

Prescriptive Stretching

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Prescriptive Stretching Course Objectives

After completing the Prescriptive Stretching course, the participant will:

1. Understand the basics of the skeletal and muscular system
2. Understand the fundamentals of stretching
3. Properly explain the proper posture and the role of agonists, antagonists, and stabilizers
4. Understand the concepts of active and latent trigger points and how they can affect posture and stretching.
5. Identify the four main principles of stretching
6. Design safe and effective techniques for targeting specific muscles
7. Identify common mistakes of various stretches, as well as how to test for various flexibility issues.
8. Understand the coordination and design of stretches and the order they may need to occur for individuals
9. Design programs for pain relief for various conditions



Prescriptive Stretching Course Examination

For each of the following questions, circle the letter of the answer that best answers the question.

1. In order to stand up straight, the muscles of the back should be:
 - A. Slightly shorter but as strong as the muscles on the anterior side
 - B. Equally long and strong compared to the anterior side
 - C. Preferably short and weak compared to the anterior side
 - D. Relaxed and long compared to the anterior side

2. Which type of trigger point hurts when pressed by a finger?
 - A. Active
 - B. Latent
 - C. Radiating
 - D. Compression

3. All of the following are reasons for trigger points EXCEPT:
 - A. Feeling cold
 - B. Sitting
 - C. Standing
 - D. Repetitive movements

4. At what age do we typically reach our maximum density and strength for the skeleton?
 - A. 16
 - B. 35
 - C. 20
 - D. 25

5. Which joint structure provides protection from bacteria?
 - A. Joint capsule
 - B. Joint fluid
 - C. Hyaline cartilage
 - D. Muscle

6. Which statement is false concerning inactivity?
 - A. Osteoarthritis begins to develop
 - B. Capillaries begin to withdraw
 - C. Tendons can tear with sudden movements
 - D. Cartilage begins to thicken over time

7. Which statement is false concerning why we should stretch?
 - A. Age and technique can affect mobility
 - B. Stretching can make muscles stronger
 - C. All studies show that stretching increases mobility
 - D. Stretching can cause muscles to relax thus decreasing pain

8. All of the following are one of the Four Main Principles of Stretching EXCEPT:
 - A. Stretch through the pain
 - B. Stretch slowly
 - C. Stretch the muscle you are intending to stretch
 - D. Avoid affecting other muscles and joints

9. The main focus of proper stretching is:
 - A. To take the path of least resistance
 - B. To try not to move the joint
 - C. To stretch multiple muscles at once
 - D. To stretch to the point of pain

10. Which statement is true regarding PNF stretching?
 - A. It benefits the muscle to fight the stretching phase
 - B. Once you relax the muscle, the next step is to contract it.
 - C. It has 3 parts or steps to it
 - D. It is a series of stretch, relax, contract to improve range of motion

11. How do you know you have reached the end-point of the stretch when performing PNF?
 - A. You feel a light sting in the muscle
 - B. The bony landmarks of the joint are touching
 - C. Full range of motion for the joint has been met
 - D. The client is making a painful face

12. Which component of PNF stretching is used as a “distraction” to the muscle?
 - A. Ending point
 - B. Relaxation
 - C. Contraction
 - D. Starting point

13. Your client just twisted his knee and is now complaining of tightness, pain and limited range of motion. You suggest he wait to stretch his quads and hamstrings for how long?
 - A. 48 hours
 - B. Until the injury has been evaluated by a professional
 - C. Until the swelling goes down
 - D. Immediately

14. Which statement is false concerning hypermobility?
 - A. It can injure the joint
 - B. It can be due to training of muscles for particular sports
 - C. It can be genetic
 - D. It means that your muscles are properly stretched

15. How long should a woman wait to begin stretching after delivering her baby?
 - A. 12 weeks
 - B. 8 weeks
 - C. 6 weeks
 - D. 2 weeks

