



Western Technical College

10524145 Physical Therapist Assistant Principles of Musculoskeletal Rehabilitation

Course Outcome Summary

Course Information

Description	Integrates concepts of musculoskeletal pathologies, physical therapy interventions, and data collection in patient treatment.
Career Cluster	Health Science
Instructional Level	Associate Degree Courses
Total Credits	4
Total Hours	108

Pre/Corequisites

Prerequisite	10524143 PTA Biophysical Agents
Prerequisite	10524141 PTA Kinesiology 2 OR 10524157 PTA Applied Kinesiology 2
Prerequisite	10524139 PTA Patient Interventions

Textbooks

Fundamental Orthopedic Management for the Physical Therapist Assistant. 5th Edition. Copyright 2022. Shankman, Gary A. and Robert C. Manske. Publisher: Elsevier Science. **ISBN-13**:978-0-323-66171-3. Required.

Therapeutic Exercise - Foundations & Techniques. 7th Edition. Copyright 2018. Kisner, Carolyn. Publisher: F.A. Davis Co. **ISBN-13**: 978-0-8036-5850-9. Required.

Success Abilities

1. Cultivate Passion: Enhance Personal Connections
2. Live Responsibly: Develop Resilience
3. Live Responsibly: Foster Accountability
4. Refine Professionalism: Act Ethically
5. Refine Professionalism: Improve Critical Thinking
6. Refine Professionalism: Participate Collaboratively
7. Refine Professionalism: Practice Effective Communication

High Impact Practices

1. Community Based Learning Project: a key learning outcome of this course is to connect academic learning and civic development while simultaneously addressing a community partner's needs, interests, or problems.

Program Outcomes

1. Function under the supervision of a physical therapist in a safe, legal, professional, and ethical manner to ensure the safety of patients, self, and others throughout the clinical interaction
2. Demonstrate clear and collaborative communication with patients, families, and health care team
3. Exhibit behaviors and conduct that reflect respect and sensitivity according to physical therapy practice standards
4. Produce documentation to support the delivery of physical therapy services
5. Demonstrate critical thinking skills to implement and modify treatment within a plan of care under the direction and supervision of a physical therapist
6. Perform data collection essential for carrying out the plan of care under the direction and supervision of the physical therapist
7. Perform technically competent, evidence-based physical therapy interventions under the direction and supervision of the physical therapist
8. Educate patients, families, and other health providers
9. Integrate components of operational and fiscal practices of physical therapy service in a variety of settings

Course Competencies

1. Identify etiology, signs and symptoms for the patient with shoulder pathologies

Assessment Strategies

- 1.1. by responding to a case study scenario (oral or written)
- 1.2. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 1.1. you describe common pathologies of the shoulder girdle and shoulder
- 1.2. you explain the etiology of pathologies of the shoulder girdle and shoulder.
- 1.3. you identify signs and symptoms of pathology of the shoulder girdle and shoulder.
- 1.4. you describe medical management including pharmacological and surgical interventions and diagnostic testing

Learning Objectives

- 1.a. Describe etiology of pathologies of the shoulder girdle and shoulder
- 1.b. List common pathologies of the shoulder girdle and shoulder
- 1.c. List clinical signs and symptoms of specific pathologies of the shoulder girdle and shoulder
- 1.d. Explore medical and surgical interventions for pathology of the shoulder and shoulder girdle.
- 1.e. List impairments, activity and participation restrictions associated with pathology of the shoulder and shoulder girdle
- 1.f. Discuss physical therapy management of patients with shoulder and shoulder girdle pathology

2. Perform physical therapy interventions for the patient with shoulder pathologies

Assessment Strategies

- 2.1. in the laboratory setting
- 2.2. in a skill demonstration
- 2.3. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 2.1. you select the correct equipment and supplies
- 2.2. you perform all critical steps in the right order
- 2.3. you position yourself correctly and apply principles of good body mechanics
- 2.4. you employ appropriate interventions
- 2.5. you follow safety procedures
- 2.6. you verbalize an explanation of the process
- 2.7. your explanation presents sound reasoning as you describe the decisions you make throughout the process
- 2.8. you analyze patient response to physical therapy interventions

