

The University of Texas at El Paso
College of Health Sciences
Doctor of Physical Therapy Program

PT 6307

CARDIOPULMONARY PATIENT MANAGEMENT

SPRING 2023

COURSE SYLLABUS

Credit Hours: 3

Contact Hours: Total: 75 hours (15 weeks plus final exam)

Lecture: 2 hours/week; Lab: 3 hours/week; Interprofessional Education Event: 2 hours

Schedule: Lab will be held on Mondays – location will vary between Campbell Building Rooms 203/204 & the Center for Simulation (usually Room 126) in Health Sciences and Nursing Building (HSN) on main campus – see schedule in syllabus and Blackboard

Lab A: 9:00am-noon

Lab B: 1:00-4:00pm

Lecture: Tuesdays 2:30-4:30pm at Campbell Room 213

Schedule is as above EXCEPT where indicated otherwise on attached schedule &/or Blackboard

Mandatory Interprofessional Education Event: Friday March 3 afternoon – online via Zoom

NOTE: See detailed scheduled at the end of the syllabus for specific dates and times

See Blackboard for Zoom links

Instructors:

Celia Pechak, PT, PhD, MPH (primarily Cardio content)

Office location: Mesa Building – Room 115N

Phone #: 915-747-7289 (office)

E-mail: cmpechak@utep.edu (best way to contact me)

Office hours: Available for group review sessions after class Weeks #1-8. Students also may email me for individual appointments. I am very happy to meet with you to help you learn the course content! Bring your questions.

- **PRIMARY course contact for Weeks 1-8**

Fredy Mora Solis, PT, PhD (primarily Pulmonary content)

Office location: Mesa Building – Room 115M

12/16/2022

Phone #: *TBD*

E-mail: frmorasolis@utep.edu

Office hours: Office hours are available after class or by appointment in-person. Zoom meetings can also be arranged.

- **PRIMARY course contact for Weeks 9-15**

Sue Fogel, PT

Email: smfogel@utep.edu

- Documentation assignment and Simucase grader
- Contact Sue with any questions about documentation assignments and cc Dr. Pechak

Course Description: This course provides theoretical and practical instruction for the evaluation and management of physical therapy patients with cardiovascular and pulmonary disorders. Emphasis is placed on the etiology and pathology of selected cardiopulmonary medical conditions, as well as the therapeutic management of patients with these conditions. Students will create a physical therapy plan of care for selected cardiovascular and pulmonary dysfunctions using diagnostic, pharmacologic, and clinical laboratory data. Concepts of health promotion and fitness are explored.

Course Objectives: *By the end of the course, the student will be able to:*

1. Apply key course concepts (including cardiac output, hemodynamic stability, and oxygen transport) to determining appropriate clinical decisions for the management of simulated or paper patients/clients with common cardiopulmonary conditions. (7A: exercise science, pharmacology, diagnostic imaging; 7C: cardiovascular, respiratory, system interactions, differential diagnosis, medical and surgical conditions; 7D11) [Application]
2. Identify when simulated or paper patients/clients with common cardiopulmonary conditions need further examination or consultation by a physical therapist or a referral to another health care professional. (7A: exercise science, pharmacology, diagnostic imaging; 7C: cardiovascular, respiratory, system interactions, differential diagnosis, medical and surgical conditions; 7D16) [Comprehension]
3. Demonstrate ability to administer appropriate tests and measures with simulated patients/clients with common cardiopulmonary conditions, including ventilation and respiration or gas exchange. (7C: cardiovascular, respiratory, medical and surgical conditions; 7D19w) [Application]
4. Evaluate data (including patient history, laboratory values, ECGs, pulmonary function tests, imaging studies, vital signs, presence of edema, medications and other medical/surgical interventions, patient's signs and symptoms) from the examination of simulated or paper clients/patients with common cardiopulmonary conditions to make

- clinical judgements. (7A: exercise science, pharmacology, diagnostic imaging; 7C: cardiovascular, respiratory, system interactions, differential diagnosis, medical and surgical conditions; 7D17; 7D20) [Evaluation]
5. Determine a diagnosis for simulated or paper patients/clients with common cardiopulmonary conditions that guides future patient/client management. (7A: exercise science, pharmacology, diagnostic imaging; 7C: cardiovascular, respiratory, system interactions, differential diagnosis, medical and surgical conditions; 7D22) [Synthesis]
 6. Determine goals and expected outcomes for simulated or paper patients/clients with common cardiopulmonary conditions that are realistic given the available resources and specify expected length of time to achieve them. (7A: exercise science, pharmacology, diagnostic imaging; 7C: cardiovascular, respiratory, system interactions, differential diagnosis, medical and surgical conditions; 7D23) [Synthesis]
 7. Create a safe and effective plan of care for simulated or paper patients/clients with common cardiopulmonary conditions. (7A: exercise science, pharmacology, diagnostic imaging; 7C: cardiovascular, respiratory, system interactions, differential diagnosis, medical and surgical conditions; 7D24; 7D27a) [Synthesis]
 8. Demonstrate documentation of an initial evaluation that uses ICF language and meets professional and legal standards for a simulated patient/client with a common cardiopulmonary condition. (7D21; 7D32) [Application]
 9. Perform appropriate interventions to achieve the goals for simulated or paper patients/clients with common cardiopulmonary conditions, including airway clearance techniques and patient/client education. (7C: cardiovascular, respiratory, medical and surgical conditions 7D27a; 7D27h) [Application]
 10. Judge when and how to modify the physical therapy plan of care based on patient/client's condition and response to treatment for simulated or paper patient/clients with potential or existing cardiopulmonary disorders. (7A: exercise science; 7C: cardiovascular, respiratory, system interactions, medical and surgical conditions; 7D30) [Evaluation]
 11. Identify when simulated or paper patients/clients with common cardiopulmonary conditions may or may not be treated by a physical therapist assistant based on patient/client status and the Texas PT Practice Act & Rules. (7D25) [Comprehension]
 12. Identify best PT action in the event of possible urgent or emergency situation (including myocardial infarction, cardiac arrest, hypertensive emergency, and acute onset of stroke). (7C: cardiovascular, respiratory, system interactions, differential diagnosis, medical and surgical conditions; 7D33) [Comprehension]
 13. Apply the concepts of health, wellness, health promotion, and population health to their community engagement project with El Paso Senior Games. (7D34) [Application]
 14. Evaluate the success of themselves and their teammates in engaging in effective interprofessional collaborative practice during an interprofessional education training. (7D36; 7D39) [Evaluation]

