

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

PT 6307

Cardiopulmonary Patient Management

Spring 2015

COURSE SYLLABUS

Credit Hours: 3 (2-hour lecture; 3-hour lab per week)

Contact Hours: 75 (15 weeks)

Schedule: Lecture: Wednesdays, 10:00am-noon – Room 113

Lab A: Mondays, 9:00-12:00 pm – Simulation Lab, Health Sciences and Nursing Building, Room 126

Lab B: Mondays, 1:00 - 4:00 pm – Simulation Lab, Health Sciences and Nursing Building, Room 126

EXCEPT where indicated otherwise on attached schedule &/or Blackboard

Instructor:

Celia Pechak, PT, PhD, MPH

Office: Campbell 311, 747-7289

Office hours: Wednesdays after class 12-1:00pm - and other times based on student's request as traditionally students have not used my office hours when I set them. If you cannot make scheduled office hours, email me 3 possible options for appointment. Also feel free to stop in my office any time my door is open, or meet with me before or after lab. I am very happy to meet with you to help you learn the course content!

e-mail: cmpechak@utep.edu

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:

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

1. Correlate signs, symptoms, and test results of patients with cardiovascular and pulmonary disorders commonly seen by physical therapists with anatomy, physiology, pathology, and pathophysiology. (CC-2, 3)
2. Apply key course concepts (including cardiac output, hemodynamic stability, and oxygen transport system) in the explanation of patient condition and impact of medical/surgical/physical therapy interventions. (CC-2, 3)

3. Interpret the potential impact of routine pharmacological agents on patient condition and physical therapy interventions based on knowledge of commonly used agents and an understanding of the common therapeutic effects and side effects of these agents. (CC-2, 3, 5.19, 5.20)
4. Identify and implement appropriate tests and measures (including cardiac and pulmonary auscultation, assessment of circulation, vital signs, pain, edema, functional mobility assessment, and validated outcome measures), and interpret results for patients with common cardiovascular and pulmonary disorders. (CC-2, 3, 5.27, 5.30, 5.31, 5.45, 5.46, 5.47, 5.49)
5. Differentiate between musculoskeletal disorders and cardiovascular and pulmonary disorders with similar signs and symptoms in order to determine best course of PT action (including possible referral or activation of emergency procedures). (CC-2, 3, 5.19, 5.20, 5.27, 5.31)
6. Determine best course of PT action based on interpretation of the results of PT examination and evaluation (including laboratory values, ECGs, pulmonary function tests, imaging studies, vital signs, presence of edema, medications and other medical/surgical interventions, patient's signs and symptoms). (CC-2, 3, 5.19, 5.20, 5.28, 5.29, 5.30, 5.31)
7. Identify and implement appropriate physical therapy interventions (including airway clearance techniques, positioning strengthening, and functional mobilization) for patients with common cardiovascular and pulmonary disorders (including patients s/p acute limb amputation) based on understanding patient's condition and effects of interventions (including negative effects of bed rest). (CC-2, 3, 5.19, 5.20, 5.39)
8. Design and deliver a comprehensive physical therapy plan of care (including patient/family education and consultation with other health care professionals) for patients with cardiovascular and pulmonary disorders in simulated practice settings based on evaluation, diagnosis, and prognosis. (CC-2, 3, 5.17, 5.19, 5.20, 5.32, 5.33, 5.34, 5.35, 5.36, 5.37)
9. Modify physical therapy plan of care when necessary based on patient's condition and response to treatment for patients with cardiovascular and pulmonary disorders in simulation practice and written cases. (CC-2, 3, 5.19, 5.20, 5.38, 5.48)
10. Demonstrate culturally appropriate patient/family education (including use of at least basic Spanish when appropriate) using appropriate teaching methods with simulated patients with cardiovascular and pulmonary disorders. (CC-5.9, 5.26, 5.41)
11. Identify and implement proper risk management/safety practices (including use of proper body mechanics for patient and student PT, and activation of emergency procedures such as CPR) for patients with cardiovascular and pulmonary disorders based on understanding of patient condition and any contraindications/precautions specific to patient. (CC-2, 3, 5.17, 5.19, 5.20, 5.43, 5.44)
12. Determine the appropriate role of the PTA in the intensive care setting. (CC-5.40)
13. Access current evidence, analyze it, and apply it to the physical therapy plan of care for patients with cardiovascular and pulmonary disorders. (CC-2, 3, 5.21, 5.22, 5.23)
14. Determine appropriate health promotion recommendations (including those related to smoking cessation and exercise) for the prevention of cardiovascular and pulmonary disease. (CC-2, 3, 5.50, 5.51, 5.52)
15. Demonstrate professional behaviors that reflect accountability, altruism, compassion/caring, integrity, professional duty, effective communication, and cultural competence during simulated patient care. (CC-5.1, 5.2, 5.3, 5.6, 5.8, 5.9, 5.10, 5.11, 5.17, 5.18).
16. Document thorough and accurate initial evaluations and progress notes that meet professional and legal standards for simulated patients with cardiovascular and pulmonary disorders in a simulated acute care setting. (CC-3, 5.1, 5.42)
17. Complete accurate self-reflection/peer critique, and incorporate recommendations in order to improve student performance in simulated acute care setting. (CC-5.12, 5.13, 5.14, 5.19)
18. Develop, implement, and modify plan of care for individual simulated patients and/or paper case scenarios based on the patients' learning styles, values, preferences, needs, and self-identified goals. (CC-5.18)

