

PHA5609 Pediatric Pharmacotherapy

Spring 2023

2 Credit Hours – [A-E Grading]

This elective course will provide students with an understanding of the health care needs of the pediatric patient. In addition, the students will develop the knowledge and skills to provide pharmaceutical care to pediatric patients in both ambulatory and inpatient settings. The course will focus on developmental stages of growth, common pediatric disease states, and specific pharmacotherapeutic considerations unique to pediatric patients. The course will be taught through a combination of lectures and active learning sessions.

Teaching Partnership Leaders

Kalen Manasco, Pharm.D., BCPS, BCPPS, FCCP, FPPA

- Email: kmanasco@cop.ufl.edu
- Office: HPNP 3310
- Phone: 352 – 294 - 8749

Office Hours: Please see the Canvas course site for posted office hours.

Renad Abu-Sawwa, Pharm.D., BCPPS

- Email: rabusawwa@cop.ufl.edu
- Office: HPNP 2314A
- Phone: 352 – 294 - 8779

Office Hours: Please see the Canvas course site for posted office hours.

See Appendix A. for Course Directory of Faculty and Staff Contact Information.

Entrustable Professional Activities

This course will prepare you to perform the following activities which the public entrusts a Pharmacist to perform:

1. **EPA A1.** Collect subjective and objective data by performing a patient assessment and gathering data from chart/electronic records, pharmacist records, other health professionals and patient/family interviews.
2. **EPA A2.** Interpret patient data, and identify medication-related problems and develop a prioritized problem list.
3. **EPA A3.** Formulate evidence-based care plans in collaboration with an interprofessional team. Utilize clinical guidelines in the development of a pharmacotherapy plan.
4. **EPA A5.** Provide counseling and medications and health wellness (including referral when there are social determinants of health and disparities).
5. **EPA A6.** Assess and counsel a patient about health-wellness
6. **EPA A7.** Present a succinct oral patient summary and plan to a health care provider. Defend a therapeutic plan verbally or in writing using references, guidelines, or primary literature.

7. **EPA A9.** Collaborate as a member of an interprofessional team and provide patient-centered care.

Course-Level Objectives

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

1. Explain the challenges of providing pharmaceutical care to pediatric patients.
2. Identify and utilize appropriate drug information resources to help make decisions about the management of common pediatric disease states.
3. Recommend appropriate therapy and monitoring of common pediatric disease states (to include appropriate patient counseling techniques about medications) through participation in patient case discussions.
4. Calculate pediatric dosages of medications and provide information on the availability of dosage forms (i.e., manufactured product, extemporaneous formulation).
5. Identify controversial topics relating to the pharmaceutical care of pediatric patients for group discussions.

Course Pre-requisites

1. Completion of all Year 1 and 2 Pharm.D. program coursework including milestones.
2. Satisfactory completion of Blocks 8.

Course Co-requisites

N/A

Required Textbooks/Readings

DiPiro, Joseph, et al. DiPiro: Pharmacotherapy A Pathophysiologic Approach. 12th ed., McGraw-Hill.
(Available in Access Pharmacy)

Use [UF VPN to access UF Libraries Resources](#) when off-campus.

The UF HSC library staff can assist you with questions or issues related to accessing online library materials. For assistance contact your College of Pharmacy librarian or visit the [HSC Library Website](#) at this URL: <http://www.library.health.ufl.edu/>

Suggested Textbooks/Readings

Benavides S, Nahata MC, eds. Pediatric Pharmacotherapy. 2nd edition. Lenexa, Kansas: American College of Clinical Pharmacy; 2020. ISBN: 978-1-952291-04-3. Available for purchase online: <https://www.accp.com/store/product.aspx?pc=PEDPC20G>

Kliegman R, Stanton B, St. Geme J, Schor N. Nelson Textbook of Pediatrics. Elsevier Health Sciences, Philadelphia, PA, 20th edition, 2015. ISBN-13: 978-1455775668. Available via HSC library website at this URL:
<http://www.library.health.ufl.edu/>

Other Required Learning Resources

N/A

Materials & Supplies Fees

N/A

Student Evaluation & Grading

Evaluation Methods and How Grades are calculated.

[The Canvas® gradebook will be set-up using the percentages below to compute the grade.]

Table 1.1 Evaluation and Grading

Assessment Item	Grade Percentage
Post lecture / pre-class quizzes (5 @ 5% each)	25%
ALS / Group Discussion (4 @ 5% each)	20%
Group Presentation (<i>see Appendix C</i>)	35%
Final exam	20%
Total	100%

Table 1.2 Grading Scale

Percentage	Letter Grade
92.50-100%	A
89.50-92.49%	A-
86.50-89.49%	B+
82.50-86.49%	B
79.50-82.49%	B-
76.50-79.49%	C+
72.50-76.49%	C
69.50-72.49%	C-
66.50-69.49%	D+
62.50-66.49%	D
59.50-62.49%	D-
< 59.50%	E

Rounding of grades:

Final grades in Canvas will be rounded to the 2nd decimal place. If the decimal is X.495 or higher, Canvas will round the grade to X.50. The above scale depicts this policy and grades are determined accordingly. Grade assignment is made using this policy and NO EXCEPTIONS will be made in situations where a student's grade is "close."

