



**School of Pharmacy**  
**Course Syllabus**  
**Course # PHAR 6271**  
**Advanced Pediatric Pharmacotherapy**  
**Term: Spring 2021**  
**Tuesdays 4:00PM-5:50PM**

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**Course Coordinator: Denise I. Pinal, PharmD, BCPPS**  
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### **Course Description**

This course will provide an overview of topics relating to advanced pediatric pharmacotherapy for students who are interested in developing their knowledge in relevant concepts in pediatric pharmacy practice. The skills gained through this course will equip pharmacy students to participate in the optimal care of pediatric patients.

### **Pre-Requisites**

In order to enroll in this course, student must be in the P2 or P3 year of the curriculum.

**Pharmacists' Patient Care Process:** This course will utilize all concepts found within the Pharmacists' Patient Care Process. ( <https://www.pharmacist.com/sites/default/files/files/PatientCareProcess.pdf> )

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### **Office Hours**

The course coordinator will conduct virtual and in-person office hours upon appointment and will accommodate all students as time permits. Students may request an appointment with the course coordinator via e-mail. All appointments should be made at least 48 hours in advance.

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### **Course Learning Objectives:**

At the conclusion of this course, students shall be expected to:

| <b>Course Objectives</b>                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recognize key concepts related to the importance of pediatric medication safety in health care settings.                                                                   |
| Describe the pathophysiology responsible for disease states commonly encountered in in pediatric medicine.                                                                 |
| Recognize the major signs, symptoms, and clinical findings associated with each disease state.                                                                             |
| Identify usual pediatric medication doses, dosage forms, adverse drug reactions, and monitoring parameters of drug classes.                                                |
| Evaluate the pediatric pharmacy literature and common pediatric references to work through patient cases, drug information questions, and other course assignments.        |
| Interpret the clinical significance of differences in pharmacokinetic/pharmacodynamic parameters seen in pediatric patients.                                               |
| Formulate comprehensive pharmacotherapeutic plans that account for the unique pharmacokinetic, pharmacodynamic, and pharmacogenomic parameters seen in pediatric patients. |

**I = Introduce, R = Reinforce, A = Apply**

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## Detailed Course Meetings & Location

**This course meets on Tuesdays from 4:00PM-5:50PM.**

**Virtual Sessions will occur via Blackboard Collaborate. Class will be held virtually for the first six weeks of the course. Coordinator will communicate with students regarding updates after the first six weeks of the course have concluded.**

**In-Person sessions will occur in CABL 213**

In a major disruption (e.g., H1N1 epidemic, subzero weather), be prepared to maintain course progress via other means (e.g., Internet, our Blackboard course shell, etc.) and check your email (especially your UTEP miners account) regularly.

### Online Platform/Blackboard:

Accessing Course Content on Blackboard: All lectures, handouts, and course material will be located in Blackboard. Log into My UTEP.edu and click on the Blackboard link to access the online course for PHAR 6475. The course is individualized and students may access lectures/handouts as they are made available by course instructors. Except in cases of a UTEP network being “down” or “offline” you are ultimately responsible to ensure that your computer is connected to the internet and that any issues are addressed prior to class and/or assessments.

### Online Assessment Requirements:

This course requires the use of ExamSoft®. Students are responsible for ensuring they have access to the online assessment system. Assessments will be disseminated before the due date. This requires students to download the assessment using an internet connection. It is the student’s responsibility to maintain access to a reliable internet connection (with the rare exception of when UTEP’s systems are down).

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## Expectations of Students During Course

Student participation in class discussion is an essential component of the learning process. Students are expected to complete all assigned tasks before class to be sufficiently prepared to make a meaningful contribution to the class dialogue and activities. In order to achieve the learning outcomes for this course, students must come to class prepared, on time, be engaged, attentive and spend adequate time working through assignments. All students involved in group work and interdisciplinary instruction are expected to equally contribute and provide professional courtesies to their classmates regarding timelines and communication.

Students are expected to participate in all class-related activities. Class sessions will be recorded and made available online to ensure student access to course materials.

**Online Class Behavior: Students are expected to be professionals in all activities related to the completion of this course. Any behavior that is unprofessional in nature will not be tolerated (e.g., unprofessional or rude comments on discussion boards) and may result in a deduction in course grade or reporting of the student to the Office of Student Affairs for unprofessional behavior.**

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## Methods of Instruction/Learning

The learning outcomes in this course will be achieved via:

1. **Outside Preparation:** Students will be required to complete some readings and assignments outside of formal class hours. Students must complete all readings and assignments by the due date indicated.