Learning Objectives

- 2.a. Describe method of management and rehabilitation for specific shoulder pathologies, applying current evidence, theory and clinical judgement
- 2.b. Complete preparation for treatment including a review all relevant medical records to ensure treatment is indicated, an interview of the patient/family to establish previous and current levels of function, and an assessment of the patient to ensure treatment is appropriate while taking into consideration the patient's specific needs and values
- 2.c. Provide rationale for the upcoming treatment to be performed within the Physical Therapist's plan of care that includes current evidence, clinical goals, and patient goals/values
- 2.d. Position self, patient and supplies/equipment safely and correctly
- 2.e. Assess patient's response to interventions and notify physical therapist if needed
- 2.f. Monitor and adjust intervention within the plan of care established by the Physical Therapist based upon the patient response to treatment and clinical indications
- 2.g. Document intervention accurately and thoroughly, following all federal and state practice act guidelines including appropriate treatment time, units, and billing codes
- 2.h. Educate the patient/family/caregiver in a manner consistent with their level of knowledge and understanding of the diagnosis/condition
- 2.i. Describe the progression of intervention throughout the continuum of healing using case scenarios of shoulder patients

3. Analyze features of gait for the patient with musculoskeletal disorders

Assessment Strategies

- 3.1. by developing an analysis (written, graphic, oral, or three-dimensional model)
- 3.2. by answering questions on one or more exams
- 3.3. in a skill demonstration

Criteria

Your performance will be successful when:

- 3.1. you accurately identify features of gait in patients with musculoskeletal disorders
- 3.2. you differentiate between typical and atypical features of gait.

Learning Objectives

- 3.a. Describe basic components of gait cycle in patient without musculoskeletal disorder
- 3.b. Explain weight bearing in normal gait and in patients with a musculoskeletal pathology

- 3.c. Examine common gait deviations in patients with musculoskeletal disorders
- 3.d. Analyze gait in patient with musculoskeletal disorder through case scenarios
- 3.e. Document gait deviation accurately and thoroughly
- 3.f. Examine interventions that may lead to an improvement in gait for patients with musculoskeletal pathology

4. Analyze features of posture for the patient with musculoskeletal disorders

Assessment Strategies

- 4.1. by developing an analysis (written, graphic, oral, or three-dimensional model)
- 4.2. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 4.1. you accurately identify features of posture in patients with musculoskeletal disorders
- 4.2. you differentiate between typical and atypical features of posture

Learning Objectives

- 4.a. Describe normal posture in relation to base of support, center of gravity, symmetry, balance
- 4.b. Identify common postural deviations associated with musculoskeletal disorders
- 4.c. Relate postural deviations observed with anatomical structures involved in musculoskeletal disorders
- 4.d. Identify the extent to which the postural deviation is correctable based upon each specific patient's pathology and comorbidities
- 4.e. Document postural deviations accurately and thoroughly

5. Identify etiology, signs and symptoms for the patient with elbow/wrist/hand pathologies

Assessment Strategies

- 5.1. by responding to a case study scenario (oral or written)
- 5.2. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 5.1. you describe common pathologies of the shoulder girdle and shoulder
- 5.2. you explain the etiology of pathologies of the shoulder girdle and shoulder.
- 5.3. you identify signs and symptoms of pathology of the shoulder girdle and shoulder.
- 5.4. you describe medical management including pharmacological and surgical interventions and diagnostic testing

Learning Objectives

- 5.a. Describe etiology of pathologies of the elbow/ wrist/ hand
- 5.b. List common pathologies of the elbow/ wrist/ hand
- 5.c. List clinical signs and symptoms of specific pathologies of the elbow/ wrist/ hand
- 5.d. Explore medical and surgical interventions for pathology of the elbow/ wrist/ hand
- 5.e. List impairments, activity and participation restrictions associated with pathology of the elbow/ wrist/ hand
- 5.f. Discuss physical therapy management of patient with elbow/ wrist/ hand pathology