Educational Technology Use

The following technology below will be used during the course and the student must have the appropriate technology and software.

1. ExamSoft™ Testing Platform
2. Canvas™ Learning Management System

For technical support, navigate to [Educational Technology and IT Support Contact Information](http://curriculum.pharmacy.ufl.edu/current-students/technical-help/) at this URL: <http://curriculum.pharmacy.ufl.edu/current-students/technical-help/>

Pharm.D. Course Policies

The Policies in the following link apply to this course. Review the General [Pharm.D. Course Policies](http://curriculum.pharmacy.ufl.edu/current-students/course-policies/) carefully, at this URL: <http://curriculum.pharmacy.ufl.edu/current-students/course-policies/>

Makeup Assignments

Makeup assignments may be required for excused absences from all Active Learning Sessions. Students will be required to complete the makeup assignment within one week of the missed session.

Late Assignments

Late assignments will be discussed on a case-by-case basis with your instructor.

Respect for Diversity

The University of Florida College of Pharmacy strives to stimulate a culture that promotes diversity and inclusion within an exceptional community of students, faculty, and staff. It is our intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength, and benefit.

We intend to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let us know ways to improve the course's effectiveness for you personally or for other students or student groups.

If any of our class meetings conflict with any of your religious events, an excused absence will be provided when requested using the standard UF COP process as detailed in the [UF COP Course policies](#).

If you feel that you have experienced or witnessed any bias/treatment that falls short of these expectations, you may submit a report through the UF [COP Student Mistreatment Report](#).

Course Evaluation Process

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.bluer.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Appendix A. Course Directory

Teaching Partnership Leader/Course Director(s):

Kalen Manasco, Pharm.D., BCPS, BCPPS, FCCP, FPPA

- Email: kmanasco@cop.ufl.edu
- Office: HPNP 3310
- Phone: 352 – 294 - 8749

Office Hours: Please see the Canvas course site for posted office hours.

Renad Abu-Sawwa, Pharm.D., BCPPS

- Email: rabusawwa@cop.ufl.edu
- Office: HPNP 2314A
- Phone: 352 – 294 - 8779

Office Hours: Please see the Canvas course site for posted office hours.

Questions to Ask:

- Concerns about performance
- Guidance when there are performance problems (failing grades)
- General questions about content

Other Teaching Partnership Faculty Members:

Emilie Lynch, Pharm.D.

- Email: ebergmsa@cop.ufl.edu
- Office: GNV

Tori Gray, Pharm.D.

- Email: tgra0011@shands.ufl.edu

Sarah Kennedy, Pharm.D.

- Email: sken0007@shands.ufl.edu

Instructional Designer:

Holly Fremen

Email: holly.fremen@cop.ufl.edu

Phone: (352) 273 – 5558

Academic Coordinator Gainesville Campus:

Ashley Williams

Email: acwilliams@ufl.edu

Phone: 352-273-6523

Office: HPNP 4309

Absence/Tardy Email: (Visit the course policy site for further instructions)

Educational Coordinators

Katie Orben

Email: korben06@ufl.edu

Office: Jacksonville Campus

Andrea M Arredondo

Email: aarredondo1@cop.ufl.edu

Office: Orlando Campus

Phone: (407) 313 - 4087

Questions to Ask:

- Issues related to course policies (absences, make up exams, missed attendance)
- Absence/tardy requests (Only the Academic Coordinator handles absence requests)
- Questions about dates, deadlines, meeting place
- Availability of handouts and other course materials
- Assignment directions
- Questions about grade entries in gradebook (missing grades, incorrect grade)
- Assistance with ExamSoft® (Distance campus students may contact the Educational Coordinator for use of Examplify and assistance during exams. The Academic Coordinator is the contact person for issues related to grading and posting of ExamSoft grades.)

Appendix B: Course Outline

Date	Activity	Module #	Unit Topic	Learning Objectives Covered	Contact Time [hr.]a	Responsible
04/26/23	Module					Kalen Manasco
04/26/23	Lecture Video	1.1	Watch: Introduction to Pediatrics	1,2,4	0.5	Kalen Manasco

