

# PT 7221

## CARDIOPULMONARY PATHOLOGY

### SPRING 2022

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**Office:** HHS 224E

**Office Hours:** By appointment

## Course Information

### Course Description

Course provides student physical therapists with a foundational knowledge of cardiac and pulmonary pathology, progressing from simple to complex. Pathologies will include and expand on cardiac and pulmonary disease risk factors, hypertension, ischemia and coronary artery disease, cardiac valve pathology, congestive heart failure, cardiomyopathy, cardiac disease with multisystem failure, the EKG of common cardiac dysrhythmias, obstructive lung dysfunction, restrictive lung dysfunction, airway clearance, bronchial hygiene, ventilation/perfusion abnormalities, pulmonary hypertension, pulmonary embolism, and pulmonary cancer. Case studies are interwoven with presentation for clinical emphasis.

### Course Credits

32 Hours Lecture

### Meeting Hours

Tuesdays: 8 – 10 am

### Couse Location

HHS 216

## Prerequisite Courses

Successful completion of previous DPT coursework

## Program Outcomes/ Student Learning Outcomes

Experiences in the classroom and laboratory are designed such that at the completion of the course the student will be able to:

1. Describe common cardiopulmonary pathologies that a physical therapist would encounter in a typical practice setting. (7D10, 7D16, 7D17, 7D18, 7D19, 7D20)
2. Describe and clearly define the cardiopulmonary pathologies that are amenable to physical therapy intervention. (7D16, 7D17, 7D18, 7D22)
3. Discuss the influence of cardiopulmonary pathologies (discussed in class) on the process of physical therapy examination and evaluation. (7D16, 7D17, 7D18, 7D20)
4. Explain the impact of aging, gender and ethnicity on the pathology of cardiopulmonary diseases commonly seen by physical therapists. (7D18, 7D19, 7D34)
5. Differentiate between musculoskeletal disorders and cardiopulmonary disorders with similar signs and symptoms. (7D17, 7D18, 7D19, 7D20, 7D22)
6. Using the Guide to Physical Therapist Practice (<http://guidetoptpractice.apta.org/>) as a reference, complete a written presentation of a clinical case study based on a patient with a cardiovascular and a pulmonary pathology. (7D9, 7D10, 7D11, 7D22, 7D23, 7D24)
7. Demonstrate professional behaviors in accordance with the APTA *Code of Ethics & Core Values* associated with course content and application. (7D10, 7D11)

## Course Delivery

Lecture and class participation, case study analysis, multi-media programs (including power point outlines), self-instructional materials, reading assignments, Internet activities (Blackboard), and 1 student project.

## Required Texts and Materials

1. Essentials of Cardiopulmonary Physical Therapy, 4th ed.(2017), Hillegass, EA, Elsevier, ISBN: 9780323430548.

2. ACSM's Guidelines for Exercise Testing and Prescription 10<sup>th</sup> ed. (2017). American College of Sports Medicine. Wolters Kluwer. ISBN: 9781496339065.

## Technology Requirements

To successfully complete this course, students need to be able to install and utilize Respondus Lockdown Browser as well as utilize Blackboard.

## Communication

Faculty will make every attempt to respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

**Written communication via email:** All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes.

## Grading

### Evaluation and Grades

Course grades will be determined as indicated in the table below.

Assessment	Points of Total Grade
Quizzes (50 points each (2)	100 points
Midterm Exam	100 points
Final Exam	100 points
Written Clinical Case Study	100 points
Total	400 points

## Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

Exams and quizzes will be comprehensive and based upon materials provided in lecture, assigned textbook readings, supplemental readings, and laboratory activities. Students must be present for all exams and quizzes. The clinical case study is due on April 20, 2020 at 5 pm. [Late papers will receive a zero.] Mastery for this course is set at 80%. Exceptions may be sought by petition of the Academic Committee of the Physical Therapy Department and/or Course Coordinator who **may** require remediation and **may** give the opportunity to repeat the activity.

The final course grade will be assigned based on the cumulative percentage of points earned throughout the course. Final grades are based on the following scale (no rounding):

Grading Scale in Points	Letter Grade
360 +	A (Mastery)
320-359	B (Mastery)
280-319	C
<279	F

## Teaching Strategies

Students are expected to be “active learners.” It is a basic assumption of the instructor that students will be involved (**beyond the materials and lectures presented in the course**) discovering, processing, and applying the course information using peer-review journal articles, researching additional information and examples on the Internet, and discussing course material and clinical experiences with their peers.

## Assignment and Activity Descriptions

**\*Please note: Rubrics for all written assignments will be posted to Blackboard on Jan. 28, 2020.**

### Assignment Submission

All assignments MUST be submitted through the Assignments link in the Blackboard site. This is for grading, documenting, and archiving purposes. Issues with technology use arise from time to time. If a technology issue does occur regarding an assignment submission, email me at [sweise@angelo.edu](mailto:sweise@angelo.edu) and attach a copy of what you are trying to submit. **Please contact the IT Service Center at (325) 942-2911 or go to your Technology Support tab to report the issue.** This lets your faculty know you completed the assignment on time and are just having problems with the online submission feature in Blackboard. Once the problem is resolved, submit your assignment through the appropriate link. This process will document the problem and establish a timeline. Be sure to keep a backup of all work.