6. Perform physical therapy interventions for the patient with elbow/wrist/hand pathologies

Assessment Strategies

- 6.1. in the laboratory setting
- 6.2. in a skill demonstration
- 6.3. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 6.1. you select the correct equipment and supplies
- 6.2. you perform all critical steps in the right order
- 6.3. you position yourself correctly and apply principles of good body mechanics
- 6.4. you employ appropriate interventions
- 6.5. you follow safety procedures

- 6.6. you verbalize an explanation of the process
- 6.7. your explanation presents sound reasoning as you describe the decisions you make throughout the process
- 6.8. you analyze patient response to physical therapy interventions

Learning Objectives

- 6.a. Describe method of management and rehabilitation for specific elbow/wrist/hand pathologies, applying current evidence, theory and clinical judgement
- 6.b. Complete preparation for treatment including a review all relevant medical records to ensure treatment is indicated, an interview of the patient/family to establish previous and current levels of function, and an assessment of the patient to ensure treatment is appropriate while taking into consideration the patient's specific needs and values
- 6.c. Provide rationale for the upcoming treatment to be performed within the Physical Therapist's plan of care that includes current evidence, clinical goals, and patient goals/values
- 6.d. Position self, patient and supplies/equipment safely and correctly
- 6.e. Assess patient's response to interventions and notify physical therapist if needed
- 6.f. Monitor and adjust intervention within the plan of care established by the Physical Therapist based upon the patient response to treatment and clinical indications
- 6.g. Document intervention accurately and thoroughly, following all federal and state practice act guidelines including appropriate treatment time, units, and billing codes
- 6.h. Educate the patient/family/caregiver in a manner consistent with their level of knowledge and understanding of the diagnosis/condition
- 6.i. Describe the progression of intervention throughout the continuum of healing using case scenarios of elbow/wrist/hand patients

7. Identify etiology, signs and symptoms for the patient with knee pathologies

Assessment Strategies

- 7.1. by responding to a case study scenario (oral or written)
- 7.2. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 7.1. you describe common pathologies of the knee.
- 7.2. you explain the etiology of pathologies of the knee.
- 7.3. you identify signs and symptoms of pathology of the knee.
- 7.4. you describe medical management including pharmacological and surgical interventions and diagnostic testing

Learning Objectives

- 7.a. Describe etiology of pathologies of the knee
- 7.b. List common pathologies of the knee
- 7.c. List clinical signs and symptoms of specific pathologies of the knee
- 7.d. Explore medical and surgical interventions for pathology of the knee
- 7.e. List impairments, activity and participation restrictions associated with pathology of the knee
- 7.f. Discuss physical therapy management of patients with a knee pathology

8. Perform physical therapy interventions for the patient with knee pathologies

Assessment Strategies

- 8.1. in the laboratory setting.
- 8.2. in a skill demonstration
- 8.3. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 8.1. you select the correct equipment and supplies
- 8.2. you perform all critical steps in the right order
- 8.3. you position yourself correctly and apply principles of good body mechanics
- 8.4. you employ appropriate interventions
- 8.5. you follow safety procedures
- 8.6. you verbalize an explanation of the process

- 8.7. your explanation presents sound reasoning as you describe the decisions you make throughout the process
- 8.8. you analyze patient response to physical therapy interventions

Learning Objectives

- 8.a. Describe method of management and rehabilitation for specific knee pathologies, applying current evidence, theory and clinical judgement
- 8.b. Complete preparation for treatment including a review all relevant medical records to ensure treatment is indicated, an interview of the patient/family to establish previous and current levels of function, and an assessment of the patient to ensure treatment is appropriate while taking into consideration the patient's specific needs and values
- 8.c. Provide rationale for the upcoming treatment to be performed within the Physical Therapist's plan of care that includes current evidence, clinical goals, and patient goals/values
- 8.d. Position self, patient and supplies/equipment safely and correctly
- 8.e. Assess patient's response to interventions and notify physical therapist if needed
- 8.f. Monitor and adjust intervention within the plan of care established by the Physical Therapist based upon the patient response to treatment and clinical indications
- 8.g. Document intervention accurately and thoroughly, following all federal and state practice act guidelines including appropriate treatment time, units, and billing codes
- 8.h. Educate the patient/family/caregiver in a manner consistent with their level of knowledge and understanding of the diagnosis/condition
- 8.i. Describe the progression of intervention throughout the continuum of healing using case scenarios of knee patients

