Pediatric Pharmacy Practice (PHA 5609)
2 Semester Credit Hours

Course Purpose:
The purpose of this course is to make the pharmacy student more aware of the health care needs of pediatric patients and to give them the necessary knowledge and skills to positively impact pediatric patients.

Course Faculty and Office Hours

Course Coordinator:
Jennifer Williams, Pharm.D.
Assistant Dean and Campus Director
Clinical Associate Professor
University of Florida, College of Pharmacy

Office: 9200 113th St. N, PH102, Seminole, FL 33772
Email: williams@cop.ufl.edu
Phone: (727) 394-6213
Office hrs: (live/online) By appointment

Please see Appendix A for a listing of all faculty members involved in this team-taught course.

Place and Time of Class Sessions
All lectures are prerecorded and available on the course site on Sakai. Active learning activities are all coordinated within specific time frames on the course site on Sakai.

How This Course Relates to the Learning Outcomes You Will Achieve in the Pharm.D. Program:

This course prepares the Pharm.D. student to accomplish the following abilities and the related Student Learning Outcomes (SLOs) upon graduation:

1.2 Implement, monitor, evaluate, and adjust pharmaceutical care plans with accuracy and timeliness.
4.6 Communicate with pharmacists and other health professionals concerning patient care issues using appropriate written and verbal communication skills.
6.2 Demonstrate the ability to assimilate and apply basic, clinical, and social science knowledge in the care of patients.
8.1 Apply critical thinking, problem solving, and scientific reasoning skills to the practice of pharmacy (both patient problems and general practice problems).
8.3 Gather, analyze, and apply relevant scientific data, evidence-based data, and other information when solving practice problems (both patient-specific and general practice problems).
Course Objectives
Upon completion of this course the student will be able to:
1. Identify normal growth and development and understand the impact of acute and chronic illness on that development. Understand the impact of proper nutrition and prenatal care on development.
2. Make recommendations on the management of the following disease states. Where appropriate, compare and contrast the management, signs and symptoms, and prognosis as compared to the “same” disease state in adults.
   - Infections (otitis media, sinusitis, bronchiolitis, diarrhea, cellulitis, meningitis, osteomyelitis, pneumonia, sepsis)
   - Preventable infectious diseases (immunization practices)
   - Upper respiratory tract infections
   - The most common congenital heart defects
   - Ingestion’s and overdoses
   - Cystic Fibrosis
   - Prematurity
   - Pediatric Critical Care
3. Through participation in case discussions online, the student should exhibit the ability to use references and apply knowledge to make age appropriate decisions about the pharmaceutical needs and management of pediatric patients.

Pre-Requisite Knowledge and Skills
- PHA 5782 Pharmacotherapy II
- PHA 5783 Pharmacotherapy III

Course Structure & Outline
Course Structure
This course provides instruction through a combination of lectures, brief student presentations and online case discussions. Students will work in groups to make a 15 minute online presentation on a pediatric topic once during the semester. Student will also work in groups to complete two online case assignments. The cases will be identified by the instructor and may involve lecture topics covered during the previous weeks.

Course Outline/Activities
Please refer to Appendix B for the course schedule and outline of activities.

Textbooks
This course does not have a required text. Presenters may require additional materials or readings to supplement the lecture material.