### Late Work or Missed Assignments Policy

#### POLICY ON LATE OR MISSED ASSIGNMENTS

##### Late Work Policy

Assignment due dates are shown on the calendar/schedule or posted within Blackboard. Late

assignments are not accepted without prior approval of faculty. Faculty reserve the right to deduct points for late assignments that are accepted past the original due date.

## General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)<sup>1</sup>
- [Angelo State University Catalog](#)<sup>2</sup>

## Student Responsibility and Attendance

Attendance and promptness to classes, meetings, and future work obligations are considered professional behaviors. As this department is preparing potential professionals in the area of physical therapy, it is part of our expectation that student presence and timeliness will be held in highest regard. Tardiness is a disruption to the instructor and fellow students. A student is considered tardy if he/she arrives for class after the instructor has begun class activities. Please see the following related to implications from excessive lateness or absences without a reasonable excuse:

- a. First offense - verbal warning
- b. Second offense - second verbal warning, initiation of Disciplinary Tracking Form.
- c. Third offense - 1% off final course grade
- d. 1% off final course grade for each additional unexcused tardy or absence

Per the student handbook, **2 or more occurrences combined or mixed will result in the initiation of a Disciplinary Tracking Form.**

If a student has an unexcused absence during integrations it may lead to the removal of that student from that clinical environment. It is the responsibility of the student to contact the clinical site and give notice if they are ill, or have transportation issues.

If the student is unable to attend class, it is the student's responsibility to either call or email the PT office at 942-2545 or the office of the professor of the class directly. This notification should be made prior to commencement of said class.

Continued issues with tardiness/attendance across all courses will result in disciplinary probation and will be referred to the PT faculty for consideration of options, including program dismissal.

The PT faculty is not oblivious to doctor's appointments and other potential hazards and emergencies in daily life. Simply taking responsibility to notify the office or the professor if issues arise is considered professional behavior. Please do not rely on a classmate or other form of notification, as these have proven unreliable in years past.

Students must silence cell phones and place them out of sight during class. Permission may be granted, at the instructor's discretion, to have a cell phone out during class. Students seeking permission to have cell phones out during class must do so prior to the start of class. The first offense includes a verbal warning that will be documented in the behavioral tracking sheet. The second offense includes the initiation of a disciplinary tracking form. The third offense will result in the convening of a disciplinary committee to decide upon further disciplinary action.

**ATTENDANCE AT ALL SCHEDULED EXAMINATIONS IN THE SCHEDULED LOCATION (e.g., CLASSROOM OR TESTING CENTER) IS MANDATORY.**

Any unexcused absence from an examination will automatically result in a score of ZERO for that examination. Attempt(s) to take the exam in a location other than that scheduled by the professor without prior approval will automatically result in a score of ZERO for that examination. In the event that a student is late to an exam, that student will automatically receive a MINIMUM of 15 percentage points off of the total exam grade, and will ONLY be given the remainder of the time from the scheduled start time to finish the exam. Additionally, attempting to take the exam in an unscheduled location or being late to or absent from an exam will result in initiation of a disciplinary tracking form. Any student absent from examinations due to illness or injury must have a written justification from their physician. **Absence from or tardiness to an examination for any other reason must be excused before the time of the scheduled examination by the professor** or brought about by a very serious circumstance. For excused absences only, make-up examinations must be taken no later than one week after the student returns to class. Extended absences must be approved by the Program Director of Physical Therapy.

**POLICY ON TEST QUESTION REVIEW**

- All Tests and Quizzes will be analyzed by faculty to determine validity of questions and accuracy of answers at their earliest convenience.
- If errors are determined, adjustments will be made before grades are assigned.
- An announcement will be made when grades are finalized
- There will be no discussion on test questions until analysis and grades are assigned.
- If a student opposes a question's answer, he or she will have 24 hours after posting of grades to provide by email a paper to support the chosen answer. The maximum accepted length of the paper is 1 page (double spaced & font 12). Only references cited in class will

be accepted (textbooks, PowerPoint, &/or articles cited in PowerPoints). An individual time will be scheduled with the student to review the challenged question(s).

- Student queries prior to the announcement of assigned grades will negate the opportunity to challenge a question.
- Faculty may elect to discuss the concept of specific questions with a high percentage of missed answers in class. No change in grades will be made based upon class discussion, see bullet #5.

## **Technology**

It is an expectation of the program that technology be used in a way that supports learning and benefits you and your classmates. Students must silence cell phones and place them out of sight during class unless instructed to use them by the professor. Permission may be granted, at the instructor's discretion, to have a cell phone out during class. Students seeking permission to have cell phones out during class must do so prior to the start of class. Points will be deducted from your final exam grade at the discretion of faculty members if any technology (including but not limited to cell phone, tablet, laptop) is used in a manner that is not professional and beneficial in the learning environment. Additionally, the first offense includes a verbal warning that will be documented in the behavioral tracking sheet. The second offense includes the initiation of a disciplinary tracking form. The third offense will result in the convening of a disciplinary committee to decide upon further disciplinary action.