9. Identify etiology, signs and symptoms for the patient with ankle/foot pathologies

Assessment Strategies

- 9.1. by responding to a case study scenario (oral or written)
- 9.2. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 9.1. you describe common pathologies of the ankle and foot.
- 9.2. you explain the etiology of pathologies of the ankle and foot.
- 9.3. you identify signs and symptoms of pathology of the ankle and foot.
- 9.4. you describe medical management including pharmacological and surgical interventions and diagnostic testing

Learning Objectives

- 9.a. Describe etiology of pathologies of the ankle/ foot
- 9.b. List common pathologies of the ankle/ foot
- 9.c. List clinical signs and symptoms of specific pathologies of the ankle/ foot
- 9.d. Explore medical and surgical interventions for pathology of the ankle/ foot
- 9.e. List impairments, activity and participation restrictions associated with pathology of the ankle/ foot
- 9.f. Discuss physical therapy management of patients with pathology of the ankle/ foot

10. Perform physical therapy interventions for the patient with ankle/foot pathologies

Assessment Strategies

- 10.1. in the laboratory setting.
- 10.2. in a skill demonstration
- 10.3. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 10.1. you select the correct equipment and supplies
- 10.2. you perform all critical steps in the right order
- 10.3. you position yourself correctly and apply principles of good body mechanics
- 10.4. you employ appropriate interventions
- 10.5. you follow safety procedures
- 10.6. you verbalize an explanation of the process
- 10.7. your explanation presents sound reasoning as you describe the decisions you make throughout the

- process
- 10.8. you analyze patient response to physical therapy interventions

Learning Objectives

- 10.a. Describe method of management and rehabilitation for specific ankle/foot pathologies, applying current evidence, theory and clinical judgement
- 10.b. Complete preparation for treatment including a review all relevant medical records to ensure treatment is indicated, an interview of the patient/family to establish previous and current levels of function, and an assessment of the patient to ensure treatment is appropriate while taking into consideration the patient's specific needs and values
- 10.c. Provide rationale for the upcoming treatment to be performed within the Physical Therapist's plan of care that includes current evidence, clinical goals, and patient goals/values
- 10.d. Position self, patient and supplies/equipment safely and correctly
- 10.e. Assess patient's response to interventions and notify physical therapist if needed
- 10.f. Monitor and adjust intervention within the plan of care established by the physical Therapist based upon the patient response to treatment and clinical indications
- 10.g. Document intervention accurately and thoroughly, following all federal and state practice act guidelines including appropriate treatment time, units, and billing codes
- 10.h. Educate the patient/family/caregiver in a manner consistent with their level of knowledge and understanding of the diagnosis/condition
- 10.i. Describe the progression of intervention throughout the continuum of healing using case scenarios of ankle/foot patients

11. Identify etiology, signs and symptoms for the patient with cervical/thoracic pathologies

Assessment Strategies

- 11.1. by responding to a case study scenario (oral or written)
- 11.2. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 11.1. you describe common pathologies of the cervical and thoracic spine
- 11.2. you explain the etiology of pathologies of the cervical and thoracic spine
- 11.3. you identify signs and symptoms of pathology of the cervical and thoracic spine
- 11.4. you describe medical management including pharmacological and surgical interventions and diagnostic testing

Learning Objectives

- 11.a. Describe etiology of pathologies of the cervical/ thoracic spine
- 11.b. List common pathologies of the cervical/ thoracic spine
- 11.c. List clinical signs and symptoms of specific pathologies of the cervical/ thoracic spine
- 11.d. Explore medical and surgical interventions for pathology of the cervical/ thoracic spine
- 11.e. List impairments, activity and participation restrictions associated with pathology of the cervical/ thoracic spine
- 11.f. Discuss physical therapy management of patients with cervical/ thoracic spine pathology