Curricular Threads:

12/16/2022

- **Cultural / Linguistic Engagement and Competence:**
 - Students practice using Cardiopulmonary-related Spanish in 2 Spanish Lunch & Learn sessions, and apply Spanish with simulated patients during scenarios in 3 labs (Week 3, 12, 15). Students are also exposed to the health disparities faced by the transgender community in a case-based virtual 2-hour interprofessional education event hosted by the UTEP Health-Focused Interprofessional Education Community of Practice. Various class discussions address how culture influences patient choices and evidence-based practice (eg, patients who are Jehovah Witnesses decline blood transfusions and so the Physical Therapist may need to adjust exercise load).
- **Evidence-Based Practice and Research:**
 - Students are assigned to read current evidence (eg, CHF Clinical Practice Guidelines) and then apply the evidence as part of their clinical decision-making.
- **Clinical Reasoning:**
 - Using the UTEP DPT Clinical Reasoning Framework as a foundation, clinical reasoning is woven across the course using paper cases, Simucase, and faculty-guided questioning in class and lab. Clinical reasoning is assessed formally using an Oral Clinical Reasoning Examination.
- **Interprofessional Collaborative Practice:**
 - Students participate in a case-based virtual 2-hour interprofessional education event hosted by the UTEP Health-Focused Interprofessional Education Community of Practice, with students from multiple disciplines (including at least nursing, occupational therapy, pharmacy, social work, speech-language pathology).

Course Prerequisites for DPT Students: The UTEP DPT Program curriculum is a lock-step curriculum. Therefore, students must pass all courses in the prior semester of the DPT Program in order to enroll in courses in the subsequent semester. Faculty may consider exceptions for PT 6116 PT Capstone Project I and PT 6117 PT Capstone Project II.

Methods of Instruction: Primarily active-learning activities, including small-group classroom activities, hands-on lab practice, and interprofessional education experience.

Methods of Evaluation: Student competence and attainment of course objectives are assessed using a variety of methods. These methods and their contribution to the final grade are listed in the table below. More details regarding assignments and assessments are found at the end of this syllabus after the Course Schedule and on Blackboard.

Item	Grade Composition
Cardio-Focused Spanish Lunch & Learn Sessions Attendance (0.5% per session x 2 sessions) <ul style="list-style-type: none"> Graded by <i>Pechak</i> 	1%
Community Engagement Participation (1%) & Written Reflection (1%) <ul style="list-style-type: none"> Graded by <i>Pechak</i> 	2%
Community Faculty Assignment <ul style="list-style-type: none"> Graded by <i>Pechak</i> 	1%
Documentation Assignments (2 assignments x 1.5%) <ul style="list-style-type: none"> Week 7 Cardio scenario <ul style="list-style-type: none"> Graded by <i>Fogel</i> Week 11 Pulmonary scenario <ul style="list-style-type: none"> Graded by <i>Fogel</i> 	3%
IPE Event Attendance (0.5%) & Written Reflection (0.5%) <ul style="list-style-type: none"> Graded by <i>Pechak</i> 	1%
Sim Lab Videotaping & Critiques <ul style="list-style-type: none"> Graded by <i>Pechak</i> 	1%
Simucase Assignment <ul style="list-style-type: none"> Graded by <i>Fogel</i> 	1%
Written Exam 1 <ul style="list-style-type: none"> Graded by <i>Pechak</i> 	20%
Written Exam 2 <ul style="list-style-type: none"> Graded by <i>Pechak</i> 	25%
Final Examination Part 1: Skills Check <ul style="list-style-type: none"> Graded by <i>Solis/ Pechak /Fogel</i> 	5%
Final Examination Part 2: Oral Clinical Reasoning Exam <ul style="list-style-type: none"> Graded by <i>Solis/ Fogel</i> 	10%
Final Examination Part 3: Written Exam <ul style="list-style-type: none"> Graded by <i>Solis</i> 	30%
Total	100%

Grading Scale: The following letter grade scale is used for the UTEP Doctor of Physical Therapy Program:

Letter Grade Scale	Numerical Grade Scale
A	90-100
B	80-89
C	75-79
F	Below 75

Required Textbooks and Other Learning Resources:

- 1) DeTurk WE, Cahalin LP. *Cardiovascular and Pulmonary Physical Therapy: An Evidence-Based Approach*. 3rd ed. New York, NY: McGraw-Hill; 2018.
 - Available for FREE on Access Physiotherapy through UTEP Library
- 2) ECG Software
 - Available for FREE through UTEP DPT Program – see Blackboard for how to access
- 3) Simucase
 - Available for FREE through UTEP DPT Program – see Blackboard for how to access
- 4) Physiopedia
 - Available for FREE at <https://www.physio-pedia.com/home/>
- 5) PhysioU
 - Available for FREE through UTEP DPT Program – see Blackboard for how to access
- 6) See Blackboard for other required learning resources

Supplementary Textbooks and Other Learning Resources: [These are useful to supplement main textbook since you should already have these for other courses. Note: If these ever are no longer required texts in other courses in the DPT curriculum, you do NOT need to buy just for this course. Please notify course faculty.]

