

**ODESSA COLLEGE**  
**Physical Therapist Assistant Program**  
**Fall 2011**

**COURSE SYLLABUS**

<b>Course Number:</b>	PTHA 2435	
<b>Course Title:</b>	<b>Rehabilitation Techniques</b>	
<b>Credit Hours:</b>	4 (3 lecture/1 lab)	
<b>Contact Hours:</b>	48 lecture/48 lab	
<b>Prerequisites:</b>	PTHA 2460	
<b>Corequisites:</b>	PTHA 1413, 2201, 2409	
<b>Instructors:</b>	Tom McKelvey	Lynn McKelvey
<b>Phone:</b>	Office – 335-6830	Office – 335-6842
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<b>Office Hours:</b>	Tom:	Lynn:
	Monday 8:00 – 8:30, 2:30 - 4:30	10:30-11:30, 3:00 -4:30
	Tuesday 8:00 – 8:30, 2:30 - 4:30	1:00 - 4:30
	Wednesday 8:00 – 8:30, 2:30 - 4:30	10:30-11:30, 3:00 -4:30
	Thursday 8:00 – 8:30, 2:30 - 4:30	3:00 -4:30

**Course Description:**

Advanced course integrating previously learned and new skills/techniques into the comprehensive rehabilitation of selected musculoskeletal, neuromuscular, cardiopulmonary, and integumentary disorders. Time management, creative thinking, decision-making, problem-solving and reasoning abilities as they relate to progressing the plan of care are emphasized. (SCANS 1, 2, 5, 6, 9, 11)

**Required Textbooks:**

1. Neurologic Intervention for Physical Therapy – Second Edition; by Martin & Kessler; Saunders, 2007
2. PTHA 2435 Course Packet for Fall 2011

**Objectives:**

After completing this course, the student should be able to:

- 1.0 Understand the effects of aging on individuals and the rehabilitation process.
- 2.0 Understand the classification and characteristics of burns and the physical therapy component of burn management.
- 3.0 Describe the requirements and components of occupational rehabilitation programs and physical therapy interventions typically used in the rehabilitation of injured workers.
- 4.0 Understand the role of physical therapy in the treatment of respiratory conditions.
- 5.0 Understand the role of physical therapy in the treatment of cardiac conditions.
- 6.0 Understand the roles of selected providers in the treatment of athletic injuries.
- 7.0 Understand the characteristics of normal and abnormal development and their impact on the rehabilitation process.
- 8.0 Understand the role of physical therapy in the treatment of amputees.
- 9.0 Describe the function and use of selected orthotics.
- 10.0 Describe the process of finding and securing a job.

**Competencies:**

- 1.0 To demonstrate competency in understanding the effects of aging on individuals and the rehabilitation process, the student should be able to:
  - 1.1. \*Identify and describe normal and pathological physiological aspects of aging that impact the provision of physical therapy.
  - 1.2. \*Identify and describe psychosocial aspects of aging that impact the provision of physical therapy.
  - 1.3. \*Describe the rationale for modifications in the provision of physical therapy to geriatric patients.
  - 1.4. \*Identify and describe typical modifications for geriatric physical therapy interventions.