16. How long should a client wait to stretch the muscle that has received a cortisone injection?
- A. 10 days
 - B. 10 weeks
 - C. 4 days
 - D. 4 weeks
17. Which stretch should be avoided?
- A. Stretching the gluteals from a seated position
 - B. Stretching the quads from a side-lying position
 - C. Stretching the pectorals with a bent elbow below shoulder level
 - D. Stretching the hamstrings from a seated position
18. In which condition should you never stretch?
- A. After stitches have healed
 - B. After an intense workout
 - C. After a fracture
 - D. After menopause
19. When stretching the hip flexors, which position is correct?
- A. Standing with knee flexed and leaning forward
 - B. Standing with knee flexed and lower back arched
 - C. Standing with back leg straight with back neutral
 - D. Standing with back leg bent and back flattened.
20. What structure(s) in the spinal column absorbs forces and vibrations?
- A. Vertebral body
 - B. Transverse and spinous processes
 - C. Nucleus pulposus and annulus fibrosus
 - D. Spinal articulations
21. Which part of the spine has a normal kyphotic curve?
- A. Lumbar
 - B. Cervical/Neck
 - C. Thoracic/chest
 - D. Sacrum
22. Where is the most common location for a ruptured disc?
- A. Thoracic vertebrae 6-8
 - B. Lumbar vertebrae 4-5
 - C. Sacral area
 - D. Cervical 3-4
23. Proper interabdominal pressure can relieve pressure on the top disc of a vertebrae by what percent?
- A. 30%
 - B. 40%
 - C. 50%
 - D. 60%
24. What muscles may be tight if a client is having a hard time tightening the abdominals?
- A. Erector spinae of the back
 - B. Knee extensors
 - C. Hip flexors
 - D. Hip extensors

25. All of the following are proper positions when standing correctly EXCEPT:
- A. Shoulders should be low and relaxed
 - B. Abs should be slightly tightened
 - C. Knees should be straight
 - D. Feet should be outwardly rotated a couple of degrees
26. Sitting correctly requires:
- A. A proper chair height
 - B. Knowing how to stand correctly
 - C. A chair with a backrest
 - D. A chair with armrests
27. Using the backrest on a chair will:
- A. Place less stress on the spinal discs
 - B. Place more stress on the spinal discs
 - C. Cause you to use the abdominals more
 - D. Decreases pressure on the ligaments of the spine
28. Poor posture can lead to all of the following EXCEPT:
- A. Trigger points
 - B. Decreased lactic acid in muscles
 - C. Tension headaches
 - D. Tightening of muscles in the anterior neck
29. Which of the following is not a symptom of tight upper trapezius?
- A. Pain across the shoulder girdle
 - B. Headache pain behind the eye
 - C. Swelling at the shoulder joint
 - D. Limited range of motion when rotating the head
30. Which statement is true concerning flexibility testing for the upper trapezius?
- A. Normal range of motion for neck rotation is 90 degrees
 - B. Normal range of motion for neck extension is 45 degrees
 - C. Normal range of motion for neck rotation is 45 degrees
 - D. Normal range of motion for neck flexion is 45 degrees
31. The name given to the posture of the head when the sternocleidomastoid is tight is called:
- A. Vulture neck
 - B. Caveman neck
 - C. Military neck
 - D. Giraffe neck
32. The stretch for the sternocleidomastoid should be avoided for all of the following EXCEPT:
- A. Pain in the neck
 - B. Dizziness
 - C. Difficulty breathing
 - D. The feeling of a slight burning
33. Which muscle stretch is important for individuals who hold the phone between their head and shoulder while talking?
- A. Scalenes
 - B. Pectoralis major stretch
 - C. Upper trapezius
 - D. Pectoralis minor stretch