- 1) Quijano MG, Gonzalez-Lamendola, J. *Spanish for Physical Therapists: Tools for Effective Patient Communication*. APTA; 2006. ISBN 978-1-931369-28-2 – ESPECIALLY pages 136-139
 - A single copy is available in the UTEP Library
- 2) Goodman CC, Heick J, Lazaro RT. *Differential Diagnosis for Physical Therapists*. 6th ed. St. Louis, MO: Saunders Elsevier; 2018. ISBN: 978-0-3234-7849-6
 - A single copy is available in the UTEP Library

- 3) O'Sullivan SB, Schmitz TJ, Fulk G. *Physical Rehabilitation*. 7th ed. Philadelphia, PA: FA Davis; 2019. ISBN-13: 978-0-8036-6162-2
 - Available FREE online on Access Physiotherapy through UTEP Library

Supplementary texts available for check-out in Administrative Assistant's Office:

- 1) Jones SA. *ECG Success: Exercises in ECG Interpretation*. Philadelphia, PA: FA Davis; 2008.
- 2) Reid WR, Chung F, Hill K. *Cardiopulmonary Physical Therapy: Management and Case Studies*. 2nd ed. Thorofare, NJ: Slack Inc; 2014.

Resources Available for Student Success:

Confidential Resources:

- **Center for Accommodations and Support Services (CASS):** If you have or suspect a disability and need 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 or go by their office in Union Building East, room 106 (next to the UTEP post-office). For additional information, visit the CASS website at <http://sa.utep.edu/cass>.
- **The UTEP Student Health Center:** Union East Suite 100; 915.747.5624; www.utep.edu/chs/shc
- **The UTEP Counseling and Psychological Services:** 202 Union West, 915.747.5302; www.utep.edu/student-affairs/counsel
 - **Togetherall:** Free online 24/7 mental health support
<https://www.utep.edu/student-affairs/counsel/services/togetherall.html>

Additional Resources:

- Division of Student Affairs. 915.747.5076, www.utep.edu/student-affairs
- DPT Library Research Guide: <http://libguides.utep.edu/pt>
- Writing Center: 915.747.5112, <https://www.utep.edu/uwc/>
- Computer Labs: Independent Learning Center (ILC), 1st floor Campbell Building
- Military Student Success Center: 915.747.5342, www.utep.edu/student-affairs/mssc
- Student Wellness Program. 915.747.6738, www.utep.edu/chs/wellness

University Policies: All students are responsible for following UTEP policies and procedures found in the Handbook of Operating Procedures at www.utep.edu/vpba/hoop

Program Policies: All DPT students are responsible for following all policies and procedures documented in the current DPT Student Handbook. Course policies found in the DPT Student Handbook apply to all courses in the DPT curriculum. The current DPT Student Handbook may be found on the DPT Student Resources site on Blackboard.

Academic Integrity: The UTEP DPT Program has a 'zero tolerance policy' for scholastic dishonesty. DPT students must demonstrate academic integrity at all times. The current DPT Student Handbook outlines specific definitions, expectations, details, and consequences related to academic integrity and scholastic dishonesty. Additional information related to academic integrity is available through the UTEP Division of Student Affairs at www.utep.edu/student-affairs/osccr/student-conduct/academic-integrity.html

Course-Specific Policies: See DPT Program Handbook for all policies on exams, electronic device use, dress code, attendance, and scholastic dishonesty. We encourage you to periodically review all handbook policies, but in light of past experiences, particularly direct you to review the policies on cheating, accumulated knowledge, professional behaviors/generic abilities, attendance, and the disclaimer that the syllabus is subject to change.

1. Attendance Policy - Absences: Refer to current DPT Student Handbook 'Attendance and Classroom Behavior' for the DPT Program policy. Additional course-specific policy are as follows:

- As all Program faculty do, we believe that students should demonstrate their commitment to the profession and respect for faculty, guest speakers, and colleagues by attending all labs, and arriving to lab on time. We are expected to be at class and lab as scheduled and to be on time; we expect the same from you. We work hard to prepare for class and labs, and to make them productive active-learning opportunities; we expect you to do your part by being prepared and regularly participating. We do NOT give credit for this...we expect it. Failure to arrive to lab prepared and on time, and to not participate actively, and to fail to demonstrate professional behaviors may result in deductions of 1% per incident to your final semester grade.
- However, congruent with one's ability to request excused time off in the work setting, we permit ONE excused absence of a single class OR lab period per course per semester for any reason. In order for your first absence to be excused, you must meet the expectation described further down. HOWEVER, (with very rare exception [eg, documented serious illness or emergency] that will be considered on a case-by-case basis) there will be NO accommodations offered for missed lab time. Specifically, we will NOT offer the opportunity to make up written examinations, either in advance or after the scheduled lab, or provide individual tutoring for missed content. Additionally, late work caused by your absence will not be accepted. You should make prior arrangements with a classmate to find out what you missed, turn in any work, and/or pick up any hand-outs.

- In order to be excused for your first missed class or lab, you must email the primary course instructor at least 2 hours in advance if you will not be attending class or lab. We do not require you to give a reason, but we expect notice in WRITING by email. A phone call from you or message from one of your classmates is not acceptable.
- If you miss a second (or more) class &/or lab for any reason, it will be considered unexcused unless it is due to documented illness or emergency. In these cases, you should email the primary course instructor and then arrange a meeting with them upon your return to school to discuss why you missed class. Documentation will be required for any additional absence (eg, doctor's note documenting illness or treatment). We will notify you after our meeting and review of your documentation whether or not the absence will be considered excused or unexcused.
- Missing 30 minutes or more of a class or lab will be considered an absence.
- For each incident of an unexcused absence, 5% will be deducted from your final course grade.
- Additionally, please NOTE: Your excused absence cannot be used to miss any course assessments (eg, written examination or Skills Check) or course activities (eg, IPE Training) that have a grade associated with it. If you miss an assessment or activity, you will lose the associated course credit.

