# Sports Massage Home Study Course

20 CE Credit Hours
Online Study Guide

Presented by the:

Center for Massage Therapy Continuing Education

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## **Center for Massage Therapy Continuing Education**

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It is the responsibility of the practitioner to determine the appropriateness of the techniques presented in terms within the scope of practice. This information is in no way meant to diagnose or treat medical conditions. Written medical opinions are always the best way to resolve any questions regarding contra-indications to Sports Massage.

## PLEASE CAREFULLY READ THE DIRECTIONS ON PAGE 2

# **Instructions for the Sports Massage Home Study Course**

Thank you for investing in the Sports Massage home study course, a 20 CE credit hour course designed to further your knowledge in the principals and theory of sports massage. This guide will contain all of the instructions you will need to complete this course. This is a 20 CE hour course, so that means it should take you approximately 20 hours to watch the DVD, familiarize yourself with the principles and techniques, login and complete the exam.

In this course you will be presented with:

- Massage practices to work with runners, cyclists, swimmers, tennis players and other athletes
- Physiological principles that govern sports massage
- Pre-, inter- and post-event massage sessions using techniques you are already familiar with
- Treatment protocols to treat specific sports injuries
- Information on stretching, sports psychology and diet

# The following are steps to follow in completing this course:

- 1. Read the instructions and review the DVD and exam. Your DVD will be mailed to you.
- 2. Access the online examination in your account at www.massagetherapyceu.com.
- 3. Complete your examination and print your certificate. The exam is open book and there is no time limit for completion.

You must pass the exam with an 80% or better to pass this home study course. You are allowed to access and take the online exam up to 3 times if needed. There is no time limit when taking the exam. Feel free to review the DVD while taking the exam. This course uses the DVD "Sports Massage" with Molly Verschingel. There are no trick questions on the exam. All of the answers can be found on the DVD.

It is advised to answer the exam questions in the study guide before testing online. That way, when you are testing you do not have go back and forth through the online exam and risk losing your answered questions!

Good luck as you complete this course. If you have any question please feel free to contact us at 866-784-5940, 712-490-8245 or by email at info@massagetherapyceu.com. Most state boards require that you keep your "proof of completion" certificates for at least four years in case of audit. Thank you for taking our Sports Massage home study course.

# **Sports Massage Examination**

#### **Fundamentals**

#### Introduction

- 1. Why do athletes rely on sports massage as part of their athletic regimen?
  - a. To increase performance
  - b. To decrease injuries
  - c. They are looking for that extra edge
  - d. All of the above
- 2. What is sports massage?
  - a. Performing deeper work only
  - b. Sports massage is centered around how exercise affects the body and finding ways that different techniques can benefit the athlete
  - c. Performing superficial work only
  - d. All of the above
- 3. Sports massage is a goal orientated massage in which you have a specific outcome in your mind and fit techniques together to produce the effects on the body that you want.
  - a. True
  - b. False

## **Event Massage**

- 4. Where does event sports massage take place?
  - a. With the client on the massage table
  - b. In your massage room
  - c. Anywhere a sporting event takes place
  - d. All of the above
- 5. Which of the following is an important thing to expect at a sporting event?
  - a. Research the event and the sport
  - b. Allow enough time to set up your area so you will be ready
  - c. Do not over extend yourself
  - d. All of the above
- 6. What supplies should you expect to bring with you to a sporting event?
  - a. Sanitizing wipes, spray bottles and paper towels
  - b. Lubricant and a blanket and/or towel
  - c. Business cards and promotional materials
  - d. All of the above
- 7. Why is it important to bring sanitizing wipes, spray bottles with a bleach solution and paper towels with you to an event where you will be performing sports massage?
  - a. To wipe your hands and sanitize your work area in case there is no running water
  - b. To keep other areas around the sporting event clean as well
  - c. To look busy when you have a break
  - d. All of the above