12. Perform physical therapy interventions for the patient with cervical/thoracic pathologies

Assessment Strategies

- 12.1. in the laboratory setting
- 12.2. in a skill demonstration
- 12.3. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 12.1. you select the correct equipment and supplies
- 12.2. you perform all critical steps in the right order
- 12.3. you position yourself correctly and apply principles of good body mechanics
- 12.4. you employ appropriate interventions
- 12.5. you follow safety procedures
- 12.6. you verbalize an explanation of the process
- 12.7. your explanation presents sound reasoning as you describe the decisions you make throughout the

- process
- 12.8. you analyze patient response to physical therapy interventions

Learning Objectives

- 12.a. Describe method of management and rehabilitation for specific cervical/thoracic pathologies, applying current evidence, theory and clinical judgement
- 12.b. Complete preparation for treatment including a review all relevant medical records to ensure treatment is indicated, an interview of the patient/family to establish previous and current levels of function, and an assessment of the patient to ensure treatment is appropriate while taking into consideration the patient's specific needs and values
- 12.c. Provide rationale for the upcoming treatment to be performed within the Physical Therapist's plan of care that includes current evidence, clinical goals, and patient goals/values
- 12.d. Position self, patient and supplies/equipment safely and correctly
- 12.e. Assess patient's response to interventions and notify physical therapist if needed
- 12.f. Monitor and adjust intervention within the plan of care established by the Physical Therapist based upon the patient response to treatment and clinical indications
- 12.g. Document intervention accurately and thoroughly, following all federal and state practice act guidelines including appropriate treatment time, units, and billing codes
- 12.h. Educate the patient/family/caregiver in a manner consistent with their level of knowledge and understanding of the diagnosis/condition
- 12.i. Describe the progression of intervention throughout the continuum of healing using case scenarios of cervical/thoracic patients

13. Identify etiology, signs and symptoms for the patient with lumbar/pelvic pathologies

Assessment Strategies

- 13.1. by responding to a case study scenario (oral or written)
- 13.2. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 13.1. you describe common pathologies of the lumbar spine and pelvis.
- 13.2. you explain the etiology of pathologies of the lumbar spine and pelvis.
- 13.3. you identify signs and symptoms of pathology of the lumbar spine and pelvis.
- 13.4. you describe medical management including pharmacological and surgical interventions and diagnostic testing

Learning Objectives

- 13.a. Describe etiology of pathologies of the lumbo-pelvic region
- 13.b. Examine common pathologies of the lumbo-pelvic region
- 13.c. List clinical signs and symptoms of specific pathologies of the lumbo-pelvic region
- 13.d. Explore medical and surgical interventions for pathology of the lumbo-pelvic region
- 13.e. List impairments, activity and participation restrictions associated with pathology of the lumbo-pelvic region
- 13.f. Discuss physical therapy management of pathology of the lumbo-pelvic region

14. Perform physical therapy interventions for the patient with lumbar/pelvic pathologies

Assessment Strategies

- 14.1. in the laboratory setting
- 14.2. in a skill demonstration
- 14.3. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 14.1. you select the correct equipment and supplies
- 14.2. you perform all critical steps in the right order
- 14.3. you position yourself correctly and apply principles of good body mechanics
- 14.4. you employ appropriate interventions
- 14.5. you follow safety procedures
- 14.6. you verbalize an explanation of the process
- 14.7. your explanation presents sound reasoning as you describe the decisions you make throughout the

