

**Pharmacotherapy of Special Populations (PHR 396D)**  
**Unique Numbers #60280, #60285, #60290, #60295 (consolidated)**  
**Spring 2017, TTh 2:00-3:20 pm, PHR 3.106**

**Course Description:** Based on the solid foundation in integrated pharmacotherapy, this course explores the unique pharmacotherapeutic considerations for several “special populations” (geriatrics, pediatrics, and differences in therapeutic response due to genetic variation). *A unifying theme for the course is cultural competency, which serves as the introductory module, and is reinforced throughout the course in a case-based approach.*

Region	Staff	Section number	Class Room	Time (Local)
Austin	Linda Gordon	60280 (consolidated)	PHR 3.106	2:00pm – 3:20pm
UTEP	Carmen Ramos	60280 (consolidated)	237 Campbell Hall	1:00pm – 2:20pm
San Antonio	Laura Patterson	60280 (consolidated)	McDermott 2.108	2:00pm – 3:20pm
UTRGV	Anna Olivarez	60280 (consolidated)	RHAC 1.202	2:00pm – 3:20pm

\*Please note, unless otherwise stated, communication via the coordinator is in CST

**Course Team Faculty:**

Faculty	E-mail	Phone	Location
Patrick Davis, PhD <i>*Course Coordinator</i>	<a href="mailto:davisjp@austin.utexas.edu">davisjp@austin.utexas.edu</a>	512-475-9751	Austin – PHR 5.112D
Collin Hovinga, PharmD, M.S., FCCP	<a href="mailto:caHovinga@seton.org">caHovinga@seton.org</a>	512-324-9999 ext 87081	Austin – PHR 2.222
Holli Temple, PharmD,	<a href="mailto:Holli.temple@austin.utexas.edu">Holli.temple@austin.utexas.edu</a>	512-232-1214	Austin – PHR 2.222
Denise Pinal, PharmD <i>*Local Coordinator</i>	<a href="mailto:denisepi@utep.edu">denisepi@utep.edu</a>	915-747-5884	UTEP – Campbell 718
Bill McIntyre, PharmD	<a href="mailto:bill.mcintyre@austin.utexas.edu">bill.mcintyre@austin.utexas.edu</a>	512-232-3407	Austin - PHR 5.112P
Yasar Tasnif, PharmD <i>*Local Coordinator</i>	<a href="mailto:yasar.tasnif@utrgv.edu">yasar.tasnif@utrgv.edu</a>	956-665-8737	UTRGV
Jennifer Seltzer, PharmD <i>*Local Coordinator</i>	<a href="mailto:seltzer@uthscsa.edu">seltzer@uthscsa.edu</a>	210-567-8355	San Antonio McDermott

\*Local Coordinators for that campus.

Faculty will inform students concerning their office hours (including electronic office hours, if appropriate) during their first class period in the course.

**Guest Lecturers:** We are delighted to host guest lecturers to provide perspective on the importance of cultural proficiency in healthcare (Module 1). You should take every opportunity to learn from their expertise and practice experience.

**Prerequisites:**

Successful completion of the Integrated Pharmacotherapy sequence and the associated laboratories. Co-registration for the Advanced Pharmacotherapy Lab (PHR 194P)

**Culture Diversity Flag:** This course carries the flag for Cultural Diversity in the United States, which is a University requirement for graduation. Cultural Diversity courses are designed to increase your familiarity with the variety and richness of the American cultural experience. Therefore, a minimum of one-third of your grade will come from course components addressing this flag focus.

**Course Objectives:** By the completion of this course, the student is expected to...

1. Develop strategies for providing care to diverse patient populations.
2. Apply current literature to the treatment of special patient populations.
3. Recommend treatment options for diverse patient populations.
4. Integrate ethical considerations in treatment recommendations for special patient populations.
5. Evaluate patient cases with respect to unique patient characteristics.