#### **Stroke Fundamentals**

- 8. Which of the following are some main strokes used in sports massage?
  - a. Frictions and petrissage
  - b. Nerve strokes and feather strokes
  - c. Energy work
  - d. All of the above
- 9. Why would you use a compression stroke on a sports massage client?
  - a. In order to promote your services as a massage therapist
  - b. In order to loosen the muscle tissue and prepare the body for the next strokes
  - c. In order to allow the muscle tissue to contract
  - d. All of the above
- 10. What is the goal of using broadening strokes on a sports massage client?
  - a. To hyperextend your wrists
  - b. To allow the muscle tissue to contract
  - c. To spread and broaden the muscle tissue and fibers
  - d. All of the above
- 11. In order to properly perform circular friction on the body in a sports massage session you:
  - a. Use your fingertips to perform back and forth strokes on your client's muscle tissue
  - b. Use your whole hand to perform a circular movement on the client's muscle tissue
  - c. Keep your palm stationary in one place while performing a circular stroke
  - d. Both B and C
- 12. Which of the following is a type of friction technique used in sports massage?
  - a. Circular
  - h Palmar
  - c. Directional
  - d. Both A and B
- 13. Palmar friction is used to cool the muscle tissues down after the session is over.
  - a. True
  - b. False
- 14. To correctly perform a petrissage technique in sports massage you would:
  - a. Use your whole hand to knead and squeeze the muscle tissues in between your fingers and thumb
  - b. Use only your fingers to compress the tissues
  - c. Use your thumbs in a clockwise circular motion over the muscle tissues
  - d. All of the above
- 15. Why is compressive effluarage used?
  - a. To knead and squeeze the muscle tissues to loosen them after an event
  - b. To broaden and stretch the muscle tissues before the event
  - c. To flush the tissue of all metabolic waste that may be accumulating during the event
  - d. All of the above

- 16. What is the goal of compressive effleurage?
  - a. Warm the muscle tissues and fibers to increase circulation
  - b. Scoop the metabolic waste and push it in a manner that gets it back to the lymph system
  - c. Relax the muscle tissues and fibers
  - d. All of the above
- 17. About how many times should you perform the strokes presented?
  - a. 5
  - b. 4
  - c. 3
  - d. 2
- 18. You should never use tapotment on a post event sports massage.
  - a. True
  - b. False
- 19. In which direction should tapotment strokes, such as hacking or cupping, flow?
  - a. With the grain of the muscle fibers
  - b. Against the grain of the muscle fibers
  - c. Neither of the above
  - d. Both of the above

## **Pre-Event Massage**

- 20. What is the main goal of pre-event sports massage?
  - a. To put the athlete in the state of readiness
  - b. To warm the muscles by increasing circulation to enhance oxygen exchange
  - c. To help the athlete obtain a free range of motion
  - d. All of the above
- 21. Which of the following is an important thing to keep in mind when performing a pre-event sports massage?
  - a. Perform the massage within 60 minutes of the event
  - b. Do not overstretch the muscle tissues
  - c. Keep the treatment short
  - d. All of the above
- 22. When performing a pre-event sports massage, always use a quick pace.
  - a. True
  - b. False
- 23. When performing pre-event sports massage on a runner, what are the main muscle groups you will be working with?
  - a. Biceps, triceps, deltoid and rotator cuff muscles
  - b. Quadriceps, hamstrings, glutes, calves and feet
  - c. Spinalis, rotator cuff and intercostals
  - d. All of the above

- 24. It is always appropriate to ask your client if it is ok to use lubricant during a pre-event sports massage.
  - a. True
  - b. False
- 25. During a pre-event sports massage, you should never notice your client's skin becoming pink and warm.
  - a. True
  - b. False
- 26. When performing sports massage on a cyclist, what are the main muscle groups you will be working with?
  - a. Neck extensors and wrist flexors
  - b. Calves
  - c. Quadriceps and hamstrings
  - d. All of the above
- 27. When performing sports massage on a swimmer, what are the main muscle groups you will be working with?
  - a. Neck extensors, wrist flexors and Achilles tendon
  - b. Quadriceps, hamstrings, glutes, calves and feet
  - c. Rotator cuff, pectoralis, lattisimus, lower back and general leg
  - d. All of the above