2. Attendance Policy - Tardiness & Early Departures: Refer to current DPT Student Handbook 'Attendance and Classroom Behavior' for DPT Program policy. Additional course-specific policy is as follows:

- We use the clock on the computer to determine when class should start and end. If you expect to arrive late or leave early (eg, doctor's appointment), you should notify the primary instructor in writing by email in at least 2 hours in advance. If you are consistently late &/or leaving early for any reasons, we will contact you to discuss the problem in person or by email. Each subsequent incidence of tardiness &/or early departure may result in 1% deduction from your final semester grade.
- **NOTE:** *Being 'on time' in the online learning environment means that you have arrived into the virtual classroom & are fully 'connected' PRIOR to the scheduled start of class.*

3. Electronic Devices: Refer to current DPT Student Handbook 'Electronic Devices' for DPT Program policy. Additional course-specific policy is as follows:

- If you are using cell phones, computers, &/or other electronic devices for purposes that are not directly related to meeting the learning objectives of this course, then we consider that to be disruptive behavior. Personal calls, texts, &/or emails should be completed outside of class time. See Professional Behavior Policy below.

4. Professional Behavior Policy: See DPT Student Handbook 'Attendance and Classroom Behavior', 'Professional Behaviors' and 'Unprofessional Behavior:' for general program policy. Additional course-specific is as follows:

- We expect you to arrive to class prepared and to actively participate while not being disruptive. If you are consistently ill-prepared, not actively participating, and/or being disruptive, we will contact you to discuss the problem in person or by email. Each subsequent incidence of poor preparation, poor participation, and/or disruption may result in 1% deduction from your final semester grade.
- **DIVERSITY & INCUSION STATEMENT:** We highly value diversity, and are committed to ensuring that you and all of your peers experience a sense of belonging in this course and in our DPT Program. University spaces are intended to be safe, welcoming environments that support learning and are respectful of all individuals. Disrespect, discrimination, and harassment based on any personal characteristics (including but not limited to race/ethnicity, sex, gender identity, and sexual orientation) is not acceptable. Any direct or indirect instances of intended or unintended disrespect (including microaggressions), discrimination, or harrassment should be reported to the primary course faculty immediately so that we may work to improve our learning environment. If we inadvertently create an unwelcoming environment for you, we ask you to please arrange a time to meet with the relevant faculty member so that we can do better.
- **TITLE IX INFORMATION:**
 - The University of Texas at El Paso is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in any federally funded educational programs or activities.
 - Title IX protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination including sexual misconduct, sexual harassment, and acts of sexual violence. Sexual violence may include rape, sexual assault, sexual battery, sexual coercion, stalking, and relationship violence. Title IX prohibits institutions from excluding, separating, denying benefits, or otherwise treating individuals differently on the basis of sex. Sex based discrimination is prohibited at UTEP both by law and by University and UT System policies.
 - For additional information or questions, please contact the Title IX Coordinator, who can be reached by phone at (915) 747-8358, by email at titleix@utep.edu, or by mail at 500 W. University Ave., El Paso, TX 79968, Kelly Hall, Room 312. In addition to or in lieu of contacting the Title IX Coordinator, inquiries may also be sent to the Assistant Secretary of the Office for Civil Rights.
- Class is currently scheduled to be in-person most of the time. However, at least one class with a guest speaker will be held via Zoom. Our expectations are as follows: The online learning environment is generally not optimally conducive to promoting a professional environment. Dogs bark and kids scream, and most of us have 'offices' in bedrooms. We understand that flexibility is necessary. However, we expect you to be sitting or standing upright during class – as opposed to lying down. Lying down would not be acceptable in a

face-to-face classroom. Additionally, we expect your cameras to be turned on so that we may maximize our engagement with each other; we consider having your camera on to be a component of active participation. Mute your microphone when you are not contributing to the discussion in the virtual classroom to avoid being unnecessarily disruptive. If you must leave briefly (eg, to go to the toilet), then please use the relevant online symbol to indicate to the primary course faculty that you have 'stepped out' or send us a private message in the Chat box.

- If your Internet bandwidth is too poor to allow consistent use of video, please contact the primary course faculty to discuss it.

5. Required Dress and Equipment for Labs:

- Navy blue scrubs - required for all labs starting Week 2
 - Any style of navy blue scrubs is acceptable but they must be purchased and monogrammed at AJ's Uniforms on 900 N. Mesa - AJ's has the trademark approval to do the monogramming and requires that scrubs be purchased there.
 - Required: UTEP logo monogrammed on left (over left upper pocket, if your scrub has an upper pocket), with 'PHYSICAL THERAPY' monogrammed on next line in silver thread.
 - Optional monogramming: your name in silver thread over right side of scrub top.
- Students will be acting as patients during lab, and should have minimal clothing beneath the gown to simulate real-life conditions in a hospital.
 - Students acting as patients will be required to wear a patient gown with only shorts (and athletic bra &/or tank top, if the student desires) beneath the gown when in the role of patient
 - Scrubs should be loose enough for easy donning/doffing during lab
 - Shorts should be worn under scrub pants OR be readily available to be donned quickly
- Closed-toed shoes are required
 - Athletic shoes are appropriate but must be clean and in good condition
- A personal dual-head stethoscope (OR combined bell and diaphragm in a single head) is required
 - You can find multiple online sites with stethoscope reviews and ratings to help you choose. We do NOT require any particular brand or model. However, here are 2 possibilities to consider:
 - Omron Sprague Rappaport Stethoscope is a lower-priced one, and is appropriate for a SPT's class purposes.
 - ADC ADSCOPE 603 Stainless Stethoscope is more expensive but more highly rated.

