



**Physical Therapist Assistant Program  
Fall 2012**

**COURSE SYLLABUS**

<b>Course Number:</b>	PTHA 2201	
<b>Course Title:</b>	<b>Essentials of Data Collection</b>	
<b>Credit Hours:</b>	2 (1 lecture/1 lab)	
<b>Contact Hours:</b>	16 lecture/48 lab	
<b>Prerequisites:</b>	PTHA 2460	
<b>Corequisites:</b>	PTHA 1413, 2409, 2435	
<b>Instructors:</b>	Tana Pipes (primary)	Matt Bertrand
<b>Phone:</b>	Office – 432.335-6836	Office – 432.335-6830
	Cell – 432.413-3890	Cell – 432. 528-6393
<b>Email:</b>	<a href="mailto:tpipes@odessa.edu">tpipes@odessa.edu</a>	<a href="mailto:mbertrand@odessa.edu">mbertrand@odessa.edu</a>
<b>Office Hours:</b>	Tana:	Matt:
Monday	10:30-11:30, 2:30-4:30	10:30 - 11:30, 2:30 – 4:30
Tuesday	1:00-3:00	8:30 – 9:00, 2:30 – 4:00
Wednesday	10:30-11:30, 2:30-4:30	10:30 - 11:30, 2:30 – 4:30
Thursday	2:30 - 4:30	2:30 – 4:00

**Course Description:**

Data collection techniques used to prepare the physical therapist assistant to assist in physical therapy management. The acquisition of muscle function information by use of manual muscle testing; joint range of motion information by use of goniometry; gait information by use of gait observation; and data collection techniques for posture and balance information are included. (ICOs 1, 2, 3, 5)

**Required Textbooks:**

1. Muscle Testing: Techniques of Manual Examination, 8<sup>th</sup> Edition; Hislop and Montgomery; W. B Saunders, 2007
2. Measurement of Joint Motion: A Guide to Goniometry 4<sup>rd</sup> Edition: by Norkin and White; F. A. Davis, 2009
3. PTHA 2201 Course Packet for Fall 2012

**Objectives:**

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

- 1.0 Perform selected musculoskeletal data collection techniques and understand their relevance to the treatment plan established by the physical therapist.
- 2.0 Perform balance data collection techniques and understand their relevance to the treatment plan established by the physical therapist.
- 3.0 Perform gait data collection techniques and understand their relevance to the treatment plan established by the physical therapist.
- 4.0 Perform selected sensory data collection techniques and understand their relevance to the treatment plan established by the physical therapist.
- 5.0 Perform selected pain data collection techniques and understand their relevance to the treatment plan established by the physical therapist.
- 6.0 Perform selected postural data collection techniques and understand their relevance to the treatment plan established by the physical therapist.
- 7.0 Understand other selected assessments and their relevance to the treatment plan established by the physical therapist.

**Competencies:**

- 1.0 To demonstrate competency in performing selected musculoskeletal data collection techniques and understanding their relevance to the treatment plan established by the physical therapist, the student should be able to:
  - 1.1 \*Describe the principles and clinical relevance of manual muscle testing.
  - 1.2 \*Perform and explain selected manual muscle testing procedures.
  - 1.3 \*Document results of manual muscle testing procedures.
  - 1.4 \*Describe the principles and clinical relevance of goniometric measurements.
  - 1.5 \*Perform and explain goniometric measurement techniques for selected extremity joints.
  - 1.6 \*Document results of goniometric measurement procedures.
  - 1.7 \*Perform and explain screening procedures for muscle strength and range of motion.
- 2.0 To demonstrate competency in performing balance data collection techniques and understanding their relevance to the treatment plan established by the physical therapist, the student should be able to:
  - 2.1 \*Describe the principles and clinical relevance of balance data collection techniques.
  - 2.2 \*Perform and describe selected balance data collection techniques to include identification of fall risk factors and administration of selected tests to determine patient status.
  - 2.3 \*Describe the relationship between balance data collection techniques and interventions used to improve balance.
  - 2.4 \*Demonstrate and describe interventions used to improve balance.
  - 2.5 \*Document results of balance data collection techniques.
- 3.0 To demonstrate competency in performing gait data collection techniques and understanding their relevance to the treatment plan established by the physical therapist, the student should be able to:
  - 3.1 \*Describe the principles and clinical relevance of gait data collection techniques.
  - 3.2 \*Identify common gait deviations.
  - 3.3 \*Document results of gait data collection techniques.
- 4.0 To demonstrate competency in performing sensory data collection techniques and understanding their relevance to the treatment plan established by the physical therapist, the student should be able to:
  - 4.1 \*Describe the principles and clinical relevance of sensory data collection techniques.
  - 4.2 \*Perform and describe selected sensory data collection techniques.
  - 4.3 \*Document results of sensory data collection techniques.
- 5.0 To demonstrate competency in performing pain data collection techniques and understanding their relevance to the treatment plan established by the physical therapist, the student should be able to:
  - 5.1 \*Describe the principles and clinical relevance of pain data collection techniques.
  - 5.2 \*Perform and describe selected pain data collection techniques to include rating scales, graphs, and questionnaires.
  - 5.3 \*Document results of pain data collection techniques.
- 6.0 To demonstrate competency in performing postural data collection techniques and understanding their relevance to the treatment plan established by the physical therapist, the student should be able to:
  - 6.1 \*Describe the principles and clinical relevance of postural data collection techniques.
  - 6.2 \*Perform and describe selected postural data collection techniques to include anterior-posterior and lateral body alignment relative to a plumb line, basic scoliosis screening techniques, and leg length measurements.
  - 6.3 \*Document results of postural data collection techniques.
- 7.0 To demonstrate competency in understanding other selected assessments and their relevance to the treatment plan established by the physical therapist, the student should be able to:
  - 7.1 \*Describe the principles and clinical relevance of the selected assessments.
  - 7.2 \*Perform selected assessments.