Primary Required Text:

Hillegass E. *Essentials of Cardiopulmonary Physical Therapy*. 3rd ed. St. Louis, MO: Saunders Elsevier; 2013. ISBN: 978-1-437-70381-8

Other Required Texts (Already Purchased for Other Courses):

Goodman CC, Synder TE. *Differential Diagnosis for Physical Therapists*. 5th ed. St. Louis, MO: Saunders Elsevier; 2013. ISBN: 978-1-4377-2543-8.

Paz J, West, M. *Acute Care Handbook for Physical Therapists*. 4th ed. St. Louis, MO: Saunders; 2014. ISBN-13: 978-1-4557-2896-1.

Quijano MG, Gonzalez-Lamendola, J. *Spanish for Physical Therapists: Tools for Effective Patient Communication*. APTA; 2006. ISBN 978-1-931369-28-2.

O'Sullivan S, Schmitz T. *Physical Rehabilitation*. 6th ed. Philadelphia, PA: F.A. Davis; 20014. ISBN-13: 978-0-8036-2579-2.

Strong Recommendation (for those of you who are not familiar with ECGs):

Jones SA. *ECG Notes*. 2nd ed. Philadelphia, PA: FA Davis; 2009. ISBN-13: 978-0803621428

Supplementary Texts Available for Check-out in Beverly's Office (Room 309):

Jones SA. *ECG Success: Exercises in ECG Interpretation*. Philadelphia, PA: FA Davis; 2008.

Reid WR, Chung F, Hill K. *Cardiopulmonary Physical Therapy: Management and Case Studies*. 2nd ed. Thorofare, NJ: Slack Inc; 2014.

Supplementary Texts with Cardiopulmonary Content (not required):

Ciccone CD. *Pharmacology in Rehabilitation*. 4th ed. Philadelphia, PA: FA Davis; 2007. ISBN-13: 978-0803613775.

Hillegass EZ. *Rehab Note: A Clinical Examination Pocket Guide*. Philadelphia, PA: FA Davis; 2007. ISBN-13: 978-0-8036-1398-0.

Kisner C, Colby LA. *Therapeutic Exercise, Foundations and Techniques*. 5th ed. Philadelphia, PA: FA Davis; 2007. ISBN-13: 978-0721606194.

Required Dress and Equipment for Labs:

- Navy blue scrubs with UTEP logo monogrammed over left pocket, with "PHYSICAL THERAPY" monogrammed below in silver thread. (AJ's Uniforms on 900 N. Mesa has the specific requirements). Optional monogramming: your name over right side of scrub top
- Clean, closed-toed shoes (athletic shoes are appropriate but must be clean and in good condition)
- Dual-head Stethoscope (basic stethoscope is fine as long as it has the combination diaphragm/bell chest piece)
 - Here are some sites that have reviews:

- www.thebeststethoscope.org
- http://www.forusdocs.com/reviews/Acoustic_Stethoscope_Review_page7.htm

In general, do not buy the absolute cheapest ones as they have single-heads – at minimum you need to buy a dual-headed one that has a diaphragm on one side and a bell on the other.