Active Learning Requirements
Presentation
Students will be placed in randomly assigned groups for purposes of completing the presentation requirement in this course. Groups will consist of 4 or 5 group members. Group members may be from any campus, so students should plan to work together electronically using Adobe Connect for this presentation. A different presentation topic will be assigned to each group. Presentations should be 10-
15 minutes in length and will be recorded using Voice Thread by the posted deadline. All necessary instructions and directions regarding the use of Adobe Connect and Voice Thread for this presentation will be made available to students on the Sakai course site. Each presentation group will receive one grade for their presentation, not individual grades. All students are expected to watch all completed presentations. At the end of each presentation, students are expected to complete a short evaluation of the presentation, including a few thoughtful comments for the presenters, by the posted deadline. At the end of each presentation, students will pose questions on that presentation’s discussion board. Questions should be well thought out and should not duplicate a previously posted question for that presentation. Each student should post as least 3 questions total (not for each presentation) by the posted deadline. Each student will receive an individual participation grade for their participation in posting questions. Group members are expected to review the questions posted for their presentation and to provide complete answers, referenced as appropriate, by the posted deadline. All students are expected to evaluate their group members. Evaluations should be honest and accurately reflect each student’s participation in the presentation. Any student who receives a less than acceptable peer evaluation will be scheduled to meet with the course coordinator to discuss their participation and the resulting grade consequences for this assignment. See Appendix C for case assignment deadlines and rubric.

Cases
There will be two cases during this course. Students will be placed in randomly assigned groups for purposes of completing the case project requirement. Groups will consist of 4-5 group members. Group members may be from any campus, so students should plan to work together electronically for this project. Students will be randomized to a different group for the second case. Case materials will be posted on the Sakai course site the Friday before the case begins. During the case week, a defined period of time will be determined during which each group is allowed to post one question for either the patient or the healthcare professional. Groups will lose points for duplicated questions. The case facilitator will then answer each of those posted questions. A second defined time will allow each group to ask another question of either the patient or the healthcare professional. The case facilitator will then answer each of those posted questions. Each group will then work together to write one SOAPE note to submit for the group by the posted deadline. Any member of the group may submit the note, but only one note may be submitted per group. All students are expected to evaluate their group members. Evaluations should be honest and accurately reflect each student’s participation in the presentation. Any student who receives a less than acceptable peer evaluation will be scheduled to meet with the course coordinator to discuss their participation and the resulting grade consequences for this assignment. See Appendix D for case assignment deadlines and rubric.

Student Evaluation & Grading
Evaluation Methods
Exams 200 points
- Midterm Exam 100 points
- Final Exam 100 points
Cases 140 points
- Case One 70 points
- Case Two 70 points
Presentation 95 points
Grading Scale
The final grade in this course will be based on the total number of points earned on examinations, the presentation and cases. These points will be converted to a letter grade employing the following table:

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>Grade</th>
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<tbody>
<tr>
<td>&gt;405</td>
<td>A</td>
</tr>
<tr>
<td>392-404</td>
<td>A-</td>
</tr>
<tr>
<td>378-391</td>
<td>B+</td>
</tr>
<tr>
<td>361-377</td>
<td>B</td>
</tr>
<tr>
<td>348-360</td>
<td>B-</td>
</tr>
<tr>
<td>335-347</td>
<td>C+</td>
</tr>
<tr>
<td>318-334</td>
<td>C</td>
</tr>
<tr>
<td>305-317</td>
<td>C-</td>
</tr>
<tr>
<td>291-304</td>
<td>D+</td>
</tr>
<tr>
<td>274-290</td>
<td>D</td>
</tr>
<tr>
<td>261-273</td>
<td>D-</td>
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<tr>
<td>&lt;261</td>
<td>E</td>
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</tbody>
</table>

Additional information on minus grades is available on the University of Florida website: http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html.

Class Attendance Policy
No live sessions. Not applicable.

Quiz/Exam Policy
Each exam will cover material presented in lecture as well as required readings. There will not be a cumulative final. Questions for each exam will be prepared by lecturers and the course coordinator and will be based on lecture and reading content. The format for these exams will be multiple choice questions. Non-programmable calculators may be used during exams. Joint use of a calculator during an examination by more than one student is not allowed.

1. Exam Tardiness Policy: Students arriving late to an exam will be allowed to take the exam only if no other student on that campus has completed and left the exam room. The student will not be given extra time to complete the exam due to tardiness.
2. Return of Exams: Exams will not be returned to the student and exam keys will not be posted.
3. Posting of Exam Grades: Exam grades will be posted within one week of the exam. Notice will be provided to the students if there will be a delay in posting of exam grades.
4. Exam Rebuttals: The validity of each exam question will be determined solely from a validated statistical analysis of each question. Student comments will not be considered in this evaluation. After these determinations have been made, a final announcement will be posted to Sakai summarizing any changes that will occur in the exam scoring process. Any student who has serious concerns about their exam score is encouraged to contact the course coordinator for an appointment.