**Module 1 – Cultural Competency for Health Professionals Objectives:**

- Describe the importance of:
  - Cultural competency for pharmaceutical care
  - Cultural awareness and sensitivity and the potential impact of cultural values, beliefs, and practices on patient care outcomes and management
- Recognize cultural factors and other social determinants of health and how they can influence:
  - Health disparities, other public health issues and negative health outcomes
  - Providers' ability to ensure patient safety and/or deliver coordinated inter-professional care services
- Recognize opportunities and barriers in providing culturally-competent care and cross-cultural education
  - Demonstrate basic skills/strategies for providing pharmaceutical care

**Module 2 & 4 - Geriatrics & Pediatrics Objectives:**

- Compare and contrast special populations' pharmacokinetic and pharmacodynamic properties to the adult population
- Examine a special populations' medication list and identify potential problems
- Recommend treatment options for special populations' various disease states discussed
- Create a treatment plan that prioritizes the patient's problems
- Assess current literature in treating geriatric and pediatric disease states

**Module 3 - Pharmacogenomics Objectives:**

- Compare and contrast genetic polymorphisms in the areas of transporters, drug metabolism, and receptors and clinical consequences
- Assess the literature and application of pharmacogenomics in clinical pharmacy practice
- Assess laws and policies related to pharmacogenomic practices
- Create and justify a therapeutic plan related to an ethical dilemma in pharmacogenomics
- Evaluate a patient case for the potential of a pharmacogenomics-based drug interactions

**Course Textbooks & Readings:**

Course materials will be provided via the Canvas™ Course Website. Faculty may identify required texts/readings available to you through Access Pharmacy available through the College's Clinical Information Center (<http://www.lib.utexas.edu/lsl/clinic/index.html>). Faculty may also suggest recommended texts for gaining further insights into the subject matter.

**Web Resources**

1. The *official-Canvas® web site* for this course can be accessed either through UTDirect or via <http://canvas.utexas.edu>. Either access point is UTEID-protected, and provides you links to the courses in which you are currently enrolled. You are strongly encouraged to visit this site for additional resources associated with this course (your grades, electronic quizzes, powerpoint presentation, previous exams, the

discussion board, contacting faculty by email, electronic versions of suggested and **required** readings and hyperlinks). **The Readiness Assessment Quizzes (RAT's) will be administered via the Canvas® website** at the beginning of each class, **so be sure to bring an electronic device capable of accessing Canvas® to complete your quizzes.** The website will also be used for official, course-related announcements and to exchange class information and questions via the discussion board. Be aware that any messages posted to the discussion board are available to all enrolled students and faculty.

If you encounter problems with accessing Canvas® please contact the ITS helpdesk at: 512-475-9400 or the Canvas Guide for Student at <https://community.canvaslms.com/docs/DOC-4121>

2. Video-streamed recordings of lectures are intended to facilitate learning for those students who find this type of supplementation useful; they are not a substitute for attending class. Although recordings of these lectures will be available to you for the semester, this is for supplementation only; your instructors expect you to attend all scheduled lectures. If an individual faculty member chooses to not make his/her lectures available by video-streaming, it is that faculty member's responsibility to so inform you. It is also faculty prerogative as to whether to administer announced or unannounced quizzes during lectures (this is another reason to bring your wireless device to each and every class). If a faculty member chooses to do so, the points for these quizzes will replace questions on their portion of the upcoming exam.
3. Viewing video-streamed recordings of lectures is primarily intended for viewing on-campus (e.g., on your laptop, LRC Library, or other computer facilities available on your specific campus). However, it should be possible to view the streaming video off-campus using RoadRunner® or DSL broadband connections. Your faculty are not in a position to troubleshoot your video-streaming problems, so please do not ask them to do so; rather, you should access the LRC 's help website at <https://www.utexas.edu/pharmacy/help/> to address those problems. Any other questions should go to the Director of the LRC, Kamran Ziai ([ziai@austin.utexas.edu](mailto:ziai@austin.utexas.edu))
4. **Redistribution of Class Recordings or Other Course Material:** If video-recordings of a class are made available by the College of Pharmacy for any course, they are intended solely for the purpose of review by students currently enrolled in the that class. Faculty and students utilizing class video-recordings should be careful to not compromise the privacy of either themselves or other users (<http://registrar.utexas.edu/students/records/ferpa>), or the rights of the presenter. Students are also free to make their own recordings of lectures unless specifically prohibited from doing so by the presenter. Any additional distribution of College- or student-generated recordings (regardless of format) is prohibited without the written and signed permission of the presenter *and students identifiable on the recording*. Likewise, all course materials developed by the faculty member (handouts, powerpoints, etc) are the intellectual property of that faculty member and cannot be distributed further without the permission of that faculty member.