#### **Post Event Massage**

- 28. Why is massage performed after an event?
  - a. In order to increase circulation which brings a fresh blood supply to ischemic tissue
  - b. To assist the athletes recovery process by increasing metabolic exchange
  - c. To maintain flexibility and relax muscles for faster recovery
  - d. All of the above
- 29. When do athletes feel the most pain from "delayed muscle onset soreness"?
  - a. 12-15 hours after an event or intense training session
  - b. 24-48 hours after an event or intense training session
  - c. 1-5 hours after an event or intense training session
  - d. All of the above
- 30. Which of the following is an important guideline for post event massage?
  - a. Ensure that the athlete has had a proper cool down before you perform the massage
  - b. Ensure that the athlete has had plenty of fluids and keep the treatment short
  - c. Never massage the athletes feet until you have removed their shoes and socks
  - d. All of the above
- 31. When performing a post event massage, you will be using the same fundamental techniques as taught at the beginning of the DVD.
  - a. True
  - b. False

- 32. When performing a post event sports massage, you will want to use lubricant while performing broadening strokes.
  - a. True
  - b. False
- 33. What type of pace should you be using during a post event massage?
  - a. Fast and vigorous
  - b. The same as pre-event massage
  - c. Slow and relaxed
  - d. None of the above
- 34. What is the main goal of a post event sports massage?
  - a. Using compressive effleurage to flush metabolic waste from the tissues for a faster recovery
  - b. Warming up the muscles and increasing circulation before an event
  - c. Putting the athlete at a state of readiness
  - d. All of the above
- 35. Why might a cyclist complain of wrist and hand pain after an event?
  - a. Changing gears and being hyper-extended on the handlebars of a bicycle
  - b. Having their wrists in a flexed position for a long period of time
  - c. Both A and B
  - d. None of the above
- 36. Which of the following body parts can be used while performing compression techniques on the lower back?
  - a. Palm
  - b. Fist
  - c. Forearm
  - d. All of the above

## **Cramping**

- 37. The exact cause of cramping is unknown, but there are several theories on why it happens.
  - a. True
  - b. False
- 38. The most popular theories on cramping suggest that muscle cramps may be a result of which of the following?
  - a. Dehydration
  - b. Muscle fatigue
  - c. Electrolyte imbalances
  - d. All of the above
- 39. There is nothing we can do during a sports massage session to help with cramping.
  - a. True
  - b. False

- 40. What does direct compression do to potentially relieve a muscle cramp?
  - a. Direct compression can fatigue the muscle relieving cramping
  - b. Direct compression floods the muscle tissue with fresh blood relieving the cramp
  - c. Direct compression can interrupt the nerve signal to the muscle
  - d. All of the above
- 41. If direct compression does not help or completely relieve a muscle cramp, what is the next step?
  - a. Further direct compression
  - b. Reciprocal Inhibition
  - c. Cross Fiber friction
  - d. All of the above
- 42. How does reciprocal inhibition "contracting of the opposite muscle" work to relieve a muscle cramp?
  - a. It produces a signal to the cramping musculature to relax
  - b. It causes the opposite muscle to cramp, relieving the cramped muscle
  - c. It increases circulation in the area forcing the cramped muscle to relax
  - d. All of the above
- 43. After a muscle cramp has been relieved, it is a good idea to ice the affected area.
  - a. True
  - b. False
- 44. If an athlete begins to cramp a second time while on the massage table, what is the best thing for you to do?
  - a. Encourage the athlete to get off the table and walk around a little bit
  - b. Encourage the athlete to re-hydrate with plenty of fluids
  - c. Encourage the athlete to try back another time
  - d. All of the above

## **Inter-event Massage**

- 45. Inter-event massage is performed specifically between bouts of intense exercise.
  - a. True
  - b. False
- 46. When might you run into a situation where inter-event massage will be useful?
  - a. Tournaments
  - b. Matches
  - c. In between breaks and player times
  - d. All of the above
- 47. What is the goal of inter-event sports massage?
  - a. Prepare the athlete for an event
  - b. Bring the body back to normal as quickly as possible
  - c. Relax an athlete after an event is completed
  - d. None of the above