process

- 14.8. you analyze patient response to physical therapy interventions

Learning Objectives

- 14.a. Describe the method of management and rehabilitation for specific lumbo-pelvic pathologies, applying current evidence, theory and clinical judgement
- 14.b. Complete preparation for treatment including a review all relevant medical records to ensure treatment is indicated, an interview of the patient/family to establish previous and current levels of function, and an assessment of the patient to ensure treatment is appropriate while taking into consideration the patient's specific needs and values
- 14.c. Provide rationale for the upcoming treatment to be performed within the Physical Therapist's plan of care that includes current evidence, clinical goals, and patient goals/values
- 14.d. Position self, patient and supplies/equipment safely and correctly
- 14.e. Assess response to interventions and notify physical therapist if needed
- 14.f. Adjust intervention within the plan of care established by the Physical Therapist based upon the patient response to treatment and clinical indications
- 14.g. Document intervention accurately and thoroughly, following all federal and state practice act guidelines including appropriate treatment time, units, and billing codes
- 14.h. Educate the patient/family/caregiver in a manner consistent with their level of knowledge and understanding of the diagnosis/condition
- 14.i. Describe the progression of intervention throughout the continuum of healing using case scenarios of lumbo-pelvic patients

15. Identify etiology, signs and symptoms for the patient with hip pathologies

Assessment Strategies

- 15.1. by responding to a case study scenario (oral or written)
- 15.2. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 15.1. you describe common pathologies of the hip.
- 15.2. you explain the etiology of pathologies of the hip.
- 15.3. you identify signs and symptoms of pathology of the hip.
- 15.4. you describe medical management including pharmacological and surgical interventions and diagnostic testing

Learning Objectives

- 15.a. Describe etiology of pathologies of the hip
- 15.b. List common pathologies of the hip
- 15.c. List clinical signs and symptoms of specific pathologies of the hip
- 15.d. Explore medical and surgical interventions for pathology of the hip
- 15.e. List impairments, activity and participation limitations associated with pathology of the hip
- 15.f. Discuss physical therapy management of patients with a hip pathology

16. Perform physical therapy interventions for the patient with hip pathologies

Assessment Strategies

- 16.1. in the laboratory setting
- 16.2. in a skill demonstration
- 16.3. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 16.1. you select the correct equipment and supplies
- 16.2. you perform all critical steps in the right order
- 16.3. you position yourself correctly and apply principles of good body mechanics
- 16.4. you employ appropriate interventions
- 16.5. you follow safety procedures
- 16.6. you verbalize an explanation of the process
- 16.7. your explanation presents sound reasoning as you describe the decisions you make throughout the process

- 16.8. you analyze patient response to physical therapy interventions

Learning Objectives

- 16.a. Describe method of management and rehabilitation for specific hip pathologies, applying current evidence, theory and clinical judgement
- 16.b. Complete preparation for treatment including a review all relevant medical records to ensure treatment is indicated, an interview of the patient/family to establish previous and current levels of function, and an assessment of the patient to ensure treatment is appropriate while taking into consideration the patient's specific needs and values
- 16.c. Provide rationale for the upcoming treatment to be performed within the Physical Therapist's plan of care that includes current evidence, clinical goals, and patient goals/values
- 16.d. Position self, patient and supplies/equipment safely and correctly
- 16.e. Assess patient's response to interventions and notify physical therapist if needed
- 16.f. Monitor and adjust intervention within the plan of care established by the Physical Therapist based upon the patient response to treatment and clinical indications
- 16.g. Document intervention accurately and thoroughly, following all federal and state practice act guidelines including appropriate treatment time, units, and billing codes
- 16.h. Educate the patient/family/caregiver in a manner consistent with their level of knowledge and understanding of the diagnosis/condition
- 16.i. Describe the progression of intervention throughout the continuum of healing using case scenarios of hip patients

17. Apply the principles of healing to pathologies of the musculoskeletal system

Assessment Strategies

- 17.1. on a case study scenario, oral or written
- 17.2. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 17.1. you identify the stages of healing of various body tissue types
- 17.2. you explain the inflammatory process.
- 17.3. you identify pathologies of the musculoskeletal system.
- 17.4. you apply the principles of the healing process to patients with musculoskeletal disorders

Learning Objectives

- 17.a. Describe the stress/strain curve and its relevance to injuries of various tissues
- 17.b. Describe the various types of musculoskeletal injuries
- 17.c. Explain the inflammatory process and its function in healing
- 17.d. Describe stages of healing in various body tissues
- 17.e. Describe timeframe of healing for various body tissues
- 17.f. Relate patient signs and symptoms to intervention choices based upon the stage of healing for specific body tissues
- 17.g. Apply the principles of tissue healing to musculoskeletal patient management using case scenarios