34. Symptoms of tightness in the scalenes are:
- A. Numbness in hand or arms
 - B. Difficulty extending the neck
 - C. Tension headaches
 - D. Pain behind the eyes
35. Which of the following is not considered a common mistake when performing the scalenes stretch?
- A. Holding the stretch for 10 seconds
 - B. Gripping the head
 - C. Moving the head out of alignment
 - D. Sitting in a hunched position
36. What muscles need to be stretched prior to the scalenes if the client is having trouble performing the scalenes stretch?
- A. Pectoralis major
 - B. Pectoralis minor
 - C. Trapezius
 - D. Suboccipitals
37. Which of the following movements is not performed by the suboccipitals?
- A. Fine head movements
 - B. Neck extension
 - C. Head stabilization
 - D. Neck flexion
38. Proper techniques for performing suboccipital stretches include all of the following EXCEPT:
- A. Begin by sitting
 - B. Begin by lying prone
 - C. Use thumbs to press at the base of the skull
 - D. Push the head forward
39. Which of the following is considered to be a common mistake when stretching levator scapulae?
- A. Move the head forward and down
 - B. Movement follows the direction of the nose towards the knee
 - C. Rotating the head 60 degrees
 - D. Sitting up straight
40. If the shoulder is tight when attempting the levator scapula version 2, what two muscles should be stretched first?
- A. Latissimus dorsi and pectoralis minor
 - B. Upper trapezius and suboccipitals
 - C. Middle trapezius and suboccipitals
 - D. Latissimus dorsi and pectoralis major
41. Which of the following is incorrect procedure for the pectoralis Major flexibility test 1?
- A. Arms are bent to 90 degrees
 - B. Upper arms are just below the shoulder
 - C. Forearms are flat against the wall
 - D. Stand with your back against the wall

42. When performing the pectoralis major version 1 stretch, the proper position for the arm is:
- A. Elbow bent to 90 degrees, elbow slightly lower than the shoulder
 - B. Elbow straight, elbow slightly higher than the shoulder
 - C. Elbow bent to 90 degrees, elbow slightly higher than the shoulder
 - D. Elbow straight, elbow slightly lower than the shoulder
43. What is the main difference between the version 1 and version 2 pectoralis major stretch?
- A. Version 2 is performed while seated
 - B. Both arms are stretched at the same time in version 2
 - C. Version 1 is performed in a corner
 - D. The elbows are kept low in version 2, but slightly above the shoulder in version 1
44. All of the following are symptoms of a tight pectoralis minor muscle EXCEPT:
- A. Pain that mimics a heart attack
 - B. Numbness that radiates down the arm
 - C. Difficulty exhaling deeply
 - D. Symptom similar to tennis elbow
45. Which of the following is not a proper technique for stretching the pectoralis minor in the standing position?
- A. Take one step forward with the same foot as the arm being stretched
 - B. Maintain a natural spinal position
 - C. The shoulder should be abducted 100 degrees
 - D. Relax the muscle for 5-10 seconds before repeating
46. If the lower part of the trapezius is tight, pain may be felt:
- A. At the base of the skull
 - B. Radiating down the arm on the affected side
 - C. In the lower back
 - D. Inside the clavicular joint
47. Which of the following is not a symptom of tight middle trapezius and rhomboids?
- A. Anterior neck pain
 - B. Pain between the scapula
 - C. Numbness between the scapula
 - D. Aching in the anterior shoulder
48. How should the client increase the stretch while performing the standing trapezius and rhomboid stretch?
- A. Straighten the leg that is on the floor
 - B. Flex the hip joint of the leg resting on the bench
 - C. Move the hand holding the bench forward
 - D. Push the hand on the thigh downward which pushes the body upward
49. If your client feels a twinge in their lower back while stretching the middle trapezius, you should recommend:
- A. The seated version
 - B. The standing version
 - C. Stretching pectoralis major
 - D. Stretch latissimus dorsi

