv. Thalassemia
 - v. Hemophilia
 - vi. Von Willebrand Disease
 - vii. Leukemia
 - viii. Lymphomas (Hodgkin /Non-Hodgkin)
 - ix. Rhabdomyosarcomas
 - x. Wilms Tumor
 - xi. Retinoblastoma
 - xii. Brain tumors
- i. Immunity or Immunologic disorders
 - a. Wiskott-Aldrich Syndrome
 - b. Autoimmune Disorders
 - c. Juvenile Idiopathic Arthritis
 - d. Guillain- Barré Syndrome
- j. Alteration in Mobility/ Neuromuscular or Musculoskeletal Disorder
 - a. Variations in Anatomy and Physiology.
 - b. Nursing process
 - i. Assessment
 - ii. Laboratory and Diagnostic Testing
 - iii. Nursing Diagnoses
 - iv. Common Medical Treatments
- k. Disorders
 - a. Congenital and Developmental disorders
 - b. Neural Tube Defects
 - c. Spina Bifida Occulta
 - d. Meningocele
 - e. Myelomeningocele
 - f. Polydactyly/Syndactyly
 - g. Metatarsus Adducts
 - h. Congenital Clubfoot
 - i. Osteogenesis Imperfecta
 - j. Development Dysplasia of the Hip
 - k. Muscular Dystrophy
 - l. Cerebral Palsy

1. Acquired Disorders

- a. Legg-Calvé-Perthes Disease
- b. Scoliosis
- c. Spinal Cord Injury
- d. Fracture

m. Alteration in Intracranial Regulation / Neurologic Disorder

- a. Variations in anatomy and physiology
- b. Nursing process
- c. Assessment
- d. Laboratory and Diagnostic Testing
- e. Nursing Diagnoses
- f. Common Medical Treatments

n. Disorders

- a. Seizure Disorders
 - Epilepsy
 - Febrile Seizures
- b. Structural Defects
 - Anencephaly
 - Encephalocele
 - Microcephaly
 - Hydrocephalus
 - Craniosynostosis
 - Plagiocephaly
- c. Infectious disorders
 - Bacterial and Aseptic meningitis
 - Encephalitis
 - Reye Syndrome

F. Integration of Sciences

1. Physio pathological factors: Pediatric anatomy and physiology.
Microbiology: maternal immunological contributions to the infant; infectious process, biochemistry- routine for pediatrics, homeostasis, and thermoregulation.
2. Pathophysiology; child health problems and pain process in childhood.

V. ACTIVITIES

1. Discussion forums
2. Conference
3. Further reading
4. Assignments and modules
5. Targeted discussion
6. Collaborative work
7. Oral and written reports
8. Research Analysis
9. Cultural case studies

VI. EVALUATION

Criteria	Scale	% Final Grade
Partial Exam #1	100	20%
Partial Exam #2	100	20%
Final Exam # 3	100	20%
Assignments, Modules, Study Guides, and Tasks.	100	20%
Oral Presentation	100	10%
ATI	100	10%
Contact Hours	100	20%
	700	100%

VII. SPECIAL NOTES

Ancillary 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 Office of the Coordinator of Services to Students with Disabilities, Dr. María de los Angeles Cabello, located in the Counseling Program, Room 419, on the fourth floor of the John Will Harris Building, 787-250-1912, extension 2306.

Honesty, fraud, and plagiarism.

Dishonesty, fraud, plagiarism, and any other inappropriate behavior in relation to academic work constitute major infractions sanctioned by the [General Student Regulations](#). Major infractions, as provided for in the General Student Regulations, may result in the suspension of the University for a defined period of more than one year or permanent expulsion from the University, among other sanctions.

Use of electronic devices.

Cell phones and any other electronic device that could interrupt teaching and learning processes or alter the environment conducive to academic excellence will be deactivated. Pressing situations will be addressed, as appropriate. The handling of electronic devices that allow access, storage, or sending of data during evaluations or exams is prohibited.

Compliance with the provisions of Title IX.

The Federal Higher Education Act, as amended, prohibits discrimination based on sex in any academic, educational, extracurricular, athletic, or any other program or

employment, sponsored or controlled by an institution of higher education regardless of whether it is conducted on or off the institution's premises if the institution receives federal funds.

In accordance with current federal regulations, our academic unit has appointed a Title IX Assistant Coordinator who will provide assistance and guidance regarding any alleged incident constituting discrimination based on sex or gender, sexual harassment, or sexual assault. The Assistant Coordinator, Mr. George Rivera Rodríguez, can be reached at 787 250-1912, extension 2262, or by email at griverar@metro.inter.edu

The Normative Document entitled **Norms and Procedures to Address Alleged Violations of the Provisions of Title IX** is the document that contains the institutional rules to channel any complaint that is filed based on this type of allegation. This document is available on the website of the Inter-American University of Puerto Rico (www.inter.edu).