- 48. Which of the following is a key question to ask the athlete in order to formulate a treatment plan for inter-event sports massage?
  - a. By asking the athlete "What event did you just do?"
  - b. By asking the athlete "How are you feeling right now?"
  - c. By asking the athlete "When is your next event?"
  - d. All of the above
- 49. If an athlete has just performed a high intensity event, such as a sprint, which of the following is a good technique to use for inter-event sports massage?
  - a. Tapotment
  - b. Cross fiber friction
  - c. Compressive effleurage
  - d. All of the above
- 50. An overstretched muscle will have a positive effect if an athlete needs explosive quickness for their upcoming competition.
  - a. True
  - b. False
- 51. What effect will deep compression have on an athlete during an inter-event sports massage?
  - a. It will cause cramping in the tissues
  - b. It will hold metabolic wastes in the tissues
  - c. It will bring a fresh blood supply and energy to the tissues
  - d. All of the above
- 52. Why would you ask the athlete "When is your next event?"
  - a. In order to determine if you will need to help cool down or invigorate the muscles
  - b. In order to determine what area to work
  - c. In order to determine if you can help the athlete
  - d. None of the above
- 53. When performing an inter-event sports massage on a tennis (court) player, which of the following areas could you concentrate on, depending on how the athlete answers your questions?
  - a. Back, including glutes
  - b. Hamstrings, quadriceps and calves
  - c. Pectoralis and general arm
  - d. All of the above
- 54. What effect may tapotment have on an exhausted muscle during an inter-event sports massage?
  - a. Relaxation
  - b. Cramping
  - c. It will have no effect at all
  - d. Flushing of metabolic wastes
- 55. What action does the anterior deltoid muscle perform?
  - a. Horizontal adduction
  - b. Horizontal abduction
  - c. None of the above
  - d. Both of the above

## **Psychology and Diet**

- 56. Which of the following is a suggestion to guide the massage session in a direction that supports the athlete and their healing process?
  - a. Promote relaxation among the more aggressive treatments
  - b. Focus on the positive changes in their bodies
  - c. Consult with the athlete's sports medicine team to be sure that everyone is on the same page
  - d. All of the above
- 57. An athlete's diet can play a very important role in their recovery process.
  - a. True
  - b. False
- 58. Which of the following products should an athlete avoid in order to get the most nutritional value from foods and the maximum healing benefit?
  - a. Alcohol
  - b. Sugar
  - c. Saturated fats
  - d. All of the above

## **Injuries**

- 59. Why is it important for therapists to understand how to handle common sports injuries?
  - a. Therapists who perform sports massage do not need to be familiar with common sports injuries
  - b. This DVD is wonderful and I am having so much fun learning about sports massage
  - c. So that we can support the healing process and provide the best possible sports massage session
  - d. All of the above
- 60. How do sports massage therapists handle and treat common sports injuries?
  - a. By managing edema
  - b. Encouraging healthy scar tissue formation
  - c. Giving recommendations for stretching and strengthening
  - d. All of the above
- 61. What is healthy scar tissue in the body?
  - a. Healthy scar tissue adheres to the surrounding tissue
  - b. Healthy scar tissue is functional and does not adhere to surrounding tissues
  - c. Healthy scar tissue causes restriction in the surrounding tissues
  - d. All of the above
- 62. Which of the following are characteristics of an acute injury?
  - a. It has a definite onset and will most likely have pain and swelling
  - b. It has no notable onset with no swelling and tissue damage
  - c. It has a definite onset with no swelling or pain
  - d. All of the above

- 63. What is a massage therapist's goal for an athlete in the sub-acute stage of an injury?
  - a. To flush metabolic wastes from the tissues
  - b. To manage compensation and promote the formation of healthy scar tissue
  - c. To relax the tissues after an event
  - d. All of the above
- 64. A chronic injury is one that has a gradual onset, and sometimes has been a problem for the athlete for quite some time.
  - a. True
  - b. False
- 65. When addressing and treating common sports injuries with an athlete, it is ok to refer your athlete to a physician for evaluation and/or discuss the injury with other members of the athlete's sports medicine team.
  - a. True
  - b. False

## **Running Injuries**

- 66. What type of injuries will you most likely be working with when treating runners?
  - a. Hip issues of a chronic nature
  - b. Leg issues of a chronic nature
  - c. Feet issues of a chronic nature
  - d. All of the above