04/26/23	Lecture Video	1.2	Watch: Careers in Pediatric Pharmacy	1,2	0.5	Kalen Manasco
04/26/23 at 12:00p m - 1:50p m	Active Learning Session	1	Active Learning Session 1		2	Kalen Manasco
04/26/23	Quiz (In-class)	1	Module 1 Quiz			Kalen Manasco
04/26/23	Other		Group Project Preparation		1.5	
04/28/23	Module	2				Renad Abu-Sawwa
04/28/23	Lecture Video	2.1	Diabetes in Pediatrics	3	0.75	Tori Gray
04/28/23	Reading	2.2	Pediatric Considerations in Research	1,2	0.5	Renad Abu-Sawwa
04/28/23 at 12:00p m - 1:50p m	Active Learning Session	2	Active Learning Session 2		2	Renad Abu-Sawwa
04/28/23	Quiz (In-class)	2	Module 2 Quiz			
04/28/23	Other		Group Project Preparation		2	
05/01/23	Module	3				Kalen Manasco
05/01/23	Lecture Video	3.1	Fluids/Electrolytes/Nutrition	3,4	1	Kalen Manasco
05/01/23	Lecture Video	3.2	Cystic Fibrosis	3	1	Kalen Manasco
05/01/23	Lecture Video	3.3	Renal Disorders	3	0.5	Kalen Manasco
05/01/23 at 12:00p m - 1:50p m	Active Learning Session	3	Active Learning Session 3		2	Kalen Manasco

05/01/23	Quiz (In-class)	3	Module 3 Quiz			
05/01/23	Other		Group Project Preparation		2	
05/03/23	Module	4				Renad Abu-Sawwa
05/03/23	Lecture Video	4.1	PICU Basics and Controversies	1,3,5	1	Renad Abu-Sawwa
05/03/23	Lecture Video	4.2	Toxicology	1, 3, 5	1	Renad Abu-Sawwa
05/03/23 at 12:00p m - 1:50p m	Active Learning Session	4	Active Learning Session 4		2	Renad Abu-Sawwa
05/03/23	Quiz (In-class)	4	Module 4 Quiz			
05/03/23	Other		Group Project Preparation		2	
05/05/23	Module	5				Renad Abu-Sawwa
05/05/23	Lecture Video	5.1	NICU Basics and Controversies	1,3	0.75	Sarah Kennedy
05/05/23	Lecture Video	5.2	Pediatric Oncology Principles	3	1	Emilie Lynch
05/05/23 at 12:00p m - 1:50p m	Active Learning Session	1-5	Active Learning Session 5		2	Renad Abu-Sawwa
05/05/23	Quiz (In-class)	5	Module 5 Quiz			
05/08/23	Module	6	Group Presentations			Kalen Manasco

05/08/23 at 12:00p m - 1:50p m	Active Learning Session	1-5	Active Learning Session 6: Group Project Presentations		2	
05/08/23	Assignment	1-5	Group Project Presentations	5		
05/12/23 at 9:00a m - 11:00a m	Exam	1-5	Final Exam			
			Total Contact Time		28	

Appendix C: Group Presentation

Students will be placed into groups on the first day of class and be required to make a brief presentation at the end of the semester on a unique pediatric disease state. The presentation should be in both oral and written format for assessment. You should include background on the disease state and also evidence-based information about the treatment (review of clinical practice guidelines, clinical trials, etc.). The following rubric will be used to assess the presentation skills of the members of the group. Each member of the group will be expected to contribute to both the written and oral presentation.

	Exemplary 10	Accomplished 7	Developing 5	Beginning 3
Organization	Information presented in logical, interesting sequence, is accurate and very comprehensive	Information in logical sequence, is accurate and comprehensive	Difficult to follow presentation--student jumps around or material; is either not accurate or not comprehensive	Cannot understand presentation; content is not accurate and not comprehensive
Subject Knowledge	Demonstrates full knowledge by answering all class questions with explanations and elaborations	At ease with expected answers to questions but does not elaborate	Uncomfortable with information and is able to answer only rudimentary questions	Does not have a grasp of the information. Cannot answer questions about subject
Graphics	Explain and reinforce screen text and presentation, information is in sufficient detail but not overwhelming	Relate to text and presentation, lacks sufficient detail or overwhelming amount of detail	Occasionally uses graphics that rarely support text and presentation	Uses superfluous graphics or no graphics
Research	Uses a variety of sources in reaching accurate conclusions (at least 5 sources that are primary, secondary, or tertiary sources.) All sources are properly cited	Uses a variety of sources in reaching conclusions (does not use 5 sources or does not use a variety of sources that are primary, secondary, or tertiary in nature)	Presents only evidence that supports a preconceived point of view (uses 1 or 2 sources or citations are incomplete)	Does not justify conclusions with research evidence (no sources cited)
	using an approved format.			

Oral Presentation Elocution/Eye Contact	Maintains eye contact and pronounces all terms precisely. All audience members can hear.	Maintains eye contact most of the time and pronounces most words correctly. Most audience members can hear presentation	Occasionally uses eye contact, mostly reading presentation, and incorrectly pronounces terms. Audience members have difficulty hearing	Reads with no eye contact and incorrectly pronounces terms. Speaks too quietly
Total Points				

Developed by Kay Sagmiller, Director Center for Teaching and Learning Oregon State University