

**PTAP-140 THERAPEUTIC EXERCISE**     3 CREDITS

**SYLLABUS**

---

**CATALOG DESCRIPTION**

Clinical techniques related to stretching, strengthening, posture, balance, coordination, agility and aerobic conditioning. Treatment strategies for patients with surgical and non-surgical diagnosis.

Prerequisites: PTAP 110, PTAP 125, PTAP 130, PTAP 150

Semester Offered: Summer for On-Campus Program; Fall for Online Hybrid Program

***COMMON STUDENT LEARNING OUTCOMES***

*Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...*

**BROAD AND SPECIALIZED LEARNING**

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

**CRITICAL THINKING**

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

**CULTURAL AND CIVIC ENGAGEMENT**

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

**EFFECTIVE COMMUNICATION**

Students will exchange ideas and information with clarity in multiple contexts.

**INFORMATION LITERACY**

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

**INTEGRATING TECHNOLOGIES**

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

**COURSE LEARNING OUTCOMES**

*Upon successful completion of the course, the student will be able to...*

1. Apply techniques related to joint and muscle flexibility.
2. Apply techniques related to strength and endurance training.
3. Apply techniques related to body mechanics and postural stabilization.

4. Apply techniques related to balance, coordination, and agility training.
5. Apply techniques related to aerobic conditioning.
6. Recognize appropriate treatment programs within the plan of care developed by the supervising PT.
7. Explain outcome assessment related to course content.
8. Practice Professional Behaviors Student's Self-Assessment related to course content.
9. Describe basic concepts related to the APTA Guide to Physical Therapist Practice.

## SPECIFIC LEARNING OBJECTIVES

*Upon successful completion of the course, the student will be able to...*

1. Apply techniques related to joint and muscle flexibility.
  - 1a. Describe soft tissue extensibility.
  - 1b. Demonstrate techniques to maintain joint and muscle flexibility.
  - 1c. Explain the indications, contraindications, precautions, and physiological response related to stretching.
  - 1d. Demonstrate competency in the application of stretching techniques to meet requirements outlined in the skill check and lab exam.
  - 1e. Measure PROM or AROM to determine response to stretching exercises.
  - 1f. Identify normal and functional ROM for all major joints.
2. Apply techniques related to strength and endurance training.
  - 2a. Identify which muscles are active during a given functional activity.
  - 2b. Explain the use of common exercise equipment such as free weights, Thera-Band, foam rolls, pulleys, isokinetic machines, steppers, treadmills, elliptical, stationary bicycle, UBE, etc.
  - 2c. Demonstrate the following concepts related to progressive resistive exercises: isometric, isotonic, isokinetic, gravity-eliminated, gravity minimized, against-gravity, open-chain, closed-chain, concentric, eccentric, etc.
  - 2d. Explain the indications, contraindications, precautions, and physiological response related to strengthening.
  - 2e. Demonstrate competency in the application of strengthening techniques to meet requirements outlined in the skill check and lab exam.
  - 2f. Measure strength to determine response to strengthening exercises.
  - 2g. Perform functional muscle testing.
3. Apply techniques related to body mechanics and postural stabilization.
  - 3a. Describe postural alignment during resistive exercise training.
  - 3b. Apply techniques related to relaxation.
  - 3c. Apply techniques to improve core strength.
  - 3d. Explain the indications, contraindications, precautions, and physiological response related to body mechanics and postural stabilization.
  - 3e. Demonstrate competency in the application of body mechanics and postural stabilization to meet requirements outlined in the skill check and lab exam.
4. Apply techniques related to balance, coordination, and agility training.
  - 4a. Demonstrate common exercise equipment such as foam, BAPS, BOSU, etc.
  - 4b. Perform the following balance assessment tools such as the Tinetti and Berg.
  - 4c. Explain the indications, contraindications, precautions, and physiological response related to balance, coordination, and agility training.
  - 4d. Demonstrate competency in the application of balance, coordination, and agility training to meet requirements outlined in the skill check and lab exam.
  - 4e. Describe changes in balance reactions after participation in structured balance training activities.
5. Apply techniques related to aerobic conditioning.
  - 5a. Differentiate aerobic and anaerobic exercise.
  - 5b. Explain the effects of exercise on the cardiovascular system.

- 5c. Review the perceived exertion scale.
- 5d. Explain the indications, contraindications, precautions, and physiological response related to aerobic conditioning.
- 5e. Describe cardiopulmonary signs during aerobic conditioning such as heart rate, cardiac rhythm, respiration rate, blood pressure, oxygen saturation, color, etc.
- 5f. Recognize signs of distress during aerobic conditioning such as dyspnea, excessive sweating, angina, claudication, decreased level of alertness, cyanosis, etc.
- 6. Recognize appropriate treatment programs within the plan of care developed by the supervising PT.
  - 6a. Select appropriate therapeutic exercises for surgical or non-surgical patients with appropriate responses to change in status and change in the plan of care.
  - 6b. Select appropriate therapeutic exercises for obstetric patients with appropriate responses to change in status and change in the plan of care.
  - 6c. Modify treatment programs to ensure optimal functional outcomes.
- 7. Explain outcome assessment related to course content.
  - 7a. Identify equipment and resources necessary for discharge.
  - 7b. Finalize a functional home exercise program including ADLs.
  - 7c. Provide input to the supervising physical therapist about outcomes.
- 8. Practice Professional Behaviors Student's Self-Assessment criteria related to course content.
  - 8a. Commitment to Learning – Demonstrate the ability to self-assess, self-correct, and self-direct. Identify needs and sources of learning. Seek new knowledge and understanding.
  - 8b. Interpersonal Skills – Demonstrate the ability to interact effectively with patients, families, colleagues, other health care professionals, and the community. Demonstrate the ability to effectively deal with cultural and ethnic diversity issues.
  - 8c. Communication Skills – Demonstrate the ability to communicate effectively (i.e., speaking, body language, reading, writing, and listening) for a varied audiences and purposes.
  - 8d. Effective Use of Time – Demonstrate the ability to obtain maximum benefit from a minimum investment of time and resources.
  - 8e. Use of Constructive Feedback – Demonstrate the ability to identify sources and seek out feedback and to effectively use and provide feedback for improving personal interaction.
  - 8f. Problem-Solving – Demonstrate the ability to recognize and define problems, analyze data, develop and implement solutions, and evaluate outcomes.
  - 8g. Professionalism – Demonstrate the ability to exhibit appropriate professional conduct and to represent the profession effectively.
  - 8h. Responsibility – Demonstrate the ability to fulfill commitments and to be accountable for actions and outcomes.
  - 8i. Critical Thinking – Demonstrate the ability to question logically; to identify, generate, and evaluate elements of a logical argument; to recognize and differentiate facts, illusions, assumptions, and hidden assumptions; and to distinguish the relevant from the irrelevant.
  - 8j. Stress Management – Demonstrate the ability to identify sources of stress and to develop effective coping behaviors.
  - 8k. Use a SOAP note format to document lab skills.
- 9. Describe basic concepts related to the APTA Guide to Physical Therapist Practice.
  - 9a. Integrate basic concepts presented in the APTA Guide to Physical Therapist Practice related to course content.
  - 9b. Identify the parameters of the scope of practice of the PTA related to course content.