#### **Plantar Fascitis**

- 67. What is plantar fascitis?
  - a. A tear in the Achilles tendon
  - b. An inflammation of the IT band
  - c. An inflammation of the fascia that runs from the calcaneus to the base of the toes
  - d. All of the above
- 68. What are some common symptoms of plantar fascitis?
  - a. Pain that runs from the heel into the medial side of the arch
  - b. Intense pain in the morning when the athlete first steps out of bed
  - c. Pain is experienced when the athlete is barefoot
  - d. All of the above
- 69. Which of the following techniques can be useful in treating plantar fascitis?
  - a. Tapotment applied to the medical side of the arch
  - b. Longitudinal stripping from the base of the toe towards the calcaneus
  - c. Compressive effleurage from the base of the toe towards the calcaneus
  - d. All of the above
- 70. When using ice to help treat plantar fascitis, what is the proper amount of time for the treatment?
  - a. 10 minutes
  - b. 20 minutes
  - c. 30 minutes
  - d. 40 minutes

- 71. Along with massage and ice, stretching and strengthening the plantar fascia will help in treating plantar fascitis.
  - a. True
  - b. False

## **Shin Splints**

- 72. Where is pain from shin splints usually felt in the athlete?
  - a. The soleus muscle
  - b. The gastrocnemius
  - c. The tibial area
  - d. All of the above
- 73. What causes shin splints and tibial pain?
  - a. Excessive pronation of the foot
  - b. Unsupportive shoes
  - c. Running on hard surfaces
  - d. All of the above
- 74. What is the benefit of performing compressive strokes on the medial tibia?
  - a. Compression broadens the tissues
  - b. Compression brings blood to the tissues
  - c. Compression tightens the tissues
  - d. None of the above
- 75. What is the benefit of performing circular friction on the tibial area to treat shin splints?
  - a. Circular friction broadens the tissues
  - b. Circular friction prepares the athlete for an event
  - c. Circular friction breaks up adhesions in the tissues
  - d. All of the above
- 76. If you find a nodular or tight area while performing circular friction, what should you do?
  - a. Provide focused attention on those areas
  - b. Do not work on those areas
  - c. Treat those areas just as you would any other area
  - d. All of the above
- 77. How long should you advise your athlete to hold the presented stretches for?
  - a. 5-10 seconds
  - b. 10-15 seconds
  - c. 20-30 seconds
  - d. 30-45 seconds

## Iliotibial Band (ITB) Syndrome

- 78. When treating iliotibial band syndrome, you may find that the best way to have your athlete positioned is in the side lying position.
  - a. True
  - b. False

- 79. What is the main cause of iliotibial band syndrome?
  - a. A tightening of the gastrocnemius and soleus musculature
  - b. A tightening of the iliotibial tract which runs along the lateral portion of the upper leg
  - c. The plantar fascia which runs from the Achilles tendon to the toes
  - d. All of the above
- 80. Releasing the fascia and muscle restriction/tightness on the tensor fascia latae, gluteal and upper leg area will not help in treating iliotibial band syndrome.
  - a. True
  - b. False
- 81. What is the benefit of using spreading/broadening strokes to treat iliotibial band syndrome?
  - a. Spreading techniques will have no effect on the tissues
  - b. Spreading techniques will tighten the tissues
  - c. Spreading techniques will release tension and tightness in the tissues
  - d. All of the above
- 82. Strengthening weak hip abduction musculature in the athlete can help to relieve and heal iliotibial band syndrome.
  - a. True
  - b. False

## **Hamstring Strain**

- 83. What specific muscles are involved in hamstring strain?
  - a. Biceps femoris
  - b. Semi tendinosus
  - c. Semi membranosus
  - d. All of the above
- 84. What type of strokes will you want to use in order to beneficially treat a hamstring strain?
  - a. Vigorous and fast strokes
  - b. Lengthening and spreading strokes
  - c. Energy strokes
  - d. All of the above
- 85. Once you find an area of tension and/or adhesions in the hamstrings, what is your next step?
  - a. Treat those areas just as you would any other area
  - b. Do not work on those areas
  - c. Perform circular friction in order to break up the scar tissue
  - d. All of the above
- 86. Why might you address and treat the sides of the knees?
  - a. In order to treat the insertion sites of the hamstring musculature
  - b. In order to treat the soleus musculature
  - c. In order to treat the patellar tendon
  - d. All of the above

