PTA 8 Selected Topics in Physical Therapy

Student Learning Objectives

As evidenced by successful completion of written and practical examinations, lab activities, assignments, research article reviews, and the role playing and analysis of clinical scenarios, the student will:

1.0 Implement basic neuromuscular and developmental treatment for adults and pediatric cases as prescribed by physical therapists.

1.1. Identify and explain normal motor development.

1.2. Identify the determinants and development of balance and equilibrium.

1.3. Distinguish balance and righting reactions and their affects on normal and pathological motor development.

1.4. Identify pathological effects on normal motor development including synergistic patterns and tonal changes.

1.5. Identify and describe basic neuro-developmental techniques and basic proprioceptive neuromuscular facilitation techniques.

1.6. Demonstrate and instruct basic neuro-developmental techniques using proper hand placement and positioning.

1.7. Demonstrate and instruct basic proprioceptive neuromuscular facilitation techniques using primary and secondary patterns.

1.8. Perform neuro-developmental mat activities.

1.9. Perform basic neuro-developmental and proprioceptive neuromuscular facilitation techniques.

1.10. Perform balance and coordination activities.

2.0 Implement treatment for cervical and lumbar dysfunction as prescribed by physical therapists.

2.1. Recall and distinguish bony and soft tissue structures of the neck and back.

2.2. Identify and describe approaches to the management of neck and low back pain.

2.3. Identify neck and low back exercises and self management strategies.

2.4. Explain neck and back pain in terms of dysfunction, derangement, and postural syndromes.

2.5. Explain the affects of back pain on normal gait and functional activities.
2.6. Perform neck and back pain treatments using an eclectic approach and according to the plan of care.

2.7. Teach neck and low back exercise and self management programs.

3.0 Administer mechanical traction techniques for the management of cervical and lumbar dysfunction as prescribed by physical therapists.

3.1. List the indications and contraindications for mechanical spinal traction.

3.2. Discuss the principles and physiological affects of mechanical traction.

3.3. Discuss the differences and parameters of static versus intermittent traction.

3.4. State the normal dosages of mechanical traction.

3.5. Implement mechanical traction procedures within a plan of care for the management of spinal conditions.

4.0 Implement orthotic training programs as prescribed by physical therapists.

4.1. Recall the major components and determinants of gait.

4.2. Describe and distinguish the uses, types, indications and contraindications of orthotic devices.

4.3. Discuss and illustrate the importance of the ankle foot orthosis in rehabilitation.

4.4. List the indicators of proper orthotic fit.

4.5. Demonstrate and instruct how to don and doff a basic ankle foot orthosis.

4.6. Teach precautions and importance of proper orthotic fit.

4.7. Use orthotic devices in ambulation training.

4.8. Identify common uses for upper and lower extremity orthoses.

4.9. Practice applying orthotic devices in patient scenarios.

4.10. Identify signs of improper fit including gait deviations and changes in skin conditions.

4.11. Given patient scenarios, assess appropriateness of orthotic and patient’s ability to care for it.

5.0 Implement prosthetic training programs as prescribed by physical therapists.
5.1. Recall the major components and determinants of gait.
5.2. Describe types of lower extremity amputations.
5.3. Identify and describe pathologies leading to lower extremity amputation including diabetes mellitus and peripheral vascular disease.
5.4. Explain the basic types of prosthetic devices.
5.5. Identify the components of lower extremity prosthetic devices.
5.6. Summarize the mechanics of prosthetic components.
5.7. Instruct pre-prosthetic training including: skin care, residual limb wrapping/compression, and therapeutic exercise.
5.8. Teach how to don and doff lower extremity prostheses.
5.9. Identify signs of improper fit including gait deviations and changes in skin conditions.
5.10. Instruct transfer and ambulation activities with and without prosthesis using assistive devices.
5.11. Given patient scenarios, assess appropriateness of prosthesis and patient’s ability to care for it.

6.0 Demonstrate a basic understanding of pharmacology and its specific impact on physical therapy treatment.
6.1. Define the word drug.
6.2. Define pharmacotherapeutics.
6.3. Compare pharmacokinetics and pharmacodynamics.
6.4. Discuss the various ways drugs are named (generic, chemical, trade).
6.5. Describe the difference between over the counter and prescription drugs.
6.6. Compare and contrast the various ways drugs may be administered.
6.7. Discuss the relationship between dosage and drug bioavailability.
6.8. Describe the structure and function of the plasma membrane.
6.9. Discuss how drugs breach the plasma membrane.
6.10. List typical biologic drug storage sites and their implications in physical therapy.
6.11. Discuss briefly how drugs are inactivated and eliminated from the body.
6.12. Recognize common drugs used by patients in rehabilitation.