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

**Methods of Presentation:**

Lectures, demonstrations, laboratory practice, check-offs, reading assignments, discussions, and outside projects and assignments. This course Essentials of Data Collection/PTHA2201/ Fall has been identified as a course by Career, Technical, and Workforce Education as one in which teaching and learning strategies adopted by AVID will be implemented. As a student in the PTA program, you will be expected to develop an understanding of the strategies, to model the strategies, to maintain fidelity of implementation, and to examine how these strategies may impact your effectiveness as a professional in your chosen area of occupation, either through coursework or practicum experience as outlined by the course instructor.

**Course Requirements:**

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

1. Complete all assignments.
2. Complete all lab check-offs.
3. Complete all unit exams.
4. Complete the final exam.

<b>Grade Compilation:</b>	Assignments	10%
	Lab check-offs	30%
	Written Exams	40%
	Final Exam	20%

<b>Grading Scale:</b>	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.*

**Student Success**

The Odessa College Student Success Coaches will help you stay focused and on track to complete your educational goals. If an instructor sees that you might need additional help or success coaching, he or she may submit a Retention Alert or a Starfish Alert. A Student Success Coach will contact you to work toward a solution.

**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.

**Expectations for Engagement – Online Learning**

To help make the web-based learning experience fulfilling and rewarding, the following Expectations for Engagement provide the parameters for reasonable engagement between students and instructors for the online learning environment. Students and instructors are welcome to exceed these requirements.

**Reasonable Expectations of Engagement for Instructors**

1. As an instructor, I understand the importance of clear, timely communication with my students. In order to maintain sufficient communication, I will
  - provided my contact information at the beginning of the syllabus;
  - respond to all messages within 24 hours if received Monday through Thursday and within 48 hours if received Friday through Sunday; and,
  - notify students of any extended times that I will be unavailable and provide them with alternative contact information (for me or for my supervisor) in case of emergencies during the time I'm unavailable.
2. As an instructor, I understand that my students will work to the best of their abilities to fulfill the course requirements. In order to help them in this area, I will

- provide clear information about grading policies and assignment requirements in the course syllabus, and
  - communicate any changes to assignments and/or to the course calendar to students as quickly as possible.
3. As an instructor, I understand that I need to provide regular, timely feedback to students about their performance in the course. To keep students informed about their progress, I will
- post grades for discussion postings within one week of the discussion thread closing.
  - provide grades for major assignments within 2 weeks of the due date or at least 3 days before the next major assignment is due, whichever comes first.

#### Reasonable Expectations of Engagement for Students

1. As a student, I understand that I am responsible for keeping up with the course. To help with this, I will
- line up alternative computer and internet access in case my primary computer crashes or my internet services is unavailable;
  - recognize that the college provides free wi-fi and computer labs during regular campus hours to help me with accessing my course; and,
  - understand that my instructor does not have to accept my technical issues as a legitimate reason for late or missing work if my equipment or service is unreliable.
2. As a student, I understand that it is my responsibility to communicate quickly with the instructor any issue or emergency that will impact my involvement with or performance in the class. This includes, but is not limited to
- getting “kicked off” of the system during tests or quizzes;
  - having trouble submitting assignments; and
  - dealing with a traumatic personal event.
3. As a student, I understand that it is my responsibility to understand course material and requirements and to keep up with the course calendar. While my instructor is available for help and clarification, I will
- seek out help from my instructor and/or from tutors;
  - ask questions if I don’t understand; and,
  - access my course several times during the week to keep up with assignments and announcements.