2. **In-class Lectures:** Some instruction will be delivered via lecture-based format. Students are expected to actively participate in class discussions as they pertain to the lectures.
3. **Assignments and in-class activities:** Students may work on assignments and in-class activities throughout the semester. Team members must all complete delegated assignments on time and must be active participants in their teams.
4. **Patient Cases:** Some material will be delivered via case-based format. Active participation is expected from all students when reviewing and working through cases.
5. **Exams/Quizzes:** Exams and/or quizzes will be used to assess the student's knowledge of the course material
6. **Journal Article Review:** Each student will select an article from the pediatric and/or neonatology literature & critically review its content, methodology, results, and conclusions
7. **Drug Information Question:** Each student will be assigned 1 or more drug information questions that will require them to critically evaluate the literature in order to provide a written response.

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## Required Course Technology/Tools/Needs

### **Recommended Textbook / Resources:**

Pediatric Pharmacotherapy by Sandra Benavides & Milap Nahata, American College of Clinical Pharmacy 2<sup>nd</sup> ed.

### **Optional Resources:**

The Harriet Lane Handbook (20th Edition) by Engorn & Flerlage, Saunders (2014)

Neofax Drug Information & Pediatrics – Micromedex

Pediatric & Neonatal Dosage Handbook

Drugs in Pregnancy and Lactation

### **Laptop Computer**

- Students are expected to bring laptop computers to the class each day for participation in online exercises or assessments. It is the responsibility of the students to make sure that the laptops are in working condition and meet the University and School of Pharmacy IT requirements. (See SOP Student Handbook and Technical Assistance section of this syllabus).

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## Evaluation and Grading Policy

Course point distribution will be as follows:

| Type of Assessment                                                                 | % Course Grade |
|------------------------------------------------------------------------------------|----------------|
| Quizzes                                                                            | 15%            |
| Participation(e.g., in-class activities, team assignments, individual assignments) | 15%            |
| Journal Club Article Presentation                                                  | 25%            |
| Final Project                                                                      | 25%            |
| Patient Cases                                                                      | 20%            |
| <b>TOTAL</b>                                                                       | <b>100%</b>    |

### **Assignment of grades:**

**A = 90 – 100%**

**B = 80 – 89%**

**C = 70 – 79%**

**D = 60-69%**

**F = < 60%**

All Exams will be administered via ExamSoft®, unless noted otherwise.

General Statement on Grading Policy: It is the responsibility of the **student** to monitor his/her progress throughout the course and see that the required competency level is being maintained. Students should seek advice and assistance from the course coordinator as soon as difficulty with the material is encountered.

Students are expected to demonstrate professional behavior at all times.

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## Missed Quizzes / Exams / Assignments Policy

Only students who miss an exam, quiz or an assignment due date as a result of an **excused absence** will be allowed to make-up a missed assignment or assessment. In class pop-quizzes will not be allowed to be made up for students who miss class either for an excused or unexcused absence. Students should consult the UTEP School of Pharmacy Student Handbook for definitions and examples of excused absences.

### Remediation Policies:

Please refer to the Student Handbook for end-of-course remediation policies and timelines (*see Table of Contents for End of Course Remediation*).

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## Technical Assistance

Checking computer requirements and ensuring that all software up to date is essential for students to access course content. **Supported browsers include** – 1) For a PC: FireFox, Internet Explorer (Do NOT use IE7), and Chrome, 2) For a Mac: Safari, Firefox, and Chrome. To enhance browser performance, students should clear the browser cache and allow pop-ups. In addition to testing the web browser, check to ensure that the computer has an updated version of Java (go to <http://java.com>, click on “Do I have Java”, click on “Verify Java Version,” update Java if needed). Additional browser plug-ins may also be needed to view some content that your instructor may share on the learning management system. Common plug-ins include: Adobe Reader, Flash Player, Windows Media Player, QuickTime. When creating documents, slide presentations, spreadsheets, etc., be sure to use Microsoft Office or a compatible program (see 10 Free MS Word Alternatives). The UTEP Technology Support Services (3rd floor, UTEP Library) can also provide students with any applications, compatibility packs, patches, and updates that may be needed.

Students working off campus may need to set up a Virtual Private Network (VPN) on their computer to access UTEP resources for this class (i.e. Library). The link below provides information in setting up a VPN connection depending on the operating system. Students may contact the Help Desk for assistance (See Technical Assistance information).