- We discourage you from buying anything more expensive than the suggested ones, until you are practicing and know that you will get your money out of the high-priced ones. Do not suggest investing more than ~ \$50.
- Personal gait belt (recommend vinyl belt that can be cleaned, not canvas type) is required
- Some means to take notes while involved in patient care (eg, note pad to record patient's vital signs, etc) is required

6. Expectations for Lab:

- Simulation labs at both the Campbell Building and the Health Sciences and Nursing (HSN) Building will be used for labs. Arrive to every lab on time. Plan extra time on days that we will be at HSN to allow for using the UTEP shuttle or finding parking. NOTE: A UTEP parking pass is required on main campus, or plan to pay for parking by the hour in the Mike Loya Building parking lot or Sun Bowl Parking Garage.
- All behaviors and dress should be professional at all times as if you were in an acute care hospital setting. Leave lab and equipment in the same orderly condition in which you found it, and be prepared to assist with set-up and clean-up as requested.
- Arrive to every lab in required lab wear with required equipment. Each student should come to every lab in clean, non-wrinkled navy blue scrubs as described in required dress. When a student is acting in the role of the SPT, they should be dressed in scrubs. When a student is acting in the role of the patient, they should be able to quickly change into a hospital gown with shorts beneath; clothing should allow access to all limbs and all areas of the trunk. Failure to arrive without appropriate scrubs will result in 5% being deducted off Oral Exam grade for each infraction during the semester.
- Long hair should be secured back at all times (ie, in a 'pony tail' or bun). No hats; no gum chewing; no sunglasses on one's head; no cell phone use during lab (unless being used to access resources directly related to the course activities). (Head coverings worn for religious reasons are allowed). NO FOOD of any kind is allowed in the lab. Only bottles of water that have the lid well-secured are permitted. Failure to follow these rules will result in 5% being deducted off Oral Exam grade for each infraction during the semester.
- Labs are meant to directly prepare students for passing the Skills Check and Oral Exam and working effectively in the clinic. Therefore, we will be using learning activities that permit promotion of professional behaviors, practice of manual skills, and development of clinical reasoning skills. When a student is acting in the SPT role, they should always be professional, communicate with their partner as if the partner is an actual patient, and always properly drape the patient to maintain modesty. When a student is acting in the patient role, they should role play as if actually a patient, but then be prepared to give your partner constructive feedback regarding how they performed after the role playing is complete – including feedback related to your partner's success in appearing confident and professional, how well they developed the therapeutic relationship, and if proper draping was maintained. At times,

there will be a third student in the group, who should act as an impartial observer and provide constructive feedback to the SPT.

- Lab partners will be changed each week, and assignments will include a mix of genders. It is important that each student assesses a variety of patients, and each student has the opportunity to teach and learn from all other students.

7. Late or Missed Assignments and Assessments Policy: See current DPT Student Handbook ‘Written Examination Policy’. Additional course-specific policy is as follows:

- No opportunities will be provided for missed examinations unless it is for an excused reason (eg, documented medical emergency).
- All written assignments are due by deadlines stated on the syllabus. Assignments submitted late but on the due date will result in a 25% deduction due to the late submission. Assignments submitted after the due date will result in ZERO credit.

8. Skills Check Policy: Refer to the DPT Student Handbook Skills Check policy for details.

9. Oral Examination Policy: For the purposes of this course, the Oral Examination is treated the same as a Practical Examination. Refer to the DPT Student Handbook ‘Practical Examination Policy’ for details.

10. Pandemic Safety: All students are expected to follow the safety policies of the DPT Program. These policies may change, depending on local, state, and national conditions. Failure to follow safety policies will be treated as unprofessional behavior.

Course Content and Schedule: (Note: Students will be notified of changes via Blackboard &/or email).

Week 1	TOPICS	READINGS & OTHER ASSIGNMENTS
Tues Jan 17	<p>Class - Role of PT with cardiopulmonary patients; essentials of cardiovascular/pulmonary physiology and exercise physiology (oxygen transport, cardiac output, hemodynamics)</p> <p><i>PECHAK</i></p> <p><i>(Note: Missed lab this week due to holiday - time will be made up with IPE event on Mar 3)</i></p>	<p>Prior to first day of CLASS: Strongly recommend you review the following content which you have covered in previous courses in order to ‘hit the ground running’:</p> <ul style="list-style-type: none"> • Patient Management Model (DeTurk & Cahalin Figure 2-5) • Cardiovascular and pulmonary anatomy (see past courses and/or DeTurk & Cahalin Ch 4) • Health Behavior Change models/theories, and Motivational Interviewing (PT 5233 material) • CPR (review most recent CPR course you took) • Blood pressure knowledge & skills – see Blackboard <p>Read Cardiac Output article on Blackboard</p>