Make-up Exam Policy
Scheduled exams should only be missed for REAL EMERGENCIES. A student who misses an exam should notify the course coordinator via email within 24 hours. Students with an excused absence may be
allowed to take a make-up exam. Make-up exams should be arranged with the course coordinator and should be administered within two weeks of the original exam date.

Policy on Old Quizzes and Assignments
Students are not provided old assignments, quizzes or exams.

Assignment Deadlines
Please submit online assignments early to avert last minute issues with technology. No late cases, presentations or assignments will be accepted. The student will receive a zero for a late assignment.

General College of Pharmacy Course Policies
The College of Pharmacy has a website that lists course policies that are common to all courses. This website covers the following:
  1. University Grading Policies
  2. Academic Integrity Policy
  3. How to request learning accommodations
  4. Faculty and course evaluations
  5. Student expectations in class
  6. Discussion board policy
  7. Email communications
  8. Religious holidays
  9. Counseling & student health
 10. How to access services for student success

Please see the following URL for this information:

Complaints
Should you have any complaints with your experience in this course please contact your course coordinator. If you feel that the complaint is not addressed satisfactorily, please visit:
http://www.distancelearning.ufl.edu/student-complaints to submit a complaint.
Appendix A: Directions for Contacting Faculty & Course Faculty List

Directions for Contacting Course Faculty
All course communication, except for personal communications, will occur through the discussion board on the course website. All questions pertaining to course logistics should be posted on the course logistics discussion board. Discussion boards will be organized by lecture topic, and questions for individual lecturers should be posted under the relevant topic so that classmates may benefit from the discussion. The discussion board will be reviewed and questions answered within 3 business days after the posting. Personal questions can be addressed directly with the Course Coordinator by email or phone.

Instructors

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisa Thames, Pharm.D., BCPS</td>
<td>Chief, Clinical Pharmacy Services</td>
<td>Shands at the University of Florida</td>
</tr>
<tr>
<td>Tara McCabe, Pharm.D.</td>
<td>Pediatric Clinical Pharmacy Specialist</td>
<td>Shands Hospital for Children at the University of Florida</td>
</tr>
<tr>
<td>Jennifer Shenk, Pharm.D.</td>
<td>Pediatric Pharmacy Clinical Specialist</td>
<td>Arnold Palmer Medical Center</td>
</tr>
<tr>
<td>Carol Motycka, Pharm.D., BCACP</td>
<td>Assistant Dean and Campus Director, Clinical Associate Professor</td>
<td>University of Florida Jacksonville Campus</td>
</tr>
<tr>
<td>Brian Kelly, Pharm.D., BCPS</td>
<td>Pediatric Clinical Pharmacy Specialist</td>
<td>Shands Hospital for Children at the University of Florida</td>
</tr>
<tr>
<td>Roel Basaldue Jr, Pharm.D.</td>
<td>PGY1 Pediatric Pharmacy Resident (2011-2012)</td>
<td>Wolfson Children’s Hospital</td>
</tr>
<tr>
<td>Sven Normann, Pharm.D., DABAT</td>
<td>Associate Dean and Clinical Associate Professor</td>
<td>University of Florida</td>
</tr>
<tr>
<td>Steve Martin, Pharm.D.</td>
<td>Pediatric Cardiology</td>
<td>Arnold Palmer Hospital for Children</td>
</tr>
<tr>
<td>Bill Renfro, Pharm.D</td>
<td>Charge Pharmacist Decentral Pharmacy Practice</td>
<td>Shands Jacksonville Medical Center</td>
</tr>
<tr>
<td>Katie Smith Conrad, Pharm.D.</td>
<td>Clinical Specialist, Pediatric Critical Care</td>
<td>Arnold Palmer Hospital for Children</td>
</tr>
</tbody>
</table>
## Appendix B: Schedule of Course Activities/Topics

