

Montgomery County Community
College PTA 200
Pathology & Rehabilitation of Orthopedic Conditions Across the Lifespan
and Continuum of Care
5 - 4 - 4

COURSE DESCRIPTION:

This course emphasizes the etiology, pathology, prevention, data collection, and appropriate physical therapy interventions related to orthopedic conditions. Application of orthotic devices, braces and splints for orthopedic conditions is discussed. Evidence based practice, clinical research, and justifying interventions based on clinical literature is integrated in the study of musculoskeletal system conditions. Critical thinking skills are developed as the student applies data in clinical decision making. During student-to- student practice in the on-campus laboratory setting students use simulated patient scenarios to demonstrate competency attainment. This course is subject to a course fee. Refer to <http://mc3.edu/adm-fin-aid/paying/tuition/course-fees> for current rates.

REQUISITES:

Previous Course Requirements

- PTA 100 Fundamentals of Physical Therapist Assisting and Data Collection
- PTA 110 Therapeutic Modalities in Physical Therapy
- PTA 125 Therapeutic Interventions for Physical Therapist Assisting

Concurrent Course Requirements

- PTA 201 Physical Therapist Assistant Roles, Relationships and Responsibilities Seminar I
- PTA 220 Pathology & Rehabilitation of Special populations & Conditions Across the Lifespan and Continuum of Care

COURSE COMMENT

- Registration requires admission to the Physical Therapist Assistant Program

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Identify the etiology, pathology, prevention, signs, symptoms, medical treatment, and physical therapy treatment for common pediatric and adult orthopedic conditions.	Lecture / Discussion Textbook Readings Supplemental Handouts Case Study / Application	Practical Examinations Written Assignments Summative Written Examinations
2. Demonstrate accurate data collection skills used by a physical therapist assistant in treating orthopedic patients, based on the physical therapy plan of care.	Lecture / Discussion Textbook Readings Supplemental Handouts Case Study / Application Hands-on laboratory interaction. Demonstration / Practice	Practical Examinations Skills Competency Checks
3. Demonstrate safety and skill while implementing therapeutic interventions in an orthopedic setting, based on the physical therapy plan of care.	Lecture / Discussion Textbook Readings Supplemental Handouts Case Study / Application Hands-on laboratory interaction. Demonstration / Practice	Practical Examinations Written Assignments Skills Competency Checks Summative Written Examinations
4. Characterize the influence of common orthopedic conditions on gait mechanics.	Lecture / Discussion Textbook Readings Supplemental Handouts Case Study / Application Hands-on laboratory interaction. Demonstration / Application	Practical Examinations Written Assignments Summative Written Examinations
5. Demonstrate safe practice as it relates to patient care of the orthopedic patient population.	Lecture / Discussion Textbook Readings Supplemental Handouts Case Study / Application Hands-on laboratory interaction. Demonstration / Application	Practical Examinations Written Assignments Skills Competency Checks Summative Written Examinations

6. Demonstrate appropriate and effective patient/caregiver management utilizing interventions from within the physical therapist's plan of care for a patient with an orthopedic condition.	Lecture / Discussion Textbook Readings Supplemental Handouts Case Study / Application	Written Assignments Summative Written Examinations
7. Demonstrate appropriate professional behaviors in all interactions with classmates and instructors by displaying all Professional Behaviors at the beginner level.	Lecture / Discussion Textbook Readings Supplemental Handouts Case Study / Application	Professional Behaviors Assessment

At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Associate Vice President of Academic Affairs. The benchmark for each learning outcome is that *70% of students will meet or exceed outcome criteria.*

SEQUENCE OF TOPICS:

1. Fundamentals
 - a. Orthopedic Management for the Physical Therapist Assistant
 - b. The Musculoskeletal System
 - c. The Nervous System
 - d. Kinesiology
 - e. Tissue Injury and Repair
 - f. Manual Modalities
 - g. Physical Agents and Mechanical Modalities
2. Therapeutic Exercise
 - a. Therapeutic Activities
 - b. Improving Range of Motion, Flexibility, and Joint Mobility
 - c. Improving Muscle Performance
 - d. Improving Balance
3. The Joints
 - a. The Vertebral Column
 - i. Examination
 - ii. Common Conditions
 - iii. Intervention Strategies / Therapeutic Techniques
 - b. Cervical Spine and Temporomandibular Joint
 - i. Examination
 - ii. Common Conditions
 - iii. Intervention Strategies / Therapeutic Techniques

- c. Thoracic Spine and Rib Cage
 - i. Examination
 - ii. Common Conditions
 - iii. Intervention Strategies / Therapeutic Techniques
- d. Lumbar Spine and Sacroiliac Joint
 - i. Examination
 - ii. Common Conditions
 - iii. Intervention Strategies / Therapeutic Techniques
- e. Shoulder Complex
 - i. Examination
 - ii. Common Conditions
 - iii. Intervention Strategies / Therapeutic Techniques
- f. Elbow and Forearm Complex
 - i. Examination
 - ii. Common Conditions
 - iii. Intervention Strategies / Therapeutic Techniques
- g. Wrist and Hand
 - i. Examination
 - ii. Common Conditions
 - iii. Intervention Strategies / Therapeutic Techniques
- h. Hip
 - i. Examination
 - ii. Common Conditions
 - iii. Intervention Strategies / Therapeutic Techniques
- i. Knee Joint Complex
 - i. Examination
 - ii. Common Conditions
 - iii. Intervention Strategies / Therapeutic Techniques
- j. Ankle and Foot
 - i. Examination
 - ii. Common Conditions
 - iii. Intervention Strategies / Therapeutic Techniques
- 4. Special Considerations
 - a. The Pediatric Orthopedic Population
 - b. The Geriatric Orthopedic Population
 - c. Women's Health
 - d. Gait
 - i. Gait Cycle
 - ii. Characteristics of Normal Gait
 - iii. Abnormal Gait Syndromes
 - iv. Gait Training with Assistive Devices
 - e. Posture
 - i. Postural Examination
 - ii. Common Faulty Postures
 - iii. Intervention

LEARNING MATERIALS:

Dutton, M. (2019) *Orthopaedics for the Physical Therapist Assistant* (2nd ed.). Sudbury, MA: Jones & Bartlett Learning.

Graves, R. (2013) *Clinical Decision Making for the Physical Therapist Assistant Across the Continuum of Care* (1st ed.). Philadelphia, PA: F.A. Davis Company.

Kisner, C., Colby, L.A. (2017) *Therapeutic Exercise – Foundations and Techniques* (7th ed.). Philadelphia, PA: F.A. Davis Company.

Other learning materials may be required and made available directly to the student and/or via the College’s Libraries and/or course management system.

COURSE APPROVAL:

Prepared by: Robert Cullen, PT, JD, MBA	Date: 8//2015
VPAA/Provost or designee Compliance Verification: Victoria Bastecki-Perez, Ed. D.	Date: 7/14/2016
Revised by: Debbie Dalrymple	Date: 12/17/2017
VPAA/Provost or designee Compliance Verification: Victoria L. Bastecki-Perez, Ed.D.	Date: 1/9/2018
Revised by: Robert Cullen	Date: 11/3/2020
VPAA or designee Compliance Verification:	Date: 12/11/2020



This course is consistent with Montgomery County Community College’s mission. It was developed, approved and will be delivered in full compliance with the policies and procedures established by the College.