50. Symptoms of tightness in the latissimus dorsi include all of the following EXCEPT:
- A. Difficulty working with the arms below shoulder level
 - B. Pain in the shoulder joint
 - C. Pain in the lower back
 - D. Pain or trouble with the shoulder while working with arms overhead
51. Which muscle should be stretched prior to performing the seated version of the latissimus stretch
- A. Quadratus lumborum
 - B. Erector spinae
 - C. Rectus femoris
 - D. Quadratus femoris
52. Which statement is false concerning the Infraspinatus stretch?
- A. You should not lower the elbow during the stretch
 - B. You should not raise the elbow during the stretch
 - C. Even if one does not feel the stretch, it is still of value to perform the exercise
 - D. You should always raise the elbow during the stretch
53. All of the following are causes of tightness in the infraspinatus EXCEPT:
- A. Typing on a key board
 - B. Push up exercises
 - C. Bench press exercises
 - D. Seated row exercises
54. Once your client is in the proper position for the infraspinatus flexibility test, how do you know if you client is tight in this area?
- A. The wrist bends
 - B. The back arches
 - C. The shoulder is unable to touch the floor or the wall
 - D. The elbow does not touch the floor or wall
55. What is the goal of the infraspinatus version 2 stretch?
- A. To move the elbow forward while shifting the body forwards
 - B. To move the elbow backwards while shifting the body backwards
 - C. To move the elbow forward while shifting the body backwards
 - D. To move the elbow backwards while shifting the body forwards
56. Which movement does not cause tightness of the teres major?
- A. Movements of the arms while cross country skiing
 - B. Swinging the arms while walking
 - C. Rock climbing
 - D. Golf swing
57. Which technique is incorrect when performing the teres major stretch?
- A. Stand with the foot of the side being stretched placed 1 foot away from the wall
 - B. Bend the elbow of the arm being stretch to 90 degrees
 - C. Resist by bringing your elbow away from the wall
 - D. Lean your right side against the wall while stretching the right teres major
58. What is the most important function of the supraspinatus?
- A. Stabilization of the shoulder
 - B. Internal rotation of the shoulder
 - C. External rotation of the shoulder
 - D. Adduction of the shoulder

59. When should version 1 of the supraspinatus be avoided?
- A. If there is pain in the neck
 - B. If there is pain in the wrist
 - C. If there is pain in the elbow
 - D. If there is pain in the back
60. Causes of tightness in the gluteus maximus include:
- A. Standing for long periods of time
 - B. Sitting with the legs internally rotated
 - C. Standing with your weight shifted to one side
 - D. Sitting with legs externally rotated
61. Proper flexibility in the gluteus maximus is found at what range of motion?
- A. 45 degrees of hip flexion
 - B. 90 degrees of hip flexion
 - C. 120 degrees of hip flexion
 - D. 150 degrees of hip flexion
62. If the client is not feeling this stretch because it is not very tight, what two muscles should he focus on instead if they have symptoms?
- A. Gluteus minimus and quadratus lumborum
 - B. Gluteus medius and piriformis
 - C. Piriformis and quadratus lumborum
 - D. Quadriceps and piriformis
63. All of the following are functions of gluteus medius and minimus EXCEPT:
- A. Hip extension
 - B. Hip abduction
 - C. Internal hip rotation
 - D. External hip rotation
64. When performing the gluteus medius and minimus stretch, what should you do if you feel pain in the groin on the side you are stretching?
- A. Use a higher table
 - B. Use a lower table
 - C. Move your knee out to the side
 - D. Move your knee inward
65. Which of the following is not a cause of tightness in the piriformis?
- A. Sitting with the knees externally rotated
 - B. Tight hip flexors
 - C. Too much sitting
 - D. Sitting with the feet and knees close together
66. Which of the following is not a symptom of a tight piriformis?
- A. Pain in the buttocks
 - B. Pain on the medial side of the knee
 - C. Numbness along the posterior side of the thigh
 - D. Pain in the lower back

