UNIVERSITY OF FLORIDA

COLLEGE OF NURSING

COURSE SYLLABUS

SUMMER 2023

COURSE NUMBER NGR 6338

COURSE TITLE Pediatric Advanced Pharmacology

CREDITS 2

PRE or CO-REQUISITES NGR 6172 Pharmacotherapeutics for Advanced Nursing Practice

Faculty Michael Maymi, DNP, APRN, CPNP-AC, CCRN, CNE

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**\***Faculty are generally available to meet with students (in the office or virtually) as listed above. Due to professional travel and other unavoidable obligations, faculty may not be present every week without notice. It advisable that students confirm availability or make an appointment in advance.

COURSE DESCRIPTION This course provides advanced knowledge of medications related to pediatric care. The focus is on the pharmacological management of common and acute conditions in the neonate, infant, child and adolescent . Emphasis is on pediatric medical conditions, dosing, management, physiologic and metabolic characteristics.

COURSE OBJECTIVES Upon completion of this course, the student will be able to:

1. Create appropriate pharmacologic management plans for specific health conditions commonly seen in the pediatric patient
2. Justify special considerations in the pharmacological management in the pediatric population.
3. Evaluate supportive management of specific pediatric conditions receiving pharmacologic management in pediatric specialty care conditions such as congenital cardiac care, metabolic disorders, chemotherapy, and mental health.

COURSE SCHEDULE

Faculty Section Day

Maymi 0210 Web-based

E-Learning in Canvas is the course management system that you will use for this course. E-Learning in Canvas is accessed by using your Gatorlink account name and password at <http://elearning.ufl.edu/>. There are several tutorials and student help links on the E-Learning login site. If you have technical questions call the UF Computer Help Desk at 352-392-HELP or send email to [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).

It is important that you regularly check your Gatorlink account email for College and University wide information and the course E-Learning site for announcements and notifications. Course websites are generally made available on the Friday before the first day of classes.

TOPICAL OUTLINE

1. Pediatric Pharmacokinetics and Pharmacodynamics
2. Antibiotic principles in the neonate, infant, and child
3. Management of Pediatric Infections I
4. Management of Pediatric Infections II
5. Sedation and Analgesia in the neonate, infant, and child
6. Neuromuscular blockade
7. Chemotherapy and Immunosuppression in the pediatric patient
8. Seizure management
9. Treatment of pediatric mental health disorders for the acute care and primary care provider (Attention Deficit, Autism, depression)
10. Treatment of pediatric Endocrine Disorders
11. Therapies for pediatric overdose
12. Alternative and Complementary therapies for the pediatric patient.

TEACHING METHODS

Lecture/Discussion, Case Presentations, Audio-Visual Materials, Web Based Tutorials.

LEARNING ACTIVITIES

Online lectures, web-based activities, assigned readings, group discussion, decision-making using simulated clinical scenarios, skills practice and return performance demonstration in the laboratory setting.

EVALUATION METHODS/COURSE GRADE CALCULATION

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| --- | --- |
| Assignment | Weight of Grade |
| Weekly Discussion Board Assignments | 10% |
| Quiz 1 | 20% |
| Quiz 2 | 20% |
| Medication Matrix | 10% |
| Medication Presentation | 10% |
| Unfolding Case Study | 30% |
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MAKE UP POLICY

Only requests that have been given prior approval for late submission will be given full credit if submitted after the posted deadline. Otherwise, students will lose 10% of the total points of an assignment for each day it is submitted late.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:   
<https://catalog.ufl.edu/graduate/regulations/#text>

GRADING SCALE/GRADE POINTS

A 95-100 (4.0) C 74-79 (2.0)

A- 93-94 (3.67) C- 72-73 (1.67)

B+ 91- 92 (3.33) D+ 70-71 (1.33)

B 84\*-90 (3.0) D 64-69 (1.0)

B- 82-83 (2.67) D- 62-63 (0.67)

C+ 80-81 (2.33) E 61 or below (0.0)

\* 84 is the minimal passing grade

For more information on grades and grading policies, please refer to University’s grading policies: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

COURSE EVALUATION

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

ACCOMMODATIONS DUE TO DISABILITY

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://disability.ufl.edu/> ) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

PROFESSIONAL BEHAVIOR

The College of Nursing expects all Nursing students to be professional in their interactions with patients, colleagues, faculty, and staff and to exhibit caring and compassionate attitudes. These and other qualities will be evaluated during patient contacts and in other relevant settings by both faculty and peers. Behavior of a Nursing student reflects on the student's individual’s ability to become a competent professional Nurse. Attitudes or behaviors inconsistent with compassionate care; refusal by, or inability of, the student to participate constructively in learning or patient care; derogatory attitudes or inappropriate behaviors directed at patients, peers, faculty or staff; misuse of written or electronic patient records (e.g., accession of patient information without valid reason); substance abuse; failure to disclose pertinent information on a criminal background check; or other unprofessional conduct can be grounds for disciplinary measures including dismissal.

INCLUSIVE LEARNING ENVIRONMENT

We strive to provide an inclusive learning environment as we prepare graduates who care, lead, and inspire. As we share our nursing values and personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels they belong to the College of Nursing community.