### Pediatric Pharmacy Practice (PHA 5609) Fall 2012 Lecture Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>1 - 9/17</td>
<td>General Pediatrics 101</td>
<td>Dr. Williams</td>
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<td></td>
<td>Ped. Nutrition &amp; Growth and Development</td>
<td>Dr. Thames</td>
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<td></td>
<td>Drug Use During Pregnancy and Breastfeeding</td>
<td>Dr. McCabe</td>
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<td></td>
<td>URTI and Otitis Media</td>
<td>Dr. McCabe</td>
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<tr>
<td>2 - 9/24</td>
<td>Childhood Obesity</td>
<td>Dr. McCabe</td>
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<tr>
<td></td>
<td>Serious Infections</td>
<td>Dr. McCabe</td>
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<tr>
<td>3 - 10/1</td>
<td>Begin Work on Group Presentations</td>
<td>ASSIGNMENT</td>
</tr>
<tr>
<td></td>
<td>Finalize Group Presentations and Record</td>
<td>ASSIGNMENT</td>
</tr>
<tr>
<td></td>
<td>Cystic Fibrosis</td>
<td>Dr. Kelly</td>
</tr>
<tr>
<td></td>
<td>Immunizations</td>
<td>Dr. Basaldua</td>
</tr>
<tr>
<td>4 - 10/8</td>
<td>Viewing of Group Presentations</td>
<td>ASSIGNMENT</td>
</tr>
<tr>
<td></td>
<td>October 8th (7-9pm) - Exam 1 (Peds 101 thru Cystic Fibrosis)</td>
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<tr>
<td>5 - 10/15</td>
<td>Case One</td>
<td>ASSIGNMENT</td>
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<tr>
<td></td>
<td>Toxicology</td>
<td>Dr. Normann</td>
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<td>6 - 10/22</td>
<td>Congenital Heart Disease</td>
<td>Dr. Martin</td>
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<tr>
<td></td>
<td>Neonatal Critical Care</td>
<td>Dr. Renfro</td>
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<td></td>
<td>Pediatric Critical Care – General</td>
<td>Dr. Conrad</td>
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<td></td>
<td>Pediatric Trauma</td>
<td>Dr. Conrad</td>
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<tr>
<td>7 - 10/29</td>
<td>Case Two</td>
<td>ASSIGNMENT</td>
</tr>
<tr>
<td>8 - 11/5</td>
<td>November 7th (7-9pm) - Exam 2 (Immunizations thru Pediatric Trauma)</td>
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</tbody>
</table>

**Exam 1:** October 8th 7-9 PM  
Gainesville: HPNP G-301A  
Orlando: 233  
Jacksonville: Conference Room  
St. Petersburg: 115A117AB

**Final Exam:** November 7th 7-9 PM  
Gainesville: HPNP G-301A  
Orlando: 233  
Jacksonville: Conference Room  
St. Petersburg: 115A117AB
Appendix C: Presentation Assignment Deadlines and Rubric

Presentation (group grade): 50 points
Students will be placed in randomly assigned groups for purposes of completing the presentation requirement in this course. Groups will consist of 4 or 5 group members. Group members may be from any campus, so students should plan to work together electronically using Adobe Connect for this presentation. A different presentation topic will be assigned to each group. Presentations should be 10-15 minutes in length and will be recorded using Voice Thread by the posted deadline. All necessary instructions and directions regarding the use of Adobe Connect and Voice Thread for this presentation will be made available to students on the Sakai course site. The link to your final version of your presentation should be posted in a new thread under your assigned topic, on the "Presentations" Forum in the discussion board. Each presentation group will receive one grade for their presentation, not individual grades.
Deadline: 10/3/12 (5:00 PM)