67. Which of the following is not a common mistake when performing the standing version of the piriformis stretch?
- A. Failing to arch the back correctly
 - B. Moving the leg out of alignment
 - C. Straightening the knee too much
 - D. Shifting the pelvis away from the forward position
68. Common mistakes when performing the seated piriformis stretch include all of the following EXCEPT:
- A. Lightly pressing down on the knee of the side being stretched
 - B. Incorrect positioning due to other tight muscles
 - C. Resting the foot on the shin of the opposite leg
 - D. Flattening the back during the stretch
69. Which of the following is not an action of the quadratus lumborum?
- A. Back extension
 - B. Rotation of the upper body
 - C. Lateral flexion
 - D. Trunk flexion
70. Symptoms of tightness in the quadratus lumborum are:
- A. Pain in the center of the gluteal region
 - B. Pain in the low back during forced exhalation
 - C. Pain in the shoulder
 - D. Pain in the low back during forced inhalation
71. If you are experiencing pain in the wrist while performing the side lying quadratus lumborum stretch, you should:
- A. Lie all the way down on the table
 - B. Discontinue the exercise
 - C. Turn your hand 90 degrees towards the thumb
 - D. Turn your hand so the fingers are away from you
72. Your client should avoid the seated version of the quadratus lumborum exercise if:
- A. He is unable to balance himself
 - B. He has pain in his lower back prior to the stretch
 - C. He has pain during forced inhalation
 - D. He has pain in his wrist
73. When performing the stretch for the psoas and iliacus, what helps to keep the back flat on the table?
- A. Making sure the leg being stretched is far off the table
 - B. Contracting the hip flexors of the leg being stretched
 - C. Pulling the opposite knee as close to the chest as possible
 - D. Squeezing the gluteal muscles
74. All of the following are actions of the rectus femoris EXCEPT:
- A. Increasing the arch of the lower back
 - B. Internal rotation of the hip
 - C. Hip flexion
 - D. Knee extension

75. Which of the following mistakes defeats the purpose of the stretch more so than any other mistake?
- A. Using a rope that is too long
 - B. Using a rope that is too short
 - C. Using a table that is too high
 - D. Using a table that is too low
76. Who should avoid the kneeling version of the rectus femoris stretch?
- A. Those with tight quadriceps
 - B. Those with patellar problems
 - C. Those who are too tight to perform the supine version
 - D. Those with tight hip flexors
77. Which is not a symptom of tightness in the tensor fasciae latae
- A. Pain in the low back
 - B. Pain on the lateral side of the hip
 - C. Aching on the medial side of the knee
 - D. Pain around the patella
78. When performing the tensor fascia latae stretch, what may be the problem if the client is not feeling the stretch?
- A. The knee may be bent too much
 - B. The knee may be too close to the wall
 - C. The lower leg is angled inward when it should be angled outward
 - D. The knee may be too far from the wall
79. What should the client do in order to decrease the pull on the gastrocnemius (calf) muscle when stretching the hamstrings?
- A. Slightly flex the knee
 - B. Dorsiflex the foot by pulling the toes up
 - C. Plantarflex the foot by pointing the toes
 - D. Keep the foot on the bench
80. Who should not avoid performing the hamstring stretch?
- A. Those who feel pain in the lower back during the stretch
 - B. Those who feel pain around the patella during the stretch
 - C. Those who feel a slight sting in the hamstrings while performing the stretch
 - D. Those who only feel the stretch in the Achilles tendon
81. Which technique is incorrect when performing the short adductor stretch?
- A. Bend the left knee in order to stretch the right adductors
 - B. Slightly decrease the arch in your lower back
 - C. Form a right angle with the right and left thigh
 - D. Flexing at the hip joint
82. To decrease the risk of injuring the knee joint when performing the gracilis stretch, the client should:
- A. Bend the knee before returning the leg to the floor
 - B. Warm up by doing similar stretches standing
 - C. Position yourself far away from the wall
 - D. Adduct the leg being stretched as far as possible