<http://admin.utep.edu/Default.aspx?tabid=58534>

If technical problems are experienced with the course, students should contact the UTEP Helpdesk during: Monday–Friday: 8AM – 5PM. If calling within UTEP: 915.747.4357. If calling from outside UTEP: 915.747.5257. For more information, please visit <http://helpdesk.utep.edu>. For help with Blackboard:

<http://admin.utep.edu/Default.aspx?tabid=74094>

In order for UTEP to provide a stable learning environment, Thursdays from 12:00-6:00am MST are reserved for minor preventive maintenance. This maintenance window is scheduled during the lowest usage time for the system. Blackboard may or may not be available during this time, depending on whether maintenance is necessary. Whenever possible, this time will be utilized to perform all minor maintenance. Unscheduled outages occur rarely, but they do happen. In the event of an unscheduled outage, Technology Support Services will confer with appropriate student and faculty networks to provide appropriate notifications to those affected.

Students can also visit an on-campus lab such as the ATLAS lab located within the Undergraduate Learning Center (UGLC building) for additional technical assistance. In addition to the various campus computer labs (ATLAS in UGLC or LACIT in Liberal Arts for example), Technology Support Services provides workstations for student use. To learn more, please visit <http://admin.utep.edu/Default.aspx?tabid=74174>.

## Attendance and Classroom Behavior

The attendance policy for the School of Pharmacy is outlined in the Student Handbook. It is expected that students should demonstrate their commitment to the profession and respect for faculty, guest speakers, and colleagues by attending all classes and arriving to class on time and prepared for the day's lesson(s).

Attendance may be taken by course coordinator or instructors. **Missing class for an unexcused absence will result in deduction of participation/assignment points. Repeated late arrivals are also deemed unprofessional behavior and may result in a deduction of participation points at the discretion of the course coordinator.** Refer to the Evaluation and Grading Policy Section of the course. Students who miss class are fully responsible for the information covered during the class sessions, which may be included on exams, quizzes or other assessments.

**If a student has an excused absence for class, they should immediately notify the course coordinator(s) and instructor(s) for that class.** To secure approval for an absence related to travel for professional meetings or for events that fall outside of the criteria outlined in the Student Handbook, please refer to the Handbook for more information regarding required documentation for submission to the Office of Student Affairs.

## Unique Dress Policy for Course

Students must abide by the School of Pharmacy Dress Code Policy. A pharmacy student/intern white coat, name badge, and professional attire **must be worn at all times** during special presentations as instructed by the faculty coordinator. Please speak with course coordinator if you have questions regarding dress policy.

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## Exam Day Policy

No allowances will be made for an exam being missed other than documented illness or emergency. The student must contact the course coordinator for confirmation prior to the exam. If permission is granted to delay the exam; it is the student's responsibility to contact the course coordinator to arrange for an alternative exam time. In this event, the nature of the make-up will be at the discretion of the course coordinator (oral, written, increased weighting on the final, etc.). An unexcused absence from an exam may result in a grade of "zero" for that exam and will result in an extra 5% deduction of the total overall course.

### Student expectations prior and during examination

1. **Seating**
  - a. Randomized assigned seating will be utilized for each examination.
2. **Room**
  - a. Students must arrive to room 15 minutes ahead of examination. Students are not permitted to be in the examination room prior to assigned seating. If the student arrives late to the examination a grade penalty can occur as stipulated by the syllabus. No additional time will be provided for the examination. **If another student has already completed his/her exam and left the exam room when an unexcused late student arrival occurs, the late arrival will not be permitted to sit for the exam and will receive a grade of zero.**
3. **Exams**
  - a. Electronic exams need to be downloaded at a minimum 2 hours prior to the examination to avoid a grade penalty as dictated in the syllabus. Repeated instances (> 1 time) of not downloading electronic exams will result in a referral to the professionalism committee on the SOP Progression Committee.
  - b. Students are responsible for having a computer for electronic exams. Computers are available to check-out as a loan for exams from the ILC, and students should make early arrangements for securing computers. Students who show up without a computer to take an electronic exam will (1) be provided a paper exam, (2) may receive a grade deduction as stipulated in the course syllabus, and (3) will receive a professionalism referral to the SOP Progression Committee.
4. **Availability of items during exam**