- 1.5. \*Identify safety factors and precautions specific to geriatric physical therapy interventions.
  - 1.6. \*Describe patient responses that necessitate immediate action or adjustments within the plan of care and communication with the supervising physical therapist.
- 2.0 To demonstrate competency in understanding the classification and characteristics of burns and the physical therapy component of burn management, the student should be able to:
    - 2.1. \*Identify and describe the pathology, symptoms, and sequelae of burn injuries.
    - 2.2. \*Identify critical aspects of acute burn care.
    - 2.3. \*Describe the rationale for physical therapy intervention in burn care.
    - 2.4. \*Identify and describe important components of a physical therapy program for burn injury.
    - 2.5. \*Identify safety factors and precautions specific to a physical therapy program for burn injury.
    - 2.6. \*Describe patient responses that necessitate immediate action or adjustments within the plan of care and communication with the supervising physical therapist.
  - 3.0 To demonstrate competency in describing the requirements and components of occupational rehabilitation programs and physical therapy interventions typically used in the rehabilitation of injured workers
    - 3.1. \*Describe the requirements for occupational rehabilitation programs in Texas.
    - 3.2. \*Describe the rationale for occupational rehabilitation and differences between occupational rehabilitation and other rehabilitation programs.
    - 3.3. \*Identify and describe typical components of occupational rehabilitation programs.
    - 3.4. \*Describe patient responses that necessitate immediate action or adjustments within the plan of care and communication with the supervising physical therapist.
    - 3.5. \*Describe the principles and clinical relevance of inclinometer measurements for spinal mobility.
    - 3.6. \*Perform and explain inclinometer measurement techniques for spinal mobility.
  - 4.0 To demonstrate competency in understanding the role of physical therapy in the treatment of respiratory conditions, the student should be able to:
    - 4.1. \*Identify and describe selected respiratory pathologies and their clinical manifestations.
    - 4.2. \*Describe the rationale for physical therapy in the treatment of respiratory conditions.
    - 4.3. \*Identify and describe basic techniques for examination of the respiratory patient to include cough and sputum characteristics, chest wall expansion and excursion, recognition of cyanosis, thoracoabdominal movements and breathing patterns with activity, and activities that affect symptoms.
    - 4.4. \*Identify and describe important components of a physical therapy program for respiratory conditions.
    - 4.5. \*Identify safety factors and precautions specific to a physical therapy program for respiratory conditions.
    - 4.6. \*Perform selected respiratory physical therapy interventions to include breathing exercises and coughing techniques.
    - 4.7. \*Describe patient responses that necessitate immediate action or adjustments within the plan of care and communication with the supervising physical therapist.
    - 4.8. \*Describe / discuss the role of respiratory physical therapy interventions in achieving short and long term goals within the plan of care.
  - 5.0 To demonstrate competency in understanding the role of physical therapy in the treatment of cardiac conditions, the student should be able to:
    - 5.1. \*Identify and describe selected cardiac pathologies and their clinical manifestations.
    - 5.2. \*Describe the rationale for cardiac rehabilitation.
    - 5.3. \*Identify and describe important components of a cardiac rehabilitation program.
    - 5.4. \*Identify safety factors and precautions specific to a cardiac rehabilitation program.
    - 5.5. \*Describe patient responses that necessitate immediate action or adjustments within the plan of care and communication with the supervising physical therapist.
  - 6.0 To demonstrate competency in understanding the roles of selected providers in the treatment of athletic injuries, the student should be able to:
    - 6.1. \*Identify and describe typical components of a sports medicine program.
    - 6.2. \*Identify characteristics of sports injuries.
    - 6.3. \*Describe the role of the athletic trainer.
    - 6.4. \*Identify precautions and safety concerns for the application and use of supportive taping.
    - 6.5. \*Perform selected athletic taping procedures.
    - 6.6. \*Describe patient responses that necessitate immediate action or adjustments within the plan of care and communication with the supervising physical therapist.

- 6.7. \*Describe / discuss the role of athletic taping procedures in achieving short and long term goals within the plan of care.
- 7.0 To demonstrate competency in understanding the characteristics of normal and abnormal development and their impact on the rehabilitation process, the student should be able to:
- 7.1. \*Identify and describe the normal sensorimotor developmental sequence from birth to three years.
  - 7.2. \*Identify and describe selected neonatal reflexes and righting and equilibrium reactions.
  - 7.3. \*Explain the interrelationship between the developmental sequence and neonatal and postural reflexes.
  - 7.4. \*Describe the relevance of developmental activities to the provision of physical therapy
  - 7.5. \*Describe the rationale for modifications in the provision of physical therapy to pediatric patients.
  - 7.6. \*Identify and describe typical modifications for pediatric physical therapy interventions.
  - 7.7. \*Identify safety factors and precautions specific to the provision of physical therapy to pediatric patients.
  - 7.8. \*Describe patient responses that necessitate immediate action or adjustments within the plan of care and communication with the supervising physical therapist.
- 8.0 To demonstrate competency in understanding the role of physical therapy in the treatment of amputees, the student should be able to:
- 8.1. \*Identify and describe various causes and levels of amputation and describe their functional implications.
  - 8.2. \*Describe the rationale for physical therapy intervention in amputee care.
  - 8.3. \*Identify and describe typical components of a pre-prosthetic and a prosthetic physical therapy program.
  - 8.4. \*Identify safety factors and precautions specific to pre-prosthetic and prosthetic physical therapy programs.
  - 8.5. \*Identify typical prosthetic care instructions to be given to patients/caregivers.
  - 8.6. \*Describe patient responses that necessitate immediate action or adjustments within the plan of care and communication with the supervising physical therapist.
- 9.0 To demonstrate competency in describing the function and use of selected orthotics, the student should be able to:
- 9.1. \*Describe the rationale for use of orthotics.
  - 9.2. \*Identify the function of various types of orthotics.
  - 9.3. \*Identify safety factors, precautions and application guidelines for proper use of selected orthotics.
  - 9.4. \*Identify typical orthotic care instructions to be given to patients/caregivers.
  - 9.5. \*Describe patient responses that necessitate immediate action or adjustments within the plan of care and communication with the supervising physical therapist.
  - 9.6. \*Describe / discuss the role of orthotics in achieving short and long term goals within the plan of care.
- 10.0 To demonstrate competency in describing the process of finding and securing a job, the student should be able to:
- 10.1. \*Describe the essential elements of an effective résumé and cover letter.
  - 10.2. Prepare a résumé for submission to potential employers.
  - 10.3. \*Describe effective interview strategies.