## **Academic Integrity**

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Health and Human Services adheres to the university's [Statement of Academic Integrity](#).<sup>3</sup>

## **Accommodations for Students with Disabilities**

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at [ADA@angelo.edu](mailto:ADA@angelo.edu). For more information about the application process and requirements, visit the [Student Disability Services website](#).<sup>4</sup> The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford  
Director of Student Disability Services  
Office of Student Affairs  
325-942-2047  
[dallas.swafford@angelo.edu](mailto:dallas.swafford@angelo.edu)  
Houston Harte University Center, Room 112

## **Incomplete Grade Policy**

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#)<sup>5</sup> for more information.

## **Plagiarism**

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#)<sup>6</sup> in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the [ASU Writing Center](#).<sup>7</sup>

## **Student Absence for Observance of Religious Holy Days**

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for [Observance of Religious Holy Day](#)<sup>8</sup> for more information.



## Copyright Policy

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

## Syllabus Changes

The faculty member reserves the option to make changes as necessary to this syllabus and the course content. If changes become necessary during this course, the faculty will notify students of such changes by email, course announcements and/or via a discussion board announcement. It is the student's responsibility to look for such communications about the course on a daily basis.

## Title IX at Angelo State University

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Boone, J.D.

You may submit reports in the following manner:

Online: [www.angelo.edu/incident-form](http://www.angelo.edu/incident-form)

Face to face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: [michelle.boone@angelo.edu](mailto:michelle.boone@angelo.edu)

*Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).*

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit: [www.angelo.edu/title-ix](http://www.angelo.edu/title-ix).

# Course Schedule

Class Date	Lecture Content	Reading	Assignment
Jan. 18, 2022	Cardiac Anatomy & Physiology, Embryology & Congenital Heart Disease	Hillegass: Ch. 1/2	
Jan. 25, 2022	Risk Factors for Heart Disease	Hillegass: Ch.3	
Feb. 1, 2022	Pathology of Hypertension	Hillegass: Ch.3/4 and 14	Introduction of Clinical Case Study
Feb. 8, 2022	Pathology of Ischemia and Coronary Artery Disease	Hillegass: Ch.3	
Feb. 15, 2022	Cardiac Valve Pathology	Hillegass: Ch.3/4/7	
Feb. 22, 2022	Quiz 1	Hillegass: Ch.3/4/7	Quiz 1
Mar. 1, 2022	Congestive Heart Failure	Hillegass: Ch.3/4/7	
Mar. 8, 2022	Cardiomyopathy & Cardiac Disease with Multisystem Failure	Hillegass: Ch.8/9	Midterm Exam (1 Hour)
Mar. 15, 2022	SPRING BREAK		
Mar. 22, 2022	Introduction to the EKG with Basic Cardiac Abnormalities	Handouts – Dr. Weise	Review of Clinical Case Study
Mar. 29, 2022	Pulmonary Anatomy and Physiology, Embryology	Hillegass: Ch. 1/2	Pulmonary Anatomy and Physiology, Embryology
April 5, 2022	Obstructive Lung Dysfunction	Hillegass: Ch.6	
April 12, 2022	Restrictive Lung Dysfunction	Hillegass: Ch.5	Quiz 2
April 19, 2022	Ventilation Perfusion Pulmonary Infectious Diseases	Hillegass: Ch.7/10 Handout in Class	Clinical Case Study Due on April 20, 5 pm
April 26, 2022	Pulmonary Hypertension; PE/DVT	Hillegass: Ch.7/10	
May 3, 2022	Pulmonary Cancer; Respiratory Distress & Failure	Hillegass: Ch.5/6/7	
May 10, 2022	Final Exam Week		Final Exam, 8 – 10 am Tues., May 10, 2022

# Student Evaluation of Faculty and Course

Students in all programs are given the opportunity to evaluate their courses and the faculty who teach them. Evaluations are most helpful when they are honest, fair, constructive, and pertinent to the class, clinical experience, or course. Faculty value student evaluations, and use student suggestions in making modifications in courses, labs and clinical experiences.

Angelo State University uses the IDEA (Individual Development and Educational Assessment) system administered through Kansas State University for all course evaluations. The Office of Institutional Research and Assessment administers IDEA for the entire university, online and has established a policy whereby students can complete course evaluations free from coercion.

Primary Student Learning Objectives utilized for this course are listed as follows:

1. Gaining a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories)
2. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course
3. Developing skill in expressing oneself orally or in writing
4. Learning to apply knowledge and skills to benefit others or serve the public good

## End of Syllabus

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<sup>1</sup> <https://www.angelo.edu/student-handbook/>

<sup>2</sup> <https://www.angelo.edu/catalogs/>

<sup>3</sup> <https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>

<sup>4</sup> <https://www.angelo.edu/services/disability-services/>

<sup>5</sup> <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

<sup>6</sup> <https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>

<sup>7</sup> [https://www.angelo.edu/dept/writing\\_center/academic\\_honesty.php](https://www.angelo.edu/dept/writing_center/academic_honesty.php)

<sup>8</sup> <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>