**Attendance:** Students are required to attend all classes, because of the importance of the team-based nature of this course, and, through the weekly readiness assessment tests which will be used so that faculty can assess class understanding going into the class period and adjust accordingly (e.g., 'just in time teaching'). We realize that illnesses and other life factors can result in unavoidable absences; therefore, the lowest three RAT quizzes will be dropped in determining the grade. There is no need to secure approval for a class absence before or after having missed the class; this is handled by the two excused quizzes. Use these excused absences wisely.

#### **Course Assessment:**

Readiness Assessment Tests [ max of 26 sessions @5 pts each; drop lowest three]	115 pts
In-Class, Integrated, Team-Based Cases [3 sessions @ 25 pts each]	75 pts
Module 1 (Cultural Competency) Assessment	100 pts
Module 2 (Geriatrics) Exam	100 pts
Module 3 (Pharmacogenomics) Exam	100 pts
Module 4 (Pediatrics) Exam	100 pts
Final Exam	100 pts
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Total for Course:	690 pts

**\*\*\*Disclaimer:** *Change in points is at the discretion of the Course Coordinator. If there are changes to the point system (e.g. as a result of 'ice days', technology issues, faculty illness, etc), students will be notified via the Canvas™ website. Any changes in the distribution of points will be communicated immediately upon a determination that the change is necessary.*

In addition, an important element of this course is for you to provide structured peer-reviews for your team members (middle and end of course). There are not points awarded for doing this (it is a professionalism expectation and is expected to be of benefit to your team members as well as you). Your grade will be lowered one increment if they are not completed in the expected time frame (e.g. A->A-; B->C+; etc).

### **Exam Procedures:**

**Students must arrive on time for examinations.** All instructions and corrections will be made at the beginning of the examination period and will not be repeated. Semester exams will begin promptly at the designated hour and will be picked up after exactly 80 minutes. A portion of the exam will be case-based on Canvas® so be sure to bring your laptop. The final examination will last three hours. Students arriving after any students have completed the exam and left the room may not be allowed to sit for the exam, and may receive a score of zero for the exam. If you would like to take any of your tests on another campus, this requires approval by the Course Coordinator.

**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 complete the College Form titled "**Student Request for Alternate Exam Time**" for final consideration and *final approval* by the Course Coordinator. In this event, the nature of the make-up will be at the discretion of the course coordinator and the faculty involved (oral, written, increased weighting on the final, etc.). An unexcused absence from an exam may result in a grade of "zero" for that exam.

The grading of objective exam questions will be based upon the scantron sheets turned in; ***i.e., not on answers written on the exam papers***. After the exams have been graded and an item analysis performed (Measurement & Evaluation Center), questions may be discarded or otherwise adjusted at the discretion of the Course Coordinator in consultation with the faculty before arriving at final grades.

### **Return of Exams, Posting Class Scores & Keys:**

**Exams:** Your examination and scantron copy can be viewed the week following the exam during times specified by the site coordinator. Individual student scores can be accessed using the Canvas™ "Grades" (only you have access to your grades).

**RAT Quizzes:** Quiz grades will be available immediately after completion of the quiz.

**In-Class, team-based Case grades** will be available soon as possible (assessments will require at least one week).

### **Post-Exam Remarks and Reconsideration Requests:**

If there is a disagreement over the answer to a specific question, the student should email the exam question plus a written explanation (with appropriate documentation) to the faculty member authoring the question, with a cc: to Dr. Davis (to ensure it was submitted by the deadline). The deadline for submission of reconsideration request will be three days after graded exams are made available. Documentation may include statements from textbooks, handouts, packets, or current scientific reprints; **lecture notes are not authoritative documentation**. The explanation must be clear, rational, and concise.

### **Re-Examination Policy:**

There will be no final exam re-examination in this course.

