UNLV | PHYSICAL THERAPY

Key Course Information

Course Number:	DPT 770
Course Title:	DPT 770 Acute Care & Cardiopulmonary Rehabilitation
Credit Hours:	3
Weekly Schedule:	2:00-5:00 pm Tuesdays
Course Location:	BHS 213/215
Office Hours:	By appointment
Instructor:	TBD

Course Description

This course covers the elements of patient and client management provided by physical therapists in the acute care setting as well as the prevention, screening, examination, diagnosis, prognosis, and intervention with anticipated goals of preferred practice patterns in cardiopulmonary care.

Course Objectives

The following objectives are aligned with curriculum content from the Commission on Accreditation in Physical Therapy Education (Evaluative Criteria of PT Programs- updated 08/2024), the APTA Minimum Required Skills of Physical Therapist Graduates at Entry-Level core document content, and the Normative Model of Physical Therapist Professional Education: Version 2017. The following evidence-based models are integrated into course instruction to support clinical reasoning and patient-centered care: HOAC II (Hypothesis-Oriented Algorithm for Clinicians II) clinical reasoning methodology (Rothstein, Echternach, & Riddle, Physical Therapy, 2003); The International Classification of Functioning, Disability and Health (ICF) model; The Patient-Client Management Model as outlined in the Guide to Physical Therapist Practice.

The course goals and objectives are related to terminal competencies specific to cardiopulmonary disorders and functional impairment specifically in the acute care environment. At the completion of the course content, the student will be able to:

1. Identify appropriate and meaningful information from an acute care chart.
2. Incorporate appropriate information from the acute care chart into the development of an evaluation and plan of care.
3. Differentiate between standard patient examination procedures and what is performed during an acute care evaluation including systems reviews.
4. Examine potential risk factors leading to skin breakdown and select an appropriate method of prevention.
5. Determine the need for and don/doff personal protective gear to, during and after the physical therapy session to protect the patient, the PT, and the environment from infection transmission.

6. Distinguish among various lines and tubes (i.e.: nasogastric, orogastric, catheter), stomas (i.e: ileostomy, colostomy) and respiratory/ventilation equipment
7. Describe the impact each of these devices will have on physical therapy interventions.
8. Develop and modify a plan of care to reflect the impact of these devices.
9. Describe how to manage an IV line or tube that has been accidentally pulled out.
10. Monitor and adjust the plan of care in response to patient/client status during evaluation and treatment in acute care environments.
11. Describe central and peripheral regulation of cardiac function and circulatory dynamics at rest and during exercise.
12. Describe the regulatory systems which modulate pulmonary ventilation and gas exchange at rest and during exercise.
13. Recognize the chronic and adaptive responses of the cardiac, pulmonary, and circulatory systems to exercise training and how these adaptations are linked to increased metabolic efficiency of the body.
14. Describe the pathological conditions of the cardiovascular and pulmonary system commonly encountered by physical therapists.
15. Explain the medical interventions utilized in the management of pathological conditions of the cardiopulmonary system commonly seen by physical therapists.
16. Explain the surgical interventions utilized in the management of pathological conditions of the cardiovascular and pulmonary system.
17. Discuss the physical therapy examination process leading to differential diagnosis for the cardiopulmonary system.
18. Discuss the contributions of other health care professionals to the management of pathological conditions of the cardiopulmonary system commonly seen by physical therapists.
19. Integrate data from the examination to formulate a clinical judgment that leads to a diagnosis, prognosis, and intervention plan consistent with findings and the literature for cardiopulmonary pathology.
20. Prescribe an appropriate exercise program for a patient with cardiopulmonary impairments based on examination findings and sound physiologic rationale.

Required Text

Hillegass, E. (2022). Essentials of Cardiopulmonary Physical Therapy. (5th ed.) Saunders, Elsevier.

Evaluation Methods

Quizzes

Each quiz will be worth 10 points. The quizzes will be given at the beginning of the class on Tuesdays. Material will be on previous lectures since the last quiz or exam. The quizzes will be on examsoft.

Written Exams

Each written exam will be worth 60 points. There will be two unit exams and a final exam. The Final will consist of 60 points from the Pulmonary unit and 30 from cumulative content. If a learner does not or cannot take the final due to an emergency, then plans must be made at the discretion of the professor to complete all coursework within a specified time period. Each learner must take all exams.

Case Study Project

Small groups will provide a SBAR presentation based on an assigned case study with an acute care appropriate diagnosis. They will demonstrate understanding of the diagnosis and pertinent aspects of a comprehensive chart review and demonstrate the ability to communicate to a team of professionals to facilitate patient-centered care. There are 4 phases to this project and will be detailed in the canvas assignment pages along with separate due dates. Phase 4 which includes SBAR formatted team communication will be done by each student on their case study in small groups on the last day of class.

Grading

The final course grade is a letter grade. There is no rounding of the final grade. The course grade will be based on the following:

Quizzes (6)	60
Acute Care Unit exam	60
Cardio Unit Exam	60
Final Exam	90
Total	**270**

Grade Scale

A	93.00-100
A-	90.00-92.99
B+	87.00-89.99
B	83.00-86.99
B-	80.00-82.99
C+	77.00-79.99
C	73.00-76.99
F	<73

Instructional Practices

Teaching Methods

1. Recorded Lectures, as assigned
2. In person lectures and discussions
3. Student-engagement activities/ small group discussions/ group presentation

4. Class-based problem solving with case studies
5. Student self-study
6. Self-reflection

Teaching Aids

1. WebCanvas platform
2. Powerpoint
3. Videos
4. Zoom/ Webex/ Panopto (if necessary)
5. Supplemental materials (PDFs, websites, journal articles)
6. Practical demonstrations

Student Responsibilities

1. Attention and active participation are required in all sessions. Each learner is expected to prepare for the lecture and lab session by reading and/or viewing the required materials prior to that session.
2. Any learner having particular difficulty with material presented in this course should seek direction and/or assistance from the professor or laboratory assistants as soon as the difficulty is perceived.
3. Each learner will be required to dress appropriately in UNLVPT scrubs with clean socks and hair secured out of the face during lab for ease of performing evaluation techniques on each other.
4. Each learner is expected to act according to the guidelines of professional abilities set forth in the UNLVPT Department policies and University Policies.
5. Learners are expected to turn in assignments on time. Exams must be taken on the scheduled dates and assignments are to be handed in prior to their deadline. Late assignments or exams without approval from the professor will be subject to a penalty assessment of 10% off per day.

University and Course Policies

For general Course Policies see the Department of Physical Therapy Student Manual. For Academic Policies for Students see https://www.unlv.edu/policies/students or scan the QR code below.