		Read DeTurk & Cahalin Ch 3 & 5 Read class PowerPoint
Week 2		
Mon Jan 23 HSN Sim Lab 126	Lab - CPR review, basic cardiopulmonary exam (medical record review; observation; palpation; rest/orthostatic/exertional blood pressure; respiratory rate & rhythm; pulse oximetry); lab values assignment BRING YOUR PERSONAL STETHOSCOPE TO ALL LABS PECHAK	Prior to LAB: Complete Lab Values 'quiz' – can collaborate - see Blackboard Review medical record on Blackboard Prior to CLASS: Read DeTurk & Cahalin Ch 11, and Ch 12 (pp. 394-396 – 'Arrhythmia', 'Evaluating the Significance of PVCs', 'Palpitations') Review ECG resources on Blackboard
Tues Jan 24	Class - ECGs PECHAK	
Week 3		
Mon Jan 30 HSN Sim Lab 126	Lab – PT clinical assessment of the cardiovascular and pulmonary system (cardiac & pulmonary auscultation, percussion, JVD, LE edema assessment) SOLIS Class – Clinical reasoning related to heart and lung sounds; SPANISH practice SOLIS	Prior to LAB: See Blackboard for prep-work on PhysioU and Physiopedia Prior to CLASS: Read DeTurk & Cahalin Ch 9 (stop at p. 260 - Figure 9-4) & Ch 10 (stop at p. 327 – or 'Medical Examinations Used By Physical Therapists') Review Sections 3 & 4 (with focus on pp. 19-29) of the American Heart Association 2017 Guidelines on Hypertension – on Blackboard Review your APTA Spanish text, pp. 136-137, 140 to top of 141
Tues Jan 31		
Week 4		
Mon Feb 6 HSN Sim Lab 126	TeamSTEPPS intro; Sensitivity & Specificity; Arterial Blood Gases and Acid-Base Balance PECHAK	Prior to LAB: Read DeTurk & Cahalin (Ch 9 pp. 268-273 – 'Arterial Blood Gases') Review PowerPoints and documents on Blackboard
Tues Feb 7	Class - EXAM 1 in-person using Respondus Lockdown Browser – bring fully-charged laptop with <i>most current version</i> of Respondus Lockdown PECHAK	After LAB: Complete Week 4 Homework (does not need to be turned in) EXAM COVERS ALL MATERIAL WEEKS 1-3

Week 5		
<p>Mon Feb 13 Campbell Sim Lab 204</p>	<p>Lab – Scenarios & clinical application of auscultation and other test results</p> <p><i>PECHAK</i></p>	<p>Prior to LAB: Read documents on Blackboard Watch assigned PhysioU videos – see Blackboard Create a list of pre-written questions for Patient History in English and Spanish Bring an example of a dyspnea scale for use with patient</p>
<p>Tues Feb 14</p>	<p>Class – Cardiovascular Evaluation – medical examinations used by PTs; lab values continued; review of Exam 1</p> <p><i>PECHAK</i></p>	<p>Prior to CLASS: Read DeTurk & Cahalin Ch 10 (pp. 327-347 – ‘Medical Examinations Used By Physical Therapists’ to end of chapter) Review Rosenfeldt et al, 2016 article IN DETAIL including appraising research methods – on Blackboard Review Heart Failure Case Study on Blackboard Review CHF Clinical Practice Guideline on Blackboard</p>
Week 6		
<p>Mon Feb 20 Campbell Sim Lab 204</p>	<p>Lab – PT assessment associated with cardiac muscle dysfunction & cardiac vascular dysfunction; sternal precautions vs ‘Move in the Tube’</p> <p><i>PECHAK</i></p>	<p>Prior to LAB: Read DeTurk & Cahalin Ch 6 & 18 Read Cahalin et al article, Adams et al article, & Adams et al Teaching Script on Blackboard (including content & research methods [if research]) and other documents on Blackboard Watch assigned PhysioU videos & answer questions – see Blackboard <i>Note: You do not have to read the articles under Outcomes in PhysioU – just have a basic idea of what the outcome measures are assessing</i></p>
<p>Tues Feb 21</p>	<p>Class - Cardiovascular pathophysiology; PT associated with cardiac muscle dysfunction & cardiac vascular dysfunction</p> <p><i>PECHAK</i></p>	<p>Prior to or after CLASS: Do Week 6 Homework on Blackboard (not for a grade)</p>
Week 7		
<p>Mon Feb 27 Campbell Sim Lab 204</p>	<p>Lab – Examination & exercise prescription for patient s/p acute MI; Evaluation of patient intolerance to exercise</p> <p><i>PECHAK</i></p>	<p>Prior to LAB: Read DeTurk & Cahalin Ch 12 (pp. 393-400 – to end of Figure 12-4) AND read through Case Study #1 (John Speed)</p>

<p>Tues Feb 28</p>	<p>Class – Cardiovascular medications; screening for cardiovascular disease</p> <p>Exam 2 review</p> <p><i>PECHAK</i></p>	<p>Watch videos on PhysioU and Access Physiotherapy - see Blackboard</p> <p>Prior to CLASS: Read DeTurk & Cahalin, Ch 8 (pp. 211-222 & pp. 233-236 – from chapter beginning to end of ‘Thrombolytics’ and then ‘Drugs Used to Treat CV Pump Dysfunction’ through ‘Drugs That Decrease Cardiac Workload’)</p> <p>Read Goodman et al, Ch 6 – especially case examples, case study, Physician Referral section, and Practice Questions</p> <p>Read Jacob et al article with focus on Background, Table 1, Discussion</p> <p>Complete table for Cardio Meds Overview & Pharmacology cases on Blackboard</p> <p>Documentation assignment from Week 7 lab scenario due in Assignments folder on Blackboard by 2:30pm this Tuesday</p>
<p>Fri Mar 3 12:15-4:45pm (make-up from having no lab in Week 1)</p> <p>MANDATORY ATTENDANCE</p>	<p><i>Videorecording in Campbell Sim Lab 204:</i></p> <p>Lab B: 12:15-2:15pm</p> <p>Lab A: 2:45-4:45pm</p> <p>See instructions in Simulation Lab Video folder on Blackboard</p> <p><i>IPE Event online via Zoom:</i></p> <p>Lab A: Sign-in at 12:15pm; event 12:30-2:30pm</p> <p>Lab B: Sign-in at 2:30pm; event 2:45-4:45pm</p> <p>See IPE Event folder on Blackboard for details</p> <p>Wear DPT polo OR scrubs</p> <p><i>PECHAK SOLIS</i> & faculty from Health-Focused IPE Community of Practice</p>	