I would say that this low-priced one is decent for a SPT's class purposes – Omron Sprague Rappaport Stethoscope, Black
http://www.amazon.com/dp/B000FERLKI/ref=as_sl_pc_tf_lc?tag=best-stethoscope-20&camp=213381&creative=390973&linkCode=as4&creativeASIN=B000FERLKI&adid=0PA60W0VFFK4VZ29FCF3&&ref-refURL=http%3A%2F%2Fwww.thebeststethoscope.org%2F

But IF you are willing/able to spend a bit more, go for:

ADC ADSCOPE 603 Stainless Stethoscope, Black

http://www.amazon.com/gp/offer-listing/B000NIB6J8/ref=as_sl_pc_tf_lc?tag=best-stethoscope-20&camp=213381&creative=390973&linkCode=am1&creativeASIN=B000NIB6J8&adid=02YCXWQJB1FBTEGFWBXE&&ref-refURL=http%3A%2F%2Fwww.thebeststethoscope.org%2F

Each of the above has its drawbacks – but I would discourage you from buying anything more expensive until you are practicing and know that you will get your money out of the high-priced ones.

- Gait belt (recommend vinyl belt that can be cleaned, not canvas type)
- Clipboard (recommend clipboard case that opens for storage of your paperwork)

Optional Dress for Lab:

- White lab coat

Methods of Instruction:

Lectures, problem solving, laboratory practice, demonstrations, video/multimedia presentations, group interaction, case studies

Methods of Evaluation:

Graded activities and their weight are as follows:

Class quiz #1	1%
Documentation Assignments	3%
EBP Presentation	3%
Case Report Paper	10%
Video & Critiques of Video Lab Performance	1%
Community Engagement Activity & Reflection	2%
Practical Exam	5%
Exam 1	20%
Exam 2	25%
Final Exam	30%

QUIZZES – Your first quiz will be given DURING class on the first day, and will count towards your course grade. Other quizzes will be available on Blackboard for your practice. The online quizzes may be taken multiple times, and are for your learning purposes only. These do NOT count toward your course grade.

DOCUMENTATION – You will complete patient documentation assignments as part of some of your simulation lab experiences; these will be due at the start of the following class (usually 2 days later).

EVIDENCE-BASED PRACTICE PRESENTATION – Each group will be assigned a common clinical question faced in acute care, and each group will find a minimum of 3 recent articles that best answer the question. The group will provide hard copies of all articles to Dr P and rank them in the order of best evidence to answer the question. With Dr P's input, the group will determine which one(s) of them will be presented to the entire class (and/or if the group needs to search for further evidence). The purposes of this assignment are to 1) further develop your skills at accessing, analyzing, and applying current evidence, 2) contribute to bringing the most current evidence to this course, and 3) further develop your presentation skills.

CASE REPORT – Students will develop and write an abbreviated case report related to the physical therapy examination and intervention of a simulated patient with a cardio, vascular, and/or pulmonary diagnosis. The main purposes of this case report are to: 1) provide an extended learning opportunity for the student to understand the care of a patient from beginning to end (including appropriate standardized tests and measures during examination, and appropriate interventions); 2) develop knowledge and skills related to writing a case report in preparation for the case report that will be developed based on a real patient in Semester 8; and 3) continue to develop professional writing skills in order to prepare students to contribute to the literature after graduation. The case study will be written in AMA format, and meet the requirements for submission to APTA's journal *Physical Therapy*. See Blackboard for rubric and other related resources.

CRITIQUES OF VIDEOED LAB PERFORMANCES – You will be videotaped completing an examination and/or intervention with a simulated patient in the Simulation Lab. You will then complete peer and self-critiques of your performances as student physical therapists. While you should prepare for the scenario through practice during regularly scheduled labs, your assignment grade will depend on the ACCURACY of your critiques, NOT the quality of your 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 Blackboard for group assignments, more information, and expectations to receive full credit.

COMMUNITY ENGAGEMENT ACTIVITY & REFLECTION – Each of you will complete a single community engagement activity related to increasing physical activity & exercise, and write a 1-2 page reflection. See Blackboard for specifics. It will be discussed during class.

LABS and WRITTEN CLASS ACTIVITIES – These do NOT have to be turned in for grading; however, I strongly recommend you complete all of these activities to prepare for your exams. If you have questions about these activities, I encourage you to use the DISCUSSION BOARD on Blackboard to ask your questions. I will answer or guide you to answers, but I also expect students to help answer each other’s questions there. These activities are meant as opportunities for you to work on your clinical reasoning.