83. How long should the gastrocnemius stretch be held?
- A. 5-10 seconds
 - B. 60 seconds
 - C. 30 seconds
 - D. 90 seconds
84. A tight soleus will cause the following symptoms EXCEPT:
- A. Aching in the calf
 - B. Pain in the arch of the foot
 - C. Ache or pain on top of the foot
 - D. Achilles tendon pain
85. Which is not a symptom of a tight tibialis anterior?
- A. Pain across the ankle
 - B. Pain on the medial side of the shin
 - C. Problems tilting the foot while walking
 - D. Pain on the lateral side of the lower leg
86. Which of the following is not considered proper positioning of the arm for the biceps brachii stretch?
- A. Rest the back of your hand on the ledge or table
 - B. Rotated the arm being stretched outward
 - C. While resting the arm on the table, the knuckles are pointing downward
 - D. Once in the proper position, the thumb should point towards the body
87. If your client experiences wrist pain during the bicep brachii stretch, what should they do?
- A. Extend the wrist by leaning backwards
 - B. Discontinue the stretch
 - C. Extend the wrist by leaning forward
 - D. Step further away from the table or ledge
88. Common mistakes made while performing the triceps brachii stretch include all of the following EXCEPT:
- A. Anchoring the shoulder blade of the arm being stretched against the wall
 - B. Tensing the chest
 - C. Failing to bend the elbow
 - D. Tensing the shoulder
89. Which of the following is a symptom of tightness in the forearm flexors?
- A. Pain on the medial side of the elbow
 - B. Pain on the lateral side of the elbow
 - C. Tingling in the fingers
 - D. Pain in the wrist
90. Which stretch is best for someone suffering from tennis elbow?
- A. Biceps brachii stretch
 - B. Triceps brachii stretch
 - C. Forearm flexors stretch
 - D. Forearm extensor stretch
91. Actions of the extensor carpi radialis longus and brevis include all of the following EXCEPT?
- A. Extend the little finger
 - B. Extend the wrist
 - C. Extend the index finger
 - D. Extend the ring finger

92. Generally, the heavier one is, the:
- A. Softer the mattress should be
 - B. More likely he will wake up with a stiff neck
 - C. More likely he will have poor posture while sleeping
 - D. Firmer the bed should be
93. If your back hurts when you first wake up, then you should:
- A. Stretch you hamstrings before going to bed
 - B. Sleep on your stomach
 - C. Get a softer mattress
 - D. Sleep on your side
94. A client should see a doctor about a back problem for all of the following EXCEPT?
- A. Shooting pain down the leg
 - B. Fatigue in the back muscles
 - C. Loss of sensitivity in certain areas
 - D. Loss of strength in certain muscles
95. Which of the following is characteristic of a Type 2 kink in your neck?
- A. The pain occurs right when you wake up in the morning
 - B. The pain is instant
 - C. The pain occurs slowly
 - D. Inability to tilt or turn the head to one side
96. All of the following muscles should be stretched to help with a headache EXCEPT:
- A. Suboccipitals
 - B. Scalenes
 - C. Middle trapezius
 - D. Sternocleidomastoid
97. All of the following muscles should be stretched to help with upper back pain EXCEPT:
- A. Middle trapezius and rhomboids
 - B. Pectoralis Major
 - C. Pectoralis minor
 - D. Latissimus dorsi
98. When dealing with shoulder pain radiating down the arm and hand, what muscles should be stretched first?
- A. Pectoralis minor
 - B. Shoulder joint muscles
 - C. Shoulder girdle muscles
 - D. Sternocleidomastoid
99. All of the following muscles should be stretched when dealing with runner's knee EXCEPT:
- A. Piriformis
 - B. Hamstrings
 - C. Rectus femoris
 - D. Gluteus medius
100. All of the following are reasons to seek professional help with lower back pain EXCEPT:
- A. Pain that improves during the day
 - B. Pain during sleep that wakes you up in the night
 - C. Radiating pain down the leg
 - D. Inability to stand on the toes without sinking down