### **Module Mastery:**

Because of the importance of each and every therapeutic module, a student doing very well on one module while failing another module (and having an overall average that would be passing) is not acceptable. **There are four modules in this course, and students must pass each and every module** with a grade of at least 70% in order to

pass the course. If a module is not passed based on their total points for that module, that portion of the comprehensive final will be scrutinized to assess whether the student has finally mastered the material. If the student does not achieve 70% on that portion of the comprehensive final with this second attempt, a course grade of "F" will be assigned. If the student does demonstrate mastery, the score originally attained on the summary exam or presentation still applies (i.e., the first score earned) and will be used to calculate the final course grade.

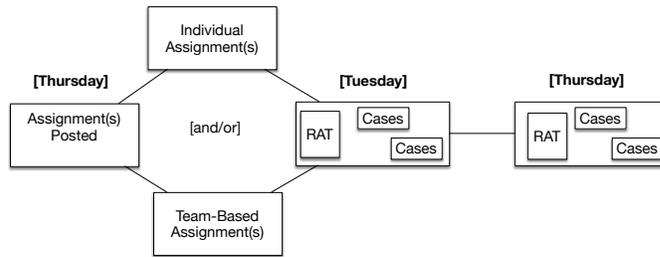
The best advice is to achieve a passing score on the module in the first place, and if not, make sure that you **review your errors** on the summary exam(s) with the appropriate faculty to address any deficiencies before the final.

*Note: this is a continuation of the same module mastery policy in the previous pharmacotherapy courses in the sequence.*

Course Grading:

A Range:		A = 100%-93%	A- = 92%-90%
B Range:	B+ = 89%-87%	B = 86%-83%	B- = 82%-80%
C Range:	C+ = 79%-77%	C = 76%-73%	C- = 72%-70%
D Range:	D+ = 69%-67%	D = 66%-65%	
F Range:	Below 65%		

This scale may be curved more leniently in the final analysis of grades at the discretion of the course coordinator in consultation with the instructors.



**Class Schedule:**

**Module I: Cultural Competency for Healthcare Professionals**

Date	Lecture Topic	Lecturer
Tues Jan 17	Course Introduction <i>"Unconscious Bias"</i>	Dr. Davis Dr. Rene Salazar
Thurs Jan 19	<i>"On Death and Dying"</i>	Dr. Dede Sparks
Tues Jan 24	<i>"Gender Identity and Healthcare"</i>	Dr. Kristen Hogan
Thurs Jan 26	<i>"Disabilities and Culture"</i>	Dr. Cossy Hough
Tues Jan 31	<i>"Compassionate Pediatrics"</i>	Dr. Barbara Jones
Thurs Feb 2	<i>"Practice Approaches to Diverse Cultures and Special Populations"</i>	Dr. Armando Chavez
Tues Feb 7	Module #1 Assessment Exercise	Course Faculty

**Module II: Pharmacotherapy in Geriatrics**

Date	Lecture Topic	Lecturer
Thurs Feb 9	Pharmacokinetics and Pharmacodynamics in Geriatrics	Dr. Temple
Tues Feb 14	Adverse Drug Reactions in Geriatrics	Dr. Temple
Thurs Feb 16	Urology in Geriatrics	Dr. McIntyre
Tues Feb 21	Palliative Care in Geriatrics	Drs. Temple & McIntyre
Thurs Feb 23	Pharmacy Practice in Geriatrics	Dr. Temple
Tues Feb 28	Cultural Competency Considerations in Geriatrics	Course Faculty
Thurs Mar 2	Integrated Geriatrics Cases [Team-Based; Assessed]	Course Faculty
Tues Mar 7	<b>Exam Module #2</b>	

**Module III: Clinical Pharmacogenomics**

Date	Lecture Topic	Lecturer
Thurs Mar 9	Principles & Technology of Pharmacogenomics	Dr. Davis
Tues Mar 21	Pharmacogenomics of Metabolism	Dr. Davis
Thurs Mar 23	Pharmacogenomics in other Disease States	Dr. Tasnif
Tues Mar 28	Pharmacogenomics in Cancer Patients	Dr. McIntyre
Thurs Mar 30	Social, Legal and Ethical Dilemmas in Pharmacogenomics	Dr. Tasnif
Tues April 4	Cultural Competency Considerations in Pharmacogenomics	Course Faculty
Thurs April 6	Integrated Pharmacogenomics Cases [Team-Based; Assessed]	Course Faculty
Tues April 11	<b>EXAM Module III</b>	