All written assignments are due at the start of class on the date indicated. NO credit will be given for late assignments.

If you get a grade below an 80% on any exam or assignment worth 5% or more of the course grade, you are required to arrange a meeting with me and work out study strategies to improve your performance. You are not required to arrange a meeting for low quiz grades, but you are strongly encouraged to do so if there is a trend of low quiz grades.

UTEP DOCTOR OF PHYSICAL THERAPY PROGRAM 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

Course Content: Refer to topic outline below

Course and Program Policy: See DPT Program Handbook for all policies on exams, electronic device use, dress code, attendance, and scholastic dishonesty. Your instructors 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, generic abilities, attendance, and the disclaimer that the syllabus is subject to change.

EXPECTATIONS FOR LAB:

The Simulation Lab at the Health Sciences and Nursing Building will be used for labs. Students from other professions will be using other rooms in the lab at the same time, and at times tours are being given to individuals from outside of UTEP. All behaviors and dress should be professional at all times. You should 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 on time and in required lab wear with required equipment. Failure to arrive without appropriate scrubs will result in 5% being deducted off practical exam grade for each infraction during the semester.

Allow extra time for parking, or use of the shuttle to/from Campbell Building.

Each student should come to every lab in clean, non-wrinkled navy blue scrubs as described in required dress, and bring shorts for men and shorts and an athletic bra for women. When a student is acting in the role of the SPT, s/he should be dressed in scrubs. When a student is acting in the role of the patient, s/he should be able to quickly change into hospital gown with shorts beneath if you choose, and allow access to all limbs and all areas of the trunk.

Labs are meant to directly prepare students for passing the practical 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, s/he should always be professional, communicate with his/her 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, s/he should role play as if actually a patient, but then be prepared to give your partner constructive feedback regarding how h/she performed after the role playing is complete – including feedback related to your partner's success in appearing confident and professional, how well s/he 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 "PT".

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

No hats; no gum chewing; no cell phone use during lab, unless being used to access resources related to patient care. NO FOOD of any kind is allowed in the Simulation Lab per lab rules. ONLY water bottles that have the lid well-secured are permitted.

Attendance, Tardiness, Class Participation, and Professional Behaviors Policy:
(this is in addition to what is found in Student Handbook, and is specific to Dr Pechak's courses)

ATTENDANCE:

As all program faculty members do, I believe that students should demonstrate their commitment to the profession and respect for faculty, guest speakers, and colleagues by attending all classes/labs, and arriving to class on time. I am expected to be at class/labs as scheduled and to be on time; I expect the same from you. I work hard to prepare for classes/labs, and to make them productive active-learning opportunities; I expect you to do your part by being prepared and fully participating. I do NOT give credit for this...I expect it. Failure to arrive to class prepared and on time, and to not participate actively, and to fail to demonstrate professional behaviors may result in deductions to your final semester grade.

However, congruent with one's ability to request excused time off in the work setting, I 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 class/lab time. Specifically I will NOT offer the opportunity to make up in-class quizzes or written examinations, either in advance or after the scheduled class, or provide individual tutoring for missed content. If you miss a lab and patient documentation was part of the lab, then you will receive ZERO for the patient documentation assignment that week. 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 do the following:

- Email me at cmpechak@utep.edu at least 2 hours in advance if you will not be attending class or lab. I do not require you to give me a reason, but I 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 me and then arrange a meeting with me 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). I will notify you after our meeting and review of your documentation whether or not the absence will be considered excused or unexcused.

Missing one hour 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.

TARDINESS:

I use the clock on the computer to determine when class or lab should start. If you expect to arrive late (eg, doctor's appointment), you should notify me in writing by email at least 2 hours in advance. If you are consistently late for any reasons, I will contact you to meet with me to discuss the problem. Each subsequent incidence of tardiness may result in 1% deduction from your final course grade.

PARTICIPATION and PROFESSIONAL BEHAVIORS:

I expect you to arrive to class and lab prepared and to actively participate while not being disruptive. If you are consistently ill-prepared, not actively participating, and/or being disruptive, I will contact you to meet with me to discuss the problem. Each subsequent incidence of poor preparation, poor participation, and/or disruption may result in 1% deduction from your final course grade.