18. Demonstrate fitting and use of orthoses

Assessment Strategies

- 18.1. in the laboratory setting
- 18.2. in a skill demonstration
- 18.3. on a case study scenario, oral or written
- 18.4. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 18.1. you identify the various types of orthoses
- 18.2. you explain the indications for use of various orthoses
- 18.3. you demonstrate fitting various orthoses to patient
- 18.4. you identify the individual's and caregiver's ability to apply and care for the device
- 18.5. you recognize changes in skin condition while using orthoses
- 18.6. you recognize safety factors involved in using orthoses

Learning Objectives

- 18.a. Define orthoses
- 18.b. Explore types of orthoses and indications for use
- 18.c. Demonstrate fitting orthoses correctly for a patient with a musculoskeletal disorder
- 18.d. Instruct the patient and caregiver in correct fit, use and care of the orthoses
- 18.e. Demonstrate skin inspection before and after use of orthoses
- 18.f. Document correct use, fit, care and indications for orthoses
- 18.g. Recommend adjustments to use of orthoses within the plan of care established by the physical therapist
- 18.h. Identify when orthoses use needs to be discontinued due to safety reasons and notify supervising physical therapist

19. Conduct data collection for patients with musculoskeletal disorders

Assessment Strategies

- 19.1. by collecting, organizing and reporting data related to patient function
- 19.2. in a skill demonstration
- 19.3. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 19.1. you collect data for muscle strength and endurance
- 19.2. you collect data for presence or absence of muscle mass
- 19.3. you collect data for pain assessment
- 19.4. you collect data to assess body movement associated with pain and soreness
- 19.5. you collect data to assess motor function

Learning Objectives

- 19.a. Perform measurement of standard vital signs for each patient to assess aerobic capacity, endurance, and appropriateness for treatment
- 19.b. Identify tests used to measure muscle strength, endurance and pain with awareness of the validity, reliability, and statistical significance of such tests
- 19.c. Measure range of motion (active, passive, and functional) using an appropriate measurement device
- 19.d. Perform data collection for muscle strength, endurance, pain and presence or absence of muscle mass
- 19.e. Perform special tests for the musculoskeletal patient
- 19.f. Perform tests for integumentary integrity
- 19.g. Perform posture assessments identifying normal and abnormal alignment of the trunk and extremities during activities and rest
- 19.h. Perform anthropometric measurements
- 19.i. Position self and patient correctly and safely
- 19.j. Document data accurately and thoroughly, following all federal and state practice act guidelines including appropriate treatment time, units, and billing codes

20. Perform balance assessments for patients with musculoskeletal disorders

Assessment Strategies

- 20.1. in a skill demonstration
- 20.2. by answering questions on one or more exams

Criteria

Your performance will be successful when:

- 20.1. you select the correct equipment and supplies
- 20.2. you perform all critical steps in the right order
- 20.3. you position yourself correctly and apply principles of good body mechanics
- 20.4. you employ appropriate interventions
- 20.5. you follow safety procedures
- 20.6. you verbalize an explanation of the process
- 20.7. your explanation presents sound reasoning as you describe the decisions you make throughout the process

Learning Objectives

- 20.a. Identify factors that contribute to balance including factors that may limit balance in patient with

- musculoskeletal disorder
- 20.b. Explore balance assessment tools used for patients with musculoskeletal disorders, with awareness of the validity, reliability, and statistical significance of each balance assessment tool
 - 20.c. Position yourself and the patient correctly and safely, properly guarding/ spotting patient during the balance assessments
 - 20.d. Document findings accurately and thoroughly, following all federal and state practice act guidelines including appropriate treatment time, units, and billing codes
 - 20.e. Within the plan of care established by the Physical Therapist, recommend balance interventions appropriate for the patient that integrate objective balance assessment results with the patient's goals, patient's home environment, diagnosis, comorbidities, and current evidence/research
 - 20.f. Defend recommendation using relevant data from assessment and relevant research