VIII. EDUCATIONAL RESOURCES

Textbook:

Hockenberry, Wilson & Rodgers (2021). *Wong's Essentials of Pediatric Nursing*. (11th ed.). Mosby. ISBN: 978-0323624190.

IX. BIBLIOGRAPHY (OR REFERENCES)

Hockenberry, Wilson & Rodgers (2021). Study Guide for Wong's Essentials of Pediatric Nursing. (11th ed.). Mosby. ISBN: 978-0323636759.

Bally, J. M. G., Spurr, S., Hyslop, S., Hodgson-Viden, H., & McNair, E. D. (2022). Using an interprofessional competency framework to enhance collaborative pediatric nursing education and practice. *BMC Nursing*, 21(1), 1–10.
<https://doi.org/10.1186/s12912-022-00932-z>

Committee on Practice and Ambulatory Medicine, & Bright Futures Periodicity Schedule Workgroup (2019). Recommendations for Preventive Pediatric Health Care. *Pediatrics*, 143(3), e20183971. <https://doi-org.ez.inter.edu/10.1542/peds.2018-3971>

Durbin, J. (2018). Pediatric Obesity in Primary Practice: A Review of the Literature. *Pediatric Nursing*, 44(4), 202–206.

Elawady, M. S., Taman, H. I., & El Said Saber, H. I. (2022). Evaluation of Pediatric Postoperative Pain Management among Nursing Staff Working in Tertiary University Hospitals: A multicenter Cross-sectional Study. *Egyptian Journal of Hospital Medicine*, 87, 1342–1347. <https://doi.org/10.21608/ejhm.2022.223608>

Engelkirk & Duben-Engelkirk (2018). *Burton's Microbiology for the Health Sciences*. 11th ed. ISBN 1496380460 / 978-0323528900. Jones & Bartlett Learning.

- Gabaeff S. C. (2016). Exploring the controversy in child abuse pediatrics and false accusations of abuse. *Legal medicine (Tokyo, Japan)*, 18, 90–97. <https://doi-org.ez.inter.edu/10.1016/j.legalmed.2015.12.004>
- Guttmann-Bauman, I., Thornton, P., Adhikari, S., Reifschneider, K., Wood, M. A., Hamby, T., & Rubin, K. (2018). Pediatric endocrine society survey of diabetes practices in the United States: What is the current state? *Pediatric diabetes*, 19(5), 859–865.
- Lantz, A. J. (2020). Pediatric Accidental Trauma: Screening and Reducing Psychological Impact. *Pediatric Nursing*, 46(3), 111–114.
- Iannicelli, A. M., Vito, D., Dodaro, C. A., De Matteo, P., Nocerino, R., Sepe, A., & Raia, V. (2019). Does virtual reality reduce pain in pediatric patients? A systematic review. *Italian Journal of Pediatrics*, 45(1), 171. <https://doi-org.ez.inter.edu/10.1186/s13052-019-0757-0>
- Jill M. G. Bally, Shelley Spurr, Shannon Hyslop, Heather Hodgson-Viden, & Erick D. McNair. (2022). Using an interprofessional competency framework to enhance collaborative pediatric nursing education and practice. *BMC Nursing*, 21(1), 1–10. <https://doi.org/10.1186/s12912-022-00932-z>
- Khorana, J., Tantivit, Y., Phiuphong, C., Pattapong, S., & Siripan, S. (2019). Foreign Body Ingestion in Pediatrics: Distribution, Management, and Complications. *Medicine (Kaunas, Lithuania)*, 55(10), 686. <https://doi-org.ez.inter.edu/10.3390/medicina55100686>
- Lozano, P., & Houtrow, A. (2018). Supporting Self-Management in Children and Adolescents With Complex Chronic Conditions. *Pediatrics*, 141(Suppl 3), S233–S241. <https://doi-org.ez.inter.edu/10.1542/peds.2017-1284H>
- McIntosh, R. (2022). Improving Nursing Student Resilience Using Online Simulation and Resilience-Based Content in a Pediatric Course. *Journal of Nursing Education*, 61(6), 348. <https://doi.org/10.3928/01484834-20220404-09>
- Patton & Belll (2022). *Anatomy and Physiology Laboratory Manual and E-Labs*. 11th ed. ISBN 0323791069 / 978-0323791069. Elsevier.
- Patton & Thibodeau (2018). *Anatomy & Physiology*. 10th ed. ISBN 0323528902 / 978-0323528900. Mosby.
- Pérez-Portabella Maristany, C., & Redecillas Ferreiro, S. E. (2017). Administración de la nutrición parenteral pediátrica [Administration of pediatric parenteral nutrition]. *Nutricion hospitalaria*, 34(Suppl 3), 50–52. <https://doi-org.ez.inter.edu/10.20960/nh.1381>