Special Accommodations (ADA):

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. For additional information, visit the CASS website at <http://sa.utep.edu/cass/>

Tentative Topic/Assignment Outline:

Date **TOPIC** **READING/ ASSIGNMENTS (do readings PRIOR to lab/class)**

Week 1		
Jan 21	Class - Role of PT with cardiopulmonary patients; oxygen transport, cardiac output, hemodynamics No lab this week due to MLK Holiday Note: This week's lab time will be made up with videotaping assignment March 6 Friday	IN CLASS QUIZ on basic cardiovascular and pulmonary anatomy & physiology (see PowerPoint lectures Ch 1&2), with special emphasis on cardiac output & related concepts (eg, SV, preload, afterload); CPR; Patient Management Model; and Health Behavioral Change models/theories and Motivational Interviewing (Note: most if not all of this content should be review) Hillegass: Chap 1 & 2 Review your CPR class notes Review Patient Management Model in <i>Guide to PT Practice</i> (PT 6202) or Hillegass Figure 16-1 Health Behavioral Change models/theories and Motivational Interviewing (refer to your sources from PT 5233)

Week 2		
Jan 26 & 28	<p>Lab- CPR review, basic cardiopulmonary exam (medical record review; observation; palpation; rest/orthostatic/exertional blood pressure; respiratory rate & rhythm; pulse oximetry); lab values assignment</p> <p>Class – ECGs</p>	<p>Watch video of orientation to Sim Lab Paz pp. 1-13 Hillegass pp. 104-107, Ch 16</p> <p>Hillegass Ch 9 (read & re-read Ch 9!) (ECG notes pp. 118-127) **BRING your ECG Notes to class and lab if you have it Paz pp. 38-46 – esp. PT considerations (ECG Notes pp. 1-71 with focus on “clinical tips”)</p>
Fri Jan 30	<p>Make-up class – see next section</p>	
Week 3		
<p>Fri Jan 30 10am-noon Room 113</p> <p>Make Up for Wed Feb 4 – Dr P at CSM</p> <p>Feb 2</p>	<p>Class – Clinical assessment of the cardiopulmonary system (cardiac & pulmonary auscultation, percussion);</p> <p><i>LAB ACTIVITIES DURING CLASS – BRING STETHOSCOPE WOMEN SHOULD WEAR SPORTS BRA</i></p> <p>Discuss Exam 1</p> <p>Lab – Patient scenarios, including interpretation of ECGs; cardiovascular exam in SPANISH</p>	<p>Hillegass Ch 16 & Powerpoints (Paz, pp.486-499)</p> <p>Article on BB</p> <p>APTA Spanish, pp. 136-137, 140 to top of 141</p>
Week 4		
Feb 9 & 11	<p>Lab - Sensitivity & Specificity; Acid-Base Balance</p> <p>Class - EXAM 1</p>	<p>Read Hillegass pp. 380-383 & Paz p. 64-66</p> <p>COVERS ALL MATERIAL through WEEKS 1-3</p>

Week 5		
Feb 16 & 18	<p>Lab – Scenarios & clinical application of auscultation and other test results; pulmonary exam in SPANISH</p> <p>Class – Cardiovascular & Pulmonary Diagnostics; lab values continued; review of Exam 1 results</p>	<p>Review Week 3 readings APTA Spanish, pp. 137-top of 141</p> <p>Hillegass Ch. 8 & 10 (& if needed, Paz has related content to supplement your understanding in Ch 3 & 4)</p>
Week 6		
Feb 23 & 25	<p>Lab & Class - Cardiovascular Pathologies (including Exercise and Diabetes)</p>	<p>Hillegass Ch 3 & 4 (& supplementary content in Paz Ch 3)</p> <p>Hillegass Ch 11 & 12 (Cardio content only)</p> <p>Hillegass Ch 7 (pp 242-256)</p> <p>Complete first DRAFT of Case Report due at start of class</p>
Week 7		
Mar 2 & 4	<p>Lab – Sternal precautions; Examination & exercise prescription for patient s/p acute MI</p> <p>Class – Cardiovascular Medications; screening for cardiovascular disease; Exam 2 review</p>	<p>Goodman, Ch 6 – especially pp. 278-285, case studies, red flags, PT actions.</p> <p>(Use Hillegass Ch 14 & Ciccone pharm book to supplement Powerpoint related to Cardio & Diabetes meds, if needed)</p> <p>Articles on BB</p>
Fri Mar 6	<p>Sim lab videotaping – see schedule on Blackboard</p>	