7.0 Identify, discuss and analyze broad topics related to bioethics in general, and the ethical practice of physical therapy in particular, including the concepts of morality and ethical values.

7.1. Define morality and ethics.

7.2. List the commonly accepted moral rules.

7.3. Differentiate general and particular moral rules.

7.4. Discuss moral rules violation and its justifications.

7.5. Define and describe professional ethics.

7.6. Define and describe the ethical values of autonomy, beneficence, non-malfeasance, and justice.

7.7. Analyze particular moral rules.

7.8. Relate personal actions and decisions to morality.

7.9. Analyze clinical and non-clinical scenarios as they relate to ethics and morality.

7.10. Correlate typical clinical actions with ethical values.

7.11. Write essays related to morality and professional ethics.

7.12. Demonstrate sound decision-making based on relating moral concepts and ethical values.

8.0. Identify, discuss, and analyze common challenges to the ethical practice of physical therapy including: colleague relations, managed care, and multicultural insensitivity.

8.1. List common challenges to ethical practice.

8.2. Define and describe managed care.

8.3. Discuss the ethical dilemmas which may arise from managed care and other health care financing reforms.

8.4. Discuss colleague and supervisory relationships and their relation to solving ethical dilemmas.

8.5. Discuss the role of culture in ethical decision-making in physical therapy practice.

8.6. Identify and discuss multicultural differences in perception and practice that influence the ethical practice of physical therapy.
8.7. Analyze elements of clinical situations related to potential sexual misconduct.

8.8. Analyze potential managed care ethical dilemmas as they relate to specific moral and ethical concepts.

8.9. Demonstrate the ability for sound ethical decision-making based on an understanding and coping with common challenges to the ethical practice of physical therapy.

9.0 Given patient scenarios, implement comprehensive physical therapy treatment as prescribed by physical therapists.

9.1. Perform therapeutic techniques demonstrating an understanding of the role of the physical therapist assistant in rehabilitation.

9.2. Perform therapeutic techniques appropriately employing universal precautions and sound body mechanics.

9.3. Perform therapeutic techniques demonstrating an understanding of organizational structure, levels of authority, and fiscal considerations in the health care delivery system.

9.4. Teach patients, families and other health workers, the uses, applications and responses of modalities and procedures with emphasis on safety and rationale as directed by physical therapist.

9.5. Demonstrate the integrative nature of physical therapy by implementing comprehensive treatment programs, utilizing knowledge and skills attained in previous and concurrent courses.

9.6. Implement therapeutic interventions within the plan of treatment considering knowledge of assessments and measurements, functional activities, physical modalities and therapeutic procedures, pathology, kinesiology, and therapeutic exercise.

9.7. Implement therapeutic interventions within the plan of treatment demonstrating consideration of time management, therapeutic sequence and procedure selection issues.

9.8. Demonstrate appropriate documentation of physical therapy treatments considering patient response, precautions, treatment parameters, long/short term goals, and effectiveness and proper billing requirements.

9.9. Perform physical therapy treatments and interact with patient and families considering influencing factors (psychosocial, cultural, economic, patient satisfaction, legal, ethic, etc.).

9.10. Assist in discharge planning and alternative levels of care decision making with supervising physical therapist.
9.11. Identify clinical responses and situations that require the attention of the supervising physical therapist or immediate interventions such as basic first aid or cardiopulmonary resuscitation.


9.13. Analyze the effectiveness of modalities and procedures in specific clinical situations.


9.15. Delineate beneficial and untoward effects of thermal modalities.

9.16. Analyze the relationship of physical agents with other therapeutic procedures (therapeutic exercise, range of motion, functional activities) as they relate to the achievement of rehabilitation goals.

9.17. Verify the effectiveness of his/her teaching behavior by analyzing performance.


10. Demonstrate appropriate professional behavior.

10.1. Attend and be on time for class, lab, and scheduled appointments.

10.2. Be prepared for lab activities; attend to tasks assigned.

10.3. Accept constructive criticism and respond and/or follow through appropriately.

10.4. Express self in a clear and easily understood manner.

10.5. Maintain appropriate personal hygiene.

10.6. Treat others with positive regard, dignity and respect.

10.7. Analyze and examine professional literature considering: specific scientific methods, interpretation of results, and clinical significance in order to foster further personal investigation and clinical effectiveness.

10.8. Explain the importance of life long learning.

10.9. Describe how professional development can occur.