CIVILITY STATEMENT

Civility among all individuals in the CON (faculty, staff and students) is vital for an inclusive environment that fosters personal reflection, growth and a collective harmony.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT

Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/> . Students are required to provide their own privacy screen for all examination’s administered to student laptops. No wireless keyboards or wireless mouse/tracking device will be permitted during examinations.

University and College of Nursing Policies

Please see the College of Nursing website for student policies (<http://students.nursing.ufl.edu/currently-enrolled/student-policies-and-handbooks/>)

REQUIRED TEXTBOOKS

Marcdante, K., Kleigman, R.M., & Schuh, A.M.(2023) *Nelson Essentials of Pediatrics 9th Edition.* Philadelphia PA, Elsevier.

Rosenthal, L., & Burchum, J. (2020). *Lehne’s Pharmacotherapeutics for Advanced Practice Nurses and Physician Assistants-E-Book*. Elsevier Health Sciences.

Takemoto, C.K, Hodding, J.H., & Krause, D.M. (2022). *Pediatric & neonatal dosage handbook.* 29th edition. Philadelphia: Walters Kluwer. ISBN: 9781591953746.

Kahl, L & Hughes, H. (2021). *The Harriet Lane handbook*, *22st Ed*. Philadelphia, PA:

Elsevier.

RECOMMENDED TEXTBOOKS

Cabana, M.D., Brakeman, P.R., Curran, M.L., DiMeglia, L.A., Golden, W.C., Goldsby, R.E.…Tanel, R.E. (Eds). (2019). *5-Minute pediatric consult 2020* (8th ed.). Philadelphia, PA: Wolters Kluwer

Burns, Dunn, Brady, Starr, and Blosser (2012). *Pediatric Primary Care* (5th Ed.). Philadelphia, PA: Saunders.

Redbook Online. <http://aapredbook.aappublications.org/>

American Academy of Pediatrics. Committee on Infectious Diseases. (2021*). Red book : report of the Committee on Infectious Diseases 32nd Edition.* Elk Grove Village, IL : American Academy of Pediatrics

WEEKLY CLASS SCHEDULE

**\*NOTE: Any course content is subject to change to facilitate learning.**

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| DATE | Module | TOPIC/EVALUATION | READINGS | Program  Objectives |
| May 15-21 | Module 1 | Pediatric Pharmacokinetics and Pharmacodynamics | Video letures, PowerPoints  Journal Articles | 1,2,3 |
| May 22-28 | Module 2 | Anti-infectives | Video letures, PowerPoints  Journal Articles | 1,2,3 |
| May 29-June 4 | Module 3 | Respiratory Disorders | Video letures  PowerPoints  Journal Articles | 1,2,3 |
| June 5-11 | Module 4 | Cardiac Disorders | Video letures  PowerPoints  Journal Articles | 1,2,3 |
| June 12-18 | Module 5 | Neruological Disorder  Pain and Sedation | Video letures  PowerPoints  Journal Articles  Due June 18:  Quiz 1 | 1,2,3 |
| June 19-25 | Module 6 | GI/Endocrine | Video letures  PowerPoints  Journal Articles  Due June 25: Medication Matrix | 1,2,3 |
| Summer Break June 26-July 2 | | | | |
| July 3-9 | Module 7 | Musculoskeletal  Behavioral Mental Health | Video letures  PowerPoints  Journal Articles | 1,2,3 |
| July 10-16 | Module 8 | Renal/Liver | Video letures  PowerPoints  Journal Articles  Due July 16:  Medication Presentation | 1,2,3 |
| July 17-23 | Module 9 | Hematology | Video letures  PowerPoints  Journal Articles | 1,2,3 |
| July 24-30 | Module 10 | GU | Video letures  PowerPoints  Journal Articles | 1,2,3 |
| July 31-Aug 6 | Module 11 | Transplant  Immunosuppression | Video letures  PowerPoints  Journal Articles  Due Aug 6:  Quiz #2 | 1,2,3 |
| Aug 7-10 |  | Finals week | Due Aug 7: Unfolding Case Study | 1,2,3 |

Program Objectives

The purposes of the curriculum leading to the degree Doctor of Nursing Practice are to:

1. Prepare the student to acquire advanced competencies in increasingly complex practice and emerging leadership roles.
2. Provide the student with a significant and comprehensive knowledge base that supports scientific skepticism and the incorporation of new knowledge in advanced nursing practice.
3. Provide the student with enhanced knowledge for the acquisition of leadership skills used to improve nursing practice and patient outcomes.

Upon completion of the doctoral program, the graduate will be able to:

1. Evaluate scientific bases from extant and emerging areas of knowledge for advanced nursing practice.
2. Evaluate decision support systems to solve clinical problems for individuals, aggregates and systems.
3. Develop advanced leadership and collaborative skills to mobilize interdisciplinary teams to solve highly complex clinical problems.
4. Develop expertise to formulate health policy and provide leadership in establishing clinical excellence and creating new models of cost-effective health care delivery.
5. Critically assess, plan, intervene and evaluate the health experiences of individuals, aggregates and systems to provide safe, evidence-based care.
6. Synthesize knowledge of cultural diversity and global perspectives in delivering health care and in critiquing nursing systems.

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| Approved: | Academic Affairs Committee:  General Faculty:  UF Curriculum Committee: | 09/2020  10/2020  11/2020 |