Week 8		
<p>Mon Mar 6 Campbell Sim Lab 204</p>	<p>Lab - Cardiovascular conditions including amputations; patient scenario with patient s/p amputation</p> <p><i>PECHAK</i></p>	<p>Prior to LAB: Read O’Sullivan – Chap 22 - Amputations (focus on postsurgical examination, positioning, and patient education) Watch SVS Peripheral Artery Disease video - see Blackboard Watch videos on PhysioU and Access Physiotherapy - see Blackboard</p>
<p>Tues Mar 7</p>	<p>Class - EXAM 2 in-person using Respondus Lockdown Browser – bring fully-charged laptop with <i>most current version</i> of Respondus Lockdown</p> <p><i>PECHAK</i></p>	<p>Note: Some of the videos on PhysioU (eg, Subjective Exam) have already been assigned so do not need to rewatch if you are comfortable with the topic</p> <p>Exam covers material from Weeks 1-7, especially 4-7</p> <p>IPE Reflection due in Assignments folder on Blackboard by start of this week’s class</p> <p>Sim Lab Video Critiques due in Assignments folder on Blackboard by 5pm this Friday</p>
SPRING BREAK		
Week 9		
<p>Mon Mar 20 Campbell Sim Lab 204</p>	<p>Lab – Lung auscultation revisited; airway clearance techniques</p> <p><i>SOLIS</i></p>	<p>Prior to LAB: Review resources related to lung auscultation from Week 3 Read documents on Blackboard Read DeTurk & Cahalin Ch 17 - focusing on pp. 534-549 (‘Intervention’ section) Watch assigned videos on YouTube and PhysioU – see Blackboard Read assigned sections on Physiopedia – see Blackboard</p>
<p>Tues Mar 21</p>	<p>Class – Pulmonary pathology, medical examinations used by PTs, interventions associated with airway clearance dysfunction</p> <p><i>SOLIS</i></p>	<p>Prior to CLASS: Read DeTurk & Cahalin Ch 7, Ch 9 (pp. 268-292 – ‘Medical Examinations Used By Physical Therapists’ onward), & Ch 17</p>

Week 10		
<p>Mon Mar 27 Campbell Sim Lab 204</p> <p>Tues Mar 28 6-8pm via ZOOM due to guest speaker</p>	<p>Lines & tubes; physical therapy associated with respiratory failure; mechanical ventilators, C-PAP, Bi-PAP; respiratory 'failure' vs 'success'</p> <p>SOLIS</p> <p>Required Attendance:</p> <p>Guest Speaker Dr. Kelsey Novosad Leon Management of Patients in Critical Care (please wear DPT polo or equivalent) - See BB for Zoom link</p> <p>SOLIS</p>	<p>Prior to LAB: Read DeTurk & Cahalin Ch 19 (pp. 611-648 – stop at 'Case Study – Patient with C5 Tetraplegia') Review APTA Task Force article (O2 recommendations) on Blackboard (including research methods, if applicable) Review Lines and Tubes on PhysioU Watch assigned YouTube videos on Blackboard</p> <p>Simucase assignment due in Assignments folder on Blackboard by start of this week's class</p>
Week 11		
<p>Mon Apr 3 Campbell Sim Lab 204</p> <p>Tues Apr 4</p>	<p>Lab – Airway clearance techniques continued (splinted coughing & assisted cough); breathing exercises; chest wall expansion; inspiratory/expiratory muscle training</p> <p>SOLIS</p> <p>Class – Physical therapy associated with ventilator pump dysfunction and failure; designing PT plan of care; screening for pulmonary disease</p> <p>SOLIS</p>	<p>Prior to LAB: Read DeTurk & Cahalin Ch 17 - focusing on pp. 534-549 ('Intervention' section) if needed (done in Week 9) Read Matsuo et al article on Blackboard (including research methods, if applicable) Watch assigned YouTube and PhysioU videos on Blackboard</p> <p>Prior to CLASS: Read DeTurk & Cahalin Ch 20 Read Goodman Ch 7 (especially Case Studies, Physician Referral section, and Key Points to Remember at end of chapter) Read case studies on Blackboard and answer questions</p> <p>Documentation assignment from Week 11 lab scenario due in Assignments folder on Blackboard by start of this week's class.</p>

Week 12		
<p>Mon Apr 10 Campbell Sim Lab 204</p>	<p>Lab – VTEs (DVTs/PEs); present & future of Cardiopulmonary Rehabilitation; regenerative medicine and rehabilitation; SPANISH practice ***Skills Check for percussion & vibration during today's lab</p>	<p>Prior to LAB: Read DeTurk & Cahalin Ch 19 (pp. 642-643 – ‘Venous Thromboembolic Disease’ section) & Ch 23 Review Hillegass et al article (VTE guidelines) on Blackboard (including research methods, if applicable)</p>
<p>Tues Apr 11</p>	<p>Class –pulmonary medications; pulmonary rehab</p>	<p>Read assigned cases and determine information requested on Blackboard</p> <p>After Lab: prepare your group's assigned Week 14 presentation</p> <p>Prior to CLASS: Read DeTurk & Cahalin Ch 8 (pp. 237-242 – from ‘Drugs Used to Treat Ventilatory Pump Dysfunction’ to end of chapter), Ch 15 Read assigned cases and determine information requested on Blackboard</p> <p>After class: Get started on Week 14 homework</p> <p>Community Faculty Assignment due in Assignments folder on Blackboard by start of this week's class</p>
Week 13		
<p>Mon Apr 17 Campbell Rooms 203/204</p>	<p>ORAL CLINICAL REASONING EXAM See schedule on Blackboard for your assigned time & location – schedule & rubric will be posted at least 1 week in advance</p>	
<p>Tues Apr 18</p>	<p>Class – PT associated with primary prevention, risk reduction, and deconditioning – including patients with diabetes and obesity</p>	