Questions posted (individual grade): 5 points
You are expected to respond to other groups' presentations with questions. Your questions should be well thought out and should not duplicate a previously posted question for that presentation. You should post at least 3 questions total (not for each presentation). These questions should be posted as replies to the presentation thread (on the Presentation Forum on the discussion board) that you are posting a question for. You will receive an individual participation grade for posting questions.
Deadline: 10/10/12 (5:00 PM)

Answers to questions (group grade): 15 points
Group members are expected to review the questions posted for their presentation and provide complete answers, referenced as appropriate. Answers should be posted as replies to the thread with the question, on the discussion board.
Deadline: 10/12/12 (5:00 PM)

Presentation Evaluations (individual grade): 20 points
All students are expected to watch all completed presentations. At the end of each presentation, you are expected to complete a short evaluation of the presentation, including a few thoughtful comments for the presenters. These evaluations should be posted as a reply to the "Post Presentation Evaluations Here" thread under the correct topic number, found on the "Presentations" Forum on the discussion board. These threads will appear after all presentations have been posted.
Deadline: 10/12/12 (5:00 PM)

Group member evaluations (individual grade): 5 points
You are expected to evaluate your group members. Evaluations are anonymous and should be honest/accurate in reflecting each of your group members' participation in the presentation. Any students who receive a less than acceptable peer evaluation will be scheduled to meet with the course coordinator to discuss their participation and the resulting grade consequences for this assignment. These evaluations will be submitted as an assignment thru a link in the "Assignments" section of this course.
Deadline: 10/14/12 (5:00 PM)
Appendix D: Case Assignment Deadlines and Rubric

Deadlines
Case 1:
Case posted for students: Friday Oct 12th at 8am
Discussion board open for first round of questions: Monday Oct 15th 8am to Tuesday Oct 16th 8am
First round of questions are answered by Facilitator: Tuesday Oct 16th
Discussion board open for second round of questions: Wednesday Oct 17th 8am-Thursday Oct 18th 8am
Second round of questions answered by Facilitator: Thursday Oct 18th
SOAPE note or "Case Answer" due from each group: Monday Oct 22nd at 5pm
Case 2:
Case posted for students: Friday Oct 26th at 8am
Discussion board open for first round of questions: Monday Oct 29th 8am to Tuesday Oct 30th 8am
First round of questions answered by Facilitator: Tuesday Oct 30th
Discussion board open for second round of questions: Wednesday Oct 31st 8am-Thursday Nov 1st 8am
Second round of questions answered by Facilitator: Thursday Nov 1st
SOAPE note or "Case Answer" due from each group: Monday Nov 5th at 5pm

Rubric
1st Questions posted (group grade): 10 points
One student from each group will post one question for the patient or caregiver on the case discussion board. Each group should start a new thread for their question, indicating their group number in the subject line. Your question should be well thought out and should not duplicate a previously posted question for this case.

2nd Questions posted (group grade): 10 points
One student from each group will post one question for the clinician on the case discussion board. Each group should start a new thread for their question, indicating their group number in the subject line. Your question should be well thought out and should not duplicate a previously posted question for this case.

SOAPE Note (group grade): 45 points
Each group will work together to write one SOAPE note to submit for the group. Any member of the group may submit the note, but only one note may be submitted per group. The SOAPE Note must have:
a. The Case # in the upper left corner
b. The Current Date just below the Case #
c. The Group # in the upper right corner
d. References listed as needed for the Note.
e. Total length should be approximately one page.
HINT: Make sure you use weight based dosing where appropriate. (Give doses as mg/kg, etc)

Group member evaluations (individual grade): 5 points
You are expected to evaluate your group members. Evaluations are anonymous and should be honest/accurate in reflecting each of your group members' participation in the case. Any students who receive a less than acceptable peer evaluation will be scheduled to meet with the course coordinator to discuss their participation and the resulting grade consequences for this assignment. These evaluations will be submitted as an assignment thru a link in the "Assignments" section of this course.