**Module IV: Pharmacotherapy in Pediatrics**

Date	Lecture Topic	Lecturer
Tues April 13	Pharmacokinetics and Pharmacodynamics in Pediatrics	Dr. Hovinga
Thurs April 18	Autism Spectrum Disorders	Dr. Hovinga
Tues April 20	Special Dosing and Nutrition/Growth in Pediatrics	Dr. Hovinga
Thurs April 25	Clinical Pearls in Pediatrics	Dr. Hovinga
Tues April 27	Cultural Competency Considerations in Pediatrics	Module Faculty
Tues May 2	Integrated Pediatrics Cases [Team-Based; Assessed]	Course Faculty
Thurs May 4	<b>EXAM Module IV</b>	
<b>Final Exam TBD</b>		

## Other Course Policies

**Professionalism:** We expect that all students will demonstrate professionalism in all aspects of this course. Respect for others should be demonstrated in class, with communication between instructors and students, during discussions, and in completed assignments. Any conduct deemed unprofessional will be dealt with in accordance to policies of the College of Pharmacy and The University of Texas. Failure to act professionally (either repeatedly or egregiously) could result in failure of this course.

**Attendance:** Students are required to attend all classes, because of the importance of the team-based nature of this course, and, through the readiness assessment test at the beginning of class which will be used so that faculty can assess class understanding going into the class period and adjust accordingly (e.g., 'just in time teaching'). We realize that illnesses and other life factors can result in unavoidable absences; therefore, the lowest three RAT quizzes will be dropped in determining the grade. There is no need to secure approval for a class absence before or after having missed the class; this is handled by the three excused quizzes. Use these excused absences wisely.

Technical Standards apply for this course. If a question of abiding by the criteria in these standards comes into question by a Course Team member, the concern will be forwarded to The University of Texas College of Pharmacy, Office of Student Affairs. <http://www.utexas.edu/pharmacy/edutrain/technicalstandards.html>

**Academic Integrity:** The "Statement on Scholastic Integrity of the College of Pharmacy" reads as follows: "Pharmacy practitioners enjoy a special trust and authority based upon the profession's commitment to a code of ethical behavior in its management of client affairs. The inculcation of a sense of responsible professional behavior is a critical component of professional education, and high standards of ethical conduct are expected of pharmacy students. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including failure of the course involved and dismissal from the college and/or the University. Since dishonesty harms the individual, fellow students, and the integrity of the University and the College of Pharmacy, policies of scholastic dishonesty will be strictly enforced in this class".

Students are expected to work independently on all examinations. Any student suspected of dishonesty will be reported to the Dean of the College of Pharmacy and to the Dean of Students, as per University regulations, with the recommendation that an "F" be assigned for the course grade. Students are expected to have read and understood the current issue of the General Information Catalog published by the Registrar's Office for information about procedures and about what constitutes scholastic dishonesty.

**Students with Disabilities:** "Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities at 471-6259 (voice) or 232-2937 (video phone) or [www.utexas.edu/diversity/ddce/ssd](http://www.utexas.edu/diversity/ddce/ssd)." All University rules concerning accommodations must be followed, including the student arranging for special accommodations **prior to each examination**. In the absence of such **prearrangement**, it will be assumed that the student is not requesting special accommodations for that exam, and will be expected to take the exam with the rest of the class at the regularly scheduled exam time.

**Religious Holidays:** If you will miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you must notify me the first week of class so that arrangements for all such students can be made for the full semester.

**Emergency Procedures:** The following recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512-471-5767, <http://www.utexas.edu/safety/> :

- Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.
- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.

- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors.
- Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.
- If you have concerns about another students behaviors, particularly if you believe they could potentially harm themselves or others, do not hesitate to contact the Behavior Concerns Advice Line (BCAL): 512-232-5050