*\* Indicates integrated, core curriculum skills (math, reading, writing, communication, technological literacy and/or critical thinking)*

#### **Methods of Presentation:**

Lectures, demonstrations, laboratory practice, reading assignments, and outside projects and/or assignments.

#### **Course Requirements:**

In order to receive credit for this course, all students must:

1. Complete all unit exams.
2. Complete all laboratory sessions and worksheets.
3. Complete all assigned projects and class presentations.
4. Complete the final exam.

<b>Grade Compilation:</b>	Tests	65%
	Lab/Projects/Assignments	10%
	Final Exam	25%

**Grading Scale:** 90-100 = A  
80-89 = B  
70-79 = C  
60-69 = D  
Below 60 = F

*Note: Students must make a minimum grade of C in each PTA course in order to remain in the program.*

### **Procedure for Requesting Special Accommodations**

Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If the student has any special needs or issues pertaining to access to and participation in any class at Odessa College, please contact Becky Rivera-Weiss in the Office of Disability Services at 432-335-6861 to request assistance and accommodations.

Physical therapist assistant students with a disability who request reasonable accommodations should meet with the Program Director no later than the first week of classes. Reasonable accommodations will be provided as authorized by the Office of Disability Services as long as the ability to meet course requirements is not compromised. Physical Therapist Assistant faculty provide no accommodations without authorization. It is the student's responsibility to be a self-advocate when requesting accommodations. The student will need to meet with each course instructor at the beginning of class to discuss the particular accommodation needed. Documentation of special needs will be maintained in the student's file.

### **Professional Behavior:**

Professional behavior is absolutely essential both while the individual is a student in this program as well as after graduation. The Professional Behaviors Assessment form provides a standard for behavior and a mechanism for self-assessment by the student as well as assessment by faculty during the academic component of the program. If a faculty member observes consistent failure to demonstrate acceptable professional behavior by a student, the faculty member will utilize the assessment form as a tool for counseling the student. **Failure to respond appropriately to counseling regarding professional behaviors will result in dismissal from the program.**

### **Attendance:**

Regular attendance at lecture and lab is essential and has a direct effect on the final grade that a student earns in class. Non-attendance on the part of a student may result in grade penalty or may lead to dismissal from the program.

A student should attend all lecture and laboratory sessions. Habitual or patterned absenteeism in lecture or lab will not be tolerated. As soon as such a problem is identified, the student will be required to meet with the faculty to determine a course of action and, if the problem is not corrected, the student will be subject to dismissal from the program. Absences in laboratory sessions are particularly problematic because of the lost opportunity to practice skills; therefore, students will be penalized for missing more than one lab session per semester. Should a student miss more than one lab session, one point for each missed session will be deducted from the final course grade.

All absences must be reported to the appropriate faculty member prior to the start of class. If the faculty member cannot be reached directly, a voice mail message may be left. Failure to notify the faculty prior to an absence will affect the student's Professional Behaviors Assessment.

### **Acceptance of Late Assignments:**

Projects or outside assignments are due at the beginning of class on the assigned due date. Late papers will receive a 5% per day grade penalty. This penalty will continue to be assessed each day the assignment is not turned in.