- Safety Project (2018). Multidisciplinary guidelines for the management of pediatric tracheostomy emergencies. *Anesthesia*, 73(11), 1400–1417. <https://doi-org.ez.inter.edu/10.1111/anae.14307>
- Salerno, S. N., Burckart, G. J., Huang, S. M., & Gonzalez, D. (2019). Pediatric Drug-Drug Interaction Studies: Barriers and Opportunities. *Clinical pharmacology and therapeutics*, 105(5), 1067–1070. <https://doi-org.ez.inter.edu/10.1002/cpt.1234>
- Seth R. (2020). COVID-19 Pandemic: The Challenges for Pediatric Oncology. *Indian Pediatrics*, 57(6), 589–590. <https://doi-org.ez.inter.edu/10.1007/s13312-020-1873-z>
- Silvestri & Silvestri (2022). *Saunders Comprehensive Review NCLEX-RN Examination*. 9th ed. ISBN 0323795307 / 978-0323795302. Saunders.
- Somekh, I., Somech, R., Pettoello-Mantovani, M., & Somekh, E. (2020). Changes in Routine Pediatric Practice in Light of Coronavirus 2019 (COVID-19). *The Journal of Pediatrics*, 224, 190–193. <https://doi-org.ez.inter.edu/10.1016/j.jpeds.2020.05.053>
- Wegner Araya A. (2018). Reanimación con control de daños en el trauma grave pediátrico [Damage control resuscitation in pediatric severe trauma]. *Revista chilena de pediatría*, 89(1), 118–127. <https://doi-org.ez.inter.edu/10.4067/S0370-41062018000100118>
- Werk, L. N., Diaz, M. C., Cadilla, A., Franciosi, J. P., & Hossain, M. J. (2019). Promoting Adherence to Influenza Vaccination Recommendations in Pediatric Practice. *Journal of primary care & community health*, 10, 2150132719853061. <https://doi-org.ez.inter.edu/10.1177/2150132719853061>
- Yeap, E., Pacilli, M., & Nataraja, R. M. (2020). Inguinal hernias in children. *Australian Journal of general practice*, 49(1-2), 38–43. <https://doi-org.ez.inter.edu/10.31128/AJGP-08-19-5037>

Audiovisual Resources

- Assessment and intervention. (2012). [Video/DVD] Medcom. Retrieved from <https://video-alexanderstreet-com.ez.inter.edu/watch/assessment-and-intervention>
- Classroom Productions (Producer), &. (2017). Cardiopulmonary assessment and cardiac anomalies. [Video/DVD] Medcom. Retrieved from <https://video-alexanderstreet-com.ez.inter.edu/watch/cardiopulmonary-assessment-and-cardiac-anomalies-2>
- Classroom Productions (Producer), 2017). Physical anomalies and neurologic issues. [Video/DVD] Medcom. Retrieved from <https://video-alexanderstreet-com.ez.inter.edu/watch/physical-anomalies-and-neurologic-issues>
- Jon Frank, & Medcom (Producers), & Cobb, D. (Director). (2017). Assessing pediatric pain. [Video/DVD] Medcom. Retrieved from <https://video-alexanderstreet-com.ez.inter.edu/watch/assessing-pediatric-pain-2>
- Jon Frank, & Medcom (Producers), & Cobb, D. (Director). (2017). Treating pediatric pain. [Video/DVD] Medcom. Retrieved from <https://video-alexanderstreet-com.ez.inter.edu/watch/treating-pediatric-pain>

Jon Frank, & Medcom (Producers), & Cobb, D. (Director). (2017). Understanding pediatric pain. [Video/DVD] Medcom. Retrieved from <https://video-alexanderstreet-com.ez.inter.edu/watch/understanding-pediatric-pain>

Medcom (Producer), & Moore, A. (Director). (2016). Pediatrics. [Video/DVD] Medcom. Retrieved from <https://video-alexanderstreet-com.ez.inter.edu/watch/pediatrics>

Thomas Walters, Jon Frank, & Medcom (Producers), &. (2014). Neonates, infants, and toddlers. [Video/DVD] Medcom. Retrieved from <https://video-alexanderstreet-com.ez.inter.edu/watch/age-specific-care-neonates-infants-and-toddlers>

Thomas Walters, Jon Frank, & Medcom (Producers), &. (2014). Preschoolers, school-agers, tweens, and adolescents. [Video/DVD] Medcom. Retrieved from <https://video-alexanderstreet-com.ez.inter.edu/watch/age-specific-care-preschoolers-school-agers-tweens-and-adolescents>

Thomas Walters, Jon Frank, & Medcom (Producers), &. (2015). Introduction and neglect. [Video/DVD] Medcom. Retrieved from <https://video-alexanderstreet-com.ez.inter.edu/watch/introduction-and-neglect>

Thomas Walters, Jon Frank, & Medcom (Producers), &. (2015). Physical and psychological abuse. [Video/DVD] Medcom. Retrieved from <https://video-alexanderstreet-com.ez.inter.edu/watch/physical-and-psychological-abuse>

Electronic Resources

Information Access Center - <http://cai.inter.edu/>

For Guidelines Americans - <http://www.health.gov/dietaryguidelines/>

Focus on National Institute on Minority Health and Health Disparities (NIMHD)
<http://www.nimhd.nih.gov/>

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