Mar 9-13	SPRING BREAK	
Week 8		
Mar 16 & 18	<p>Lab: Cardiovascular conditions including amputations; patient scenario with patient s/p amputation</p> <p>Class: EXAM 2</p>	<p>O’Sullivan Ch 22 pp 1005-1008 (focus on postsurgical examination, positioning, and patient education)</p> <p>Paz Ch 16</p> <p>Exam covers all material from week 1 through week 7, especially 4-7</p>
Week 9		
Mar 23 & 25	<p>Lab – pulmonary auscultation; airway clearance techniques</p> <p>Class – Pulmonary pathophysiology</p>	<p>Review auscultation in Hillegass Ch 4 Hillegass Ch 17 & Paz Ch 22 - focusing on airway clearance techniques</p> <p>Hillegass Ch 5 & 6 Hillegass Ch 11 & 12 (thoracic/pulmonary content)</p> <p>**SIM LAB PERFORMANCE CRITIQUES DUE at start of class</p> <p>A minimum of 3 current articles are due in next week’s lab for the EBP Presentation assignment – contact Dr P prior to THIS week’s class if the group needs Dr P’s assistance to access Acute Care or Cardiopulm Section journals or have failed to identify a minimum of 3 current articles.</p>

Week 10		
Mar 30 & Apr 1	<p>Lab – Monitoring systems in the ICU; vents, c-paps, bi-paps, chest tubes; screening for pulmonary disease – case studies</p> <p>Note: AM lab will help train the nursing students with Dr Dillon in her course in the PM; PM lab will help train the nursing students with Dr Dillon in her course in the AM. See Dr Dillon’s course documents for your scheduled time.</p> <p>Class – Designing PT plan of care, mobilization & exercise</p>	<p>Hillegass Ch 13 Goodman Ch 7</p> <p>For lab: All groups must have hard copies of current articles that answer their assigned clinical question, with a brief (less than one page) written justification ranking them by quality & relevance. Then each group and Dr P will decide which ones the group will present to the entire class during their assigned EBP presentation – or the group will be instructed to seek additional resources if they have failed to do their search effectively.</p> <p>Hillegass Ch 17 (focusing on exercise)</p>
Week 11		
Apr 6 & 8	<p>Lab – Airway clearance techniques continued; respiratory muscle exercise/inspiratory/expiratory muscle training</p> <p>Class – Ventilation & breathing strategies, respiratory muscle training; overview of pulmonary medications; pulmonary rehab</p>	<p>If needed, review Hillegass Ch 17 & Paz Ch 22 - focusing on airway clearance techniques</p> <p>Hillegass Ch 19 & articles on BB</p> <p>Note: Hillegass Ch 15 has supplementary info on Pulmonary Meds – but focus on PowerPoint</p> <p>FINAL Case Report DUE at start of class</p>
Week 12		
Apr 13 & 15	<p>Lab – Cardiac rehabilitation, pulmonary rehabilitation</p> <p>Class – Interventions for acute cardiopulmonary conditions; DVTs/PEs EBP Presentations by student groups 1, 2, 3</p>	<p>Hillegass Ch 18</p>

Week 13		
Apr 20 & 22	<p>Lab – Cases in lab</p> <p>Class – Interventions for chronic cardiopulmonary conditions; Healthy People 2020; health promotion and fitness with sample special populations</p>	<p>No required reading – but familiarize yourself with Healthy People 2020 website and resources (discussed in PT 5233)</p> <p>(Have access to course materials during lab & class)</p>
Week 14		
<p>Tues April 28</p> <p>MON April 27 or FRI May 1</p>	<p>Class – Pediatric Cardiopulmonary; ICU Acquired Weakness</p> <p>EBP Presentations by student groups 4, 5, 6</p> <p>PRACTICAL EXAM – See schedule on BB for your assigned practical exam time</p>	<p>Hillegass Ch 20 & articles on BB</p>
Week 15		
May 4 & 6	<p>Lab – Care of complex patients; cardiopulmonary treatment in SPANISH</p> <p>Class – Finish complex cardiopulmonary patient & differential diagnosis; final exam review</p>	<p>Community Engagement Reflection due in class today.</p>
Week 16		
Week of May 11-15	FINAL EXAM – Date and time to be posted	Comprehensive (with emphasis on Weeks 8-15)

****Times, dates, and reading assignments are subject to change although every effort will be made to minimize any changes – watch Blackboard for any changes.**