### **Missing an Exam:**

Exams are defined as formally scheduled examinations covering a major portion of the course content and cumulatively comprising a relatively large percentage of the overall grade for a course. Every effort should be made by the student to be present for all exams. If it is necessary for a student to miss an exam, the instructor must be notified prior to the scheduled exam time and arrangements must be made for make-up. It is the instructor's option to give the same exam as the one missed or a different exam over the same content. If the exam is not made up within one class day, a 5% per day penalty will be assessed each day the exam is not taken.

**Documentation Assignments:**

Documentation assignments will be required at specified times throughout the semester. Students will be required to access Blackboard to obtain due dates, instructions and written assignments. The written assignments will be submitted on Blackboard. The assignment grades will be averaged with any other assignment grades and comprise ten percent of the final course grade. Further instructions will be provided in class and on Blackboard.

**Projects:**

Detailed instructions will be given during the course at the appropriate time.

**Course Outline:****BURN MANAGEMENT**

- I. Incidence of Burn Injuries in the U.S.
- II. Etiology of Burns
- III. Classification by Depth
- IV. Classification by Severity
- V. Complications of Severe Burns (more than 10% TBSA)
- VI. Wound Care
- VII. Splinting / Positioning
- VIII. Scar Management
- IX. Ambulation and Exercise

**OCCUPATIONAL REHABILITATION PROGRAMS**

- I. Definition (as defined by the TWCC Medical Fee Guideline (2003) and CARF: The Rehabilitation Accreditation Commission)
- II. Terminology
- III. The Concept: How does it compare with traditional approaches?
- IV. Who benefits from Occupational Rehabilitation Programs?
- V. Client Eligibility
- VI. Provider Responsibility
- VII. Program Content
- VIII. Personnel Issues
- IX. Program Termination
- X. CARF (Commission on Accreditation of Rehab Facilities) Accreditation

**RÉSUMÉS AND INTERVIEWS**

- I. Attitude is Everything
- II. Finding the Right First Job
- III. Preparing Your Résumé
- IV. Cover Letter
- V. Interviewing Skills
- VI. Negotiating salary

**RÉSUMÉ AND COVER LETTER ASSIGNMENT****CARDIAC REHABILITATION**

- I. Cardiovascular disease
- II. Risk Factors
- III. Angina (stable or unstable)
- IV. MI (Myocardial Infarction) / Heart Attack
- V. CHF - Congestive Heart Failure
- VI. Arrhythmias and Ectopic Beats
- VII. Cardiac Medications
- VIII. Cardiac Rehabilitation

**GERIATRICS**

- I. Introduction
- II. Aging Changes
- III. Rehabilitation
- IV. Geriatric Pharmacology

**CHEST PHYSICAL THERAPY**

- I. Introduction
- II. Assessment

III. Techniques

Palpation and Breath Sounds

INCLINOMETRY LAB

- I. Cervical Flexion and Extension
- II. Cervical Lateral Flexion
- III. Cervical Rotation
- IV. Thoracic Flexion and Extension
- V. Thoracic Rotation
- VI. Lumbosacral Flexion and Extension
- VII. Lumbosacral Lateral Flexion

PEDIATRICS

- I. Introduction
- II. Terminology
- III. Reflexes
- IV. Postural Reactions
- V. Developmental Sequence (Chronological Motor Development or Developmental Milestones)
- VI. Normal Sensorimotor Development
- VII. Prenatal & Perinatal
- VIII. Environment
- IX. Disabled child
- X. Normal development - to 3 years.
- XI. General Sequence
- XII. Example of complex interplay of reflexes, reactions & practice

AGES AND STAGES

- I. Ages – various classification systems
- II. Generally
- III. Childhood
- IV. Adolescence
- V. Adulthood

AMPUTEES, PROSTHETICS & ORTHOTICS

- I. Orthotics
- II. Prosthetics
- III. Amputations
- IV. Surgical considerations
- V. Post-op Treatment
- VI. Prosthetic training
- VII. Gait Deviations

SPORTS MEDICINE

- I. Definition
- II. Characteristics of Sports Injuries
- III. The Athletic Trainer
- IV. The Team Physician
- V. Professional Associations
- VI. Athletic Taping