<p>Fri Apr 21 from 1-6pm Campbell Rooms 200/203/204</p>	<p>SKILLS CHECK - See schedule on Blackboard for your assigned time – schedule & rubric will be posted at least 1 week in advance</p> <p><i>SOLIS PECHAK FOGEL</i></p>	
<p>Week 14</p>		
<p>Mon Apr 24 HSN Sim Lab Room TBD</p> <p>Tues Apr 25</p>	<p>Lab – Swallowing & hydration/nutrition; lifting equipment for patients requiring heavy assistance – ceiling lifts, hooyer lift, HoverMatt, HoverJack; urgent/emergent situations</p> <p><i>SOLIS PECHAK</i></p> <p>Class – Pediatric Cardiopulmonary; ICU Acquired Weakness</p> <p><i>SOLIS</i></p>	<p>Prior to LAB: Be prepared to do your group presentation in lab on urgent/emergent situation Watch assigned videos on Blackboard</p> <p>Prior to CLASS: Complete Week 14 homework before class alone or in a group Read Nordon-Craft et al article (ICU-acquired weakness) on Blackboard (including research methods, if applicable) Watch assigned video on Blackboard and answer questions Read DeTurk & Cahalin Ch 21</p> <p>After CLASS: Get started on Week 15 homework</p> <p>Documentation of Spanish Lunch & Learn attendance is in Assignments folder on Blackboard by start of this week’s class</p>
<p>Week 15</p>		
<p>Mon May 1 Campbell Sim Lab 204</p> <p>Tues</p>	<p>Lab – Care of complex patients; differential diagnosis; cardiopulmonary treatment in SPANISH</p> <p><i>SOLIS</i></p> <p>Class – Exercise Prescription (Dr. Gurovich)</p>	<p>Prior to LAB: Complete Week 15 homework Review ‘A randomized trial of long-term oxygen for COPD with moderate desaturation’ IN DETAIL prior to class and answer questions on Blackboard Read Ricard & Cahalin article and answer the questions</p>

May 2	SOLIS	Community Engagement Assignment due in Assignments folder on Blackboard by start of this week's class
Final Exam Week		
Mon May 8 9-11am Campbell 213 (location is tentative – awaiting confirmation)	FINAL EXAM in-person using Respondus Lockdown Browser – bring fully-charged laptop with <i>most current version of Respondus Lockdown</i> SOLIS	Comprehensive (with emphasis on Weeks 8-15)

Manual Blood Pressure Skills: It is expected that you enter this course with the knowledge and skills gained from all previous courses in the DPT curriculum. This includes the ability to take an accurate manual blood pressure, which may be tested during the Skills Check. See the following site (&/or similar sites) to practice taking accurate blood pressures: <http://respiratory.guide/bloodPressure/practice-taking-blood-pressure>

Cardio-Focused Spanish Lunch & Learn Sessions: Dr. Alvaro Gurovich will facilitate Spanish Lunch & Learn sessions focused on cardiopulmonary content. You must attend 2 sessions focused on Cardio to earn full credit. See Blackboard for more information.

Community Engagement Project: You will complete a minimum of 3 hours of community engagement with El Paso Parks to implement Senior Games this semester. See Community Engagement Project folder on Blackboard for more information.

Community Faculty Assignment: Your group will meet virtually or in person with your assigned Community Faculty member a single time this semester – whichever is the preference of the Community Faculty. See Community Faculty folder on Blackboard for more information.

Exams: There are 3 written exams, 1 skills check, and 1 oral clinical reasoning examination in this course. Just like our patients, exams are always cumulative. If you earn a grade below an 80% on any exam, you are expected to take the initiative to arrange a meeting with Dr. Pechak to explore opportunities to improve performance.

Documentation Assignments: You will complete 2 patient documentation assignments as part of some simulation lab experiences. These will be submitted on Blackboard and due at the start of the following class unless otherwise indicated on the syllabus and/or Blackboard.

Interprofessional Education Event: You student will attend a virtual case-based interprofessional education (IPE) event with students from multiple other professions. Failure to attend, participate in, demonstrate professional behavior and dress, and to submit a written reflection will result in deductions described in Methods of Evaluation and Course-Specific Policies. Two sessions will be scheduled in the same afternoon; half the class will attend the first session and half the class will attend the second session. See Interprofessional Education Event folder on Blackboard for more information.

Simucase Assignments: You will complete an assignment using Simucase. A score of 80% or more is required to earn any credit. More details will be posted in the Simucase Assignment folder on Blackboard.

Simulation Lab Videotaping: Each student pair (or trio, if applicable) must arrange to be videorecorded in the Campbell Building Simulation Lab by someone in their lab. One student will complete an assigned treatment session with a partner acting as a simulated patient; then the roles must be reversed. The student pairs will then complete peer and self-critiques of their performances as student physical therapists. The assignment grade will depend on the ACCURACY of critiques, NOT the quality of the performances. Just like in life, there are no 're-takes' but we should always reflect on how we could improve for the next time. See Sim Lab Videotaping folder on Blackboard for more information. Students are required to keep their videorecording until the grade is assigned, so that faculty have the option to review the videorecording.