- a. By default, faculty will provide scratch paper for examinations, unless faculty determines scratch paper is not necessary in which case students will receive advance notice that scratch paper will not be provided. Only faculty will provide scratch paper, and only scratch paper provided by the School of Pharmacy can be used during the examination. Any scratch paper utilized during an examination must have the student's name on every page and all pages must be turned in at the completion of the examination. Any exemption will be noted accordingly in the syllabus.
- b. No backpacks, purses, hats, large coats, and/or other bulky clothing permitted; these items need to be left outside the examination room or in an area in the exam room designated by the faculty/proctor.
- c. No food or drink allowed
- d. No electronic devices (for example: watches, phones, calculators, etc.) are permitted on the student during an examination unless approved by the instructor prior to the examination or inspected upon entry into the exam room for approval. A specific model for calculators may be specified in the course syllabus or provided in advance of the examination to students.
- e. Disruption of examination time due to an electronic device can result in a grade penalty as stipulated in the syllabus.
- f. Bathroom break: No bathroom breaks permitted during examinations unless a prior accommodation is made. Faculty maintain discretion over the permissibility of bathroom breaks; students should expect that a proctor will accompany them to the restroom and will wait outside the restroom if permission for restroom use is granted. No additional time will be provided for examinations when restroom breaks occur.

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## UTEP and SOP Policy for Academic Integrity

Any student who commits an act of academic dishonesty is subject to discipline. The instructor is required to report all suspected academic dishonesty to the UTEP Office of Student Conduct and Conflict Resolution. Please refer to the Student Handbook for SOP guidance on academic integrity (*see Table of Contents for Curriculum and Classroom Policies: Academic Integrity*).

Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, and any act designed to give unfair advantage to a student or the attempt to commit such acts.

Proven violations of the detailed regulations, as printed in the Handbook of Operating Procedures (HOP), and available in the Office of the Dean of Students and on the homepage of the Dean of Students at [www.utep.edu/dos](http://www.utep.edu/dos), may result in sanctions ranging from disciplinary probation, to a failing grade on the work in question, to a failing grade in the course, to suspension or dismissal, among others. (For more information, see: <http://sa.utep.edu/osccr/academic-integrity/>)

## Professionalism and Professional Conduct

While enrolled at the University, a student neither loses the rights nor escapes the responsibilities of citizenship. Thus, UTEP and the SOP value professionalism and expect all students to not only acquire but also maintain the highest standards of professional attitudes and behaviors in their interactions with their fellow classmates, staff, faculty, colleagues and their patients, as described in the Student Handbook and as per UTEP's student conduct policies (see <http://sa.utep.edu/osccr/student-conduct/> & <http://admin.utep.edu/Default.aspx?tabid=73922> for further information). Any student who engages in conduct that is prohibited by the Board of Regents' Rules and Regulations, University or SOP rules or by federal, state, or local law is subject to discipline whether such conduct takes place on or off campus or whether civil or criminal penalties are also imposed for such conduct. Please refer to the Student Handbook for specific expectations regarding professional conduct in the SOP (*see Table of Contents for Academic Progression: Good Standing: Professional*).

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## UTEP and SOP Policy for Special Accommodations (ADA)

"If you have or suspect a disability and need classroom accommodations, you should contact the Center for Accommodations and Support Services (CASS) at 747-5148." You can also e-mail the office at [cass@utep.edu](mailto:cass@utep.edu) or go by

their office in Union Building East (Room 106). For additional information, visit the CASS website at <http://sa.utep.edu/cass/>

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## General Statement About Course Syllabus

The course coordinator may adapt the syllabus/course calendar to support student and course success. The syllabus is subject to change to meet course needs, especially if there are unexpected disruptions or changes in class size, resources, etc. The most updated syllabus can be found on the course Blackboard shell. It is your responsibility to review the syllabus periodically for updates.

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## Additional Information:

### Campus Concealed Carry

Effective August 1, 2016.

<http://sa.utep.edu/campuscarry/>

### Civility Statement

You are expected to follow basic standards of courtesy (<http://admin.utep.edu/Default.aspx?tabid=73922>) and may be dismissed from class for blatant or sustained disruptive behavior

### Cell Phone Policy

Students should carry cell phones but keep the phone on the vibrate mode in the event students need to be notified by the emergency alert system. **Cell phone use for the purpose of texting, email, or social media is not permitted.** This is disruptive to fellow classmates, faculty, and the learning environment. The use of a cell phone or the ringing of the phone in class is considered unprofessional behavior. No cellphones, calculators, laptops or other items may be used during an assessment (e.g., exam or a quiz) unless specifically as part of that assessment and approved by the faculty member/instructor.