#### Expectations for Engagement – Face to Face Learning

To help make the learning experience fulfilling and rewarding, the following Expectations for Engagement provide the parameters for reasonable engagement between students and instructors for the learning environment. Students and instructors are welcome to exceed these requirements.

#### Reasonable Expectations of Engagement for Instructors

1. As an instructor, I understand the importance of clear, timely communication with my students. In order to maintain sufficient communication, I will
- provided my contact information at the beginning of the syllabus;
  - respond to all messages in a timely manner through telephone, email, or next classroom contact; and,
  - notify students of any extended times that I will be unavailable and provide them with alternative contact information (for me or for my supervisor) in case of emergencies during the time I’m unavailable.

2. As an instructor, I understand that my students will work to the best of their abilities to fulfill the course requirements. In order to help them in this area, I will
  - provide clear information about grading policies and assignment requirements in the course syllabus, and
  - communicate any changes to assignments and/or to the course calendar to students as quickly as possible.
3. As an instructor, I understand that I need to provide regular, timely feedback to students about their performance in the course. To keep students informed about their progress, I will
  - return classroom activities and homework within one week of the due date and
  - provide grades for major assignments within 2 weeks of the due date or at least 3 days before the next major assignment is due, whichever comes first.

#### Reasonable Expectations of Engagement for Students

1. As a student, I understand that I am responsible for keeping up with the course. To help with this, I will
  - attend the course regularly and line up alternative transportation in case my primary means of transportation is unavailable;
  - recognize that the college provides free wi-fi, computer labs, and library resources during regular campus hours to help me with completing my assignments; and,
  - understand that my instructor does not have to accept my technical issues as a legitimate reason for late or missing work if my personal computer equipment or internet service is unreliable.
2. As a student, I understand that it is my responsibility to communicate quickly with the instructor any issue or emergency that will impact my involvement with or performance in the class. This includes, but is not limited to,
  - missing class when a major test is planned or a major assignment is due;
  - having trouble submitting assignments;
  - dealing with a traumatic personal event; and,
  - having my work or childcare schedule changed so that my classroom attendance is affected.
3. As a student, I understand that it is my responsibility to understand course material and requirements and to keep up with the course calendar. While my instructor is available for help and clarification, I will
  - seek out help from my instructor and/or from tutors;
  - ask questions if I don't understand; and,
  - attend class regularly to keep up with assignments and announcements.

#### **Course Outline:**

##### **INTRODUCTION**

- I. Definitions
- II. Why Assess?
- III. Reliability, Validity, Objectivity
- IV. Norms
- V. Types of Physical Therapy Assessments

##### **MANUAL MUSCLE TESTING**

- I. Introduction
- II. Prerequisites
- III. Grading
- IV. Principles
- V. Procedure
- VI. Factors affecting strength
- VII. Recording

VIII. Miscellaneous

## **GROSS MUSCLE SCREENING**

## **RANGE OF MOTION SCREENING**

## **GONIOMETRY**

- I. Range of motion
- II. Principles of Goniometry
- III. Accuracy of Goniometric Measurements
- IV. Goniometry Technique
- V. Documentation of Goniometric Measurements

## **POSTURE**

- I. Definitions
- II. Factors that influence posture
- III. General Guidelines for Postural Assessment and Modification
- IV. Anteroposterior Gravity Line – viewed from side
- V. Typical Postural Problems Encountered
- VI. Lateral Gravity Line
- VII. Scoliosis
- VIII. Observation of Posture Lab

## **GAIT ASSESSMENT**

- I. Introduction
- II. Visual or Observational Gait Analysis
- III. Documentation
- IV. Normal Ranges for Gait Parameters
- V. Common Gait Abnormalities, Causes, and Confirming Evidence

## **BALANCE ASSESSMENT**

- I. Balance Is Maintaining Center of Mass over Base of Support
- II. Four Part Assessment
- III. Fall Risk Factors – 1 fall/year = a “faller”
- IV. Subjective
- V. Physician Diagnosis
- VI. Clinical Evaluation
- VII. Balance Grades
- VIII. Disorders / Dysfunctions – Evaluation and Treatment

## **BALANCE GRADES**

## **PAIN ASSESSMENT**

- I. Introduction
- II. Two Dimensions of Pain
- III. Assessment Instruments

## **SENSORY TESTING**

- I. Introduction
- II. Reasons for performing sensory evaluations
- III. Division of sensory systems
- IV. Guidelines for Administering Sensory Evaluations
- V. Testing Protocols
- VI. Recording Test Results

## **SENORY TESTING DEFINITIONS**

## **ASSESSMENT TOOLS**

- I. Cognition
- II. Traumatic Brain Injury Assessment
- III. Functional Assessment

The SEI process for face-to-face and online courses is scheduled for the week of November 26th.