### Student Support

UTEP provides a variety of resources for those in need (e.g., if you feel overwhelmed, stressed or dealing with a crisis):

- UTEP's Counseling Center (free counseling to all students): 747-5302, which after-hours goes to a crisis line
- Mental Health Crisis Line: 779-1800
- National Suicide Prevention Hotline: 1-800-273-8255
- Veterans Crisis Line: 1-800-273-8255
- NAMI (National Alliance Against Mental Illness) of El Paso: 534-5478
- <http://carineducators.tumblr.com/survival>

### Title IX

Title IX of the Education Amendments of 1972 (Title IX), prohibit discrimination on the basis of sex in education programs or activities operated by recipients of Federal financial assistance. Sexual harassment of students, which includes acts of sexual violence, is a form of sex discrimination prohibited by Title IX. Sexual violence refers to physical sexual acts perpetrated against a person's will or where a person is incapable of giving consent due to the victim's use of drugs or alcohol. An individual also may be unable to give consent due to an intellectual or other disability. A number of different acts fall into the category of sexual violence, including rape, sexual assault, sexual battery, sexual coercion, stalking, and relationship violence. All such acts of sexual violence are forms of sexual harassment covered under Title IX.

In accordance with Title IX of the Education Amendments of 1972, UTEP does not discriminate on the basis of sex in the operation of its educational programs and activities. This commitment to non-discrimination applies to both employment in and admission to such programs and activities. [Link to full text at <http://admin.utep.edu/Default.aspx?tabid=68750>]

**PHAR 6271: Course Calendar and Topic Outline**  
**Advanced Pediatric Pharmacotherapy**

| <b>Module</b>                           | <b>Date</b> | <b>Content</b>                                                                                                                                                                  |
|-----------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                       | 1/18/22     | <ul style="list-style-type: none"> <li>▪ Syllabus Overview</li> <li>▪ Introduction to Pediatric Pharmacotherapy and Pharmacy Practice</li> <li>▪ Pediatric Cases 1-3</li> </ul> |
| 2                                       | 1/25/22     | <ul style="list-style-type: none"> <li>▪ Intro to Journal Club</li> <li>▪ Pediatric Cases 1-3 DUE 1/27@11:59PM</li> </ul>                                                       |
| 3                                       | 2/1/22      | <ul style="list-style-type: none"> <li>▪ Incidental Ingestions</li> </ul>                                                                                                       |
| 4                                       | 2/8/22      | <ul style="list-style-type: none"> <li>▪ Pediatric Infectious Diseases I</li> </ul>                                                                                             |
| 5                                       | 2/15/22     | <ul style="list-style-type: none"> <li>▪ Pediatric Infectious Diseases II</li> </ul>                                                                                            |
| 6                                       | 2/22/22     | <ul style="list-style-type: none"> <li>▪ Pediatric Cardiology</li> </ul>                                                                                                        |
| 7                                       | 3/1/22      | <ul style="list-style-type: none"> <li>▪ Neonatology</li> </ul>                                                                                                                 |
| 8                                       | 3/8/22      | <ul style="list-style-type: none"> <li>▪ Pediatric Endocrinology</li> </ul>                                                                                                     |
| <b>SPRING BREAK (3/15/21 – 3/19/21)</b> |             |                                                                                                                                                                                 |
| 9                                       | 3/22/22     | <ul style="list-style-type: none"> <li>▪ Pediatric Nephrology</li> </ul>                                                                                                        |
| 10                                      | 3/29/22     | <ul style="list-style-type: none"> <li>• Pediatric Neurology/Psych I</li> </ul>                                                                                                 |
| 11                                      | 4/5/22      | <ul style="list-style-type: none"> <li>▪ Pediatric Neurology/Psych II</li> <li>▪ Pediatric Gastroenterology</li> </ul>                                                          |



| <b>Module</b>      | <b>Date</b>           | <b>Content</b>                                                                                                                                                   |
|--------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>12</b>          | <b>4/12/22</b>        | <ul style="list-style-type: none"><li>▪ <b>Pediatric Heme/Onc</b></li></ul>                                                                                      |
| <b>13</b>          | <b>4/19/22</b>        | <ul style="list-style-type: none"><li>▪ <b>Pediatric Pharmacy Competencies</b></li><li>▪ <b>Pediatric Journal Club Presentations</b></li></ul>                   |
| <b>14</b>          | <b>4/26/22</b>        | <ul style="list-style-type: none"><li>▪ <b>Pediatric Pharmacy Competencies</b></li><li>▪ <b>Journal Club Presentations/Final Project Presentations</b></li></ul> |
| <b>15</b>          | <b>5/3/22</b>         | <ul style="list-style-type: none"><li>▪ <b>Pediatric Pharmacy Competencies</b></li><li>▪ <b>Final Project Presentations</b></li></ul>                            |
| <b>Finals Week</b> | <b>5/9/22-5/13/22</b> | <ul style="list-style-type: none"><li>▪ <b>TBD</b></li></ul>                                                                                                     |