- 87. Using an active stretch to stretch the hamstring group may provide more tension relief in the muscle group than a passive stretch.
  - a. True
  - b. False

## **Cycling Injuries**

- 88. Cycling injuries usually have an acute pattern from hours spent over the handlebars and saddles.
  - a. True
  - b. False

#### **Neck Pain**

- 89. When addressing the neck region of a cyclist, which of the following muscles will you focus on treating?
  - a. Pectoralis major and pectoralis minor
  - b. Lower, middle and upper trapezius
  - c. Neck extensors
  - d. All of the above
- 90. From the beginning to the end of your treatment on the trapezius musculature, (as well as many of the areas you will be working), what is the general order of steps to use?
  - a. Assessment, warming and broadening of the tissues, treatment of specific tender areas and active stretching
  - b. Treatment of specific tender areas, assessment and warming of the tissues and active stretching
  - c. Stretching, treatment of specific tender areas and assessment, warming and broadening of the tissues
  - d. All of the above
- 91. Typically, where will you find the most adhesions and tender points in the trapezius musculature of a cyclist?
  - a. Lower trapezius
  - b. Medial trapezius
  - c. Upper trapezius
  - d. All of the above

#### **Patellar Tendonitis**

- 92. What is patellar tendonitis?
  - a. It is a localized pain in the patellar tendon
  - b. It is a general pain in the tibial tuberosity
  - c. It is a localized pain in the biceps femoris
  - d. All of the above

- 93. In your approach to treating patellar tendonitis, what should your first and main focus be?
  - a. Releasing the tension in the gastrocnemius and soleus muscles in order to release the tension from the patellar tendon
  - b. Releasing the tension in the quadriceps muscle group in order to release the tension from the patellar tendon
  - c. Releasing the tension in the hamstring muscle group in order to release the tension from the patellar tendon
  - d. All of the above
- 94. Communication with your athlete in order to determine if the pressure you are using is acceptable or painful is imperative when addressing any injury in an athlete.
  - a. True
  - b. False
- 95. When you begin to treat the patellar tendon itself, which of the following strokes will be most beneficial in breaking up adhesions?
  - a. Tapotment
  - b. Effleurage
  - c. Cross fiber friction
  - d. Petrissage
- 96. What are the proper steps in applying ice to the patellar tendon?
  - a. Place the ice pack directly onto the skin, ice the patellar tendon until numbness sets in, repeat 3-4 times per day
  - b. Wrap the ice pack in a paper towel to protect the skin, apply the ice to the patellar tendon for about 10 minutes, repeat 2-3 times per day
  - c. Place the ice pack directly onto the skin, ice the patellar tendon for 30 minutes, repeat 3-5 times per day
  - d. None of the above are correct

#### **Court Injuries**

- 97. Field and court sports will most likely have the highest incidents of acute injuries.
  - a. True
  - b. False
- 98. Why might field and court sports have the highest incidents of acute injuries?
  - a. Because quick lateral movements and jumping are common
  - b. Because performing quick movements puts the athlete at a higher risk for tearing and tissue sprain/strains
  - c. Because sports which involve multiple players puts the athlete at a higher risk of contact injuries
  - d. All of the above

#### **Ankle Sprain**

- 99. What tissues does an inversion ankle sprain usually involve?
  - a. Achilles tendon and patellar tendon
  - b. Talofibular ligament and calcaneo fibular ligament
  - c. The plantar fascia and talofibular ligament
  - d. All of the above

- 100. When working with an athlete with an ankle sprain in the acute phase, what will your main focus be during treatment?
  - a. Lymphatic drainage and alleviation of edema proximal to the injury
  - b. Fascia release and spreading of the tissues
  - c. Breaking up adhesions and promoting the formation of healthy scar tissue
  - d. All of the above
- 101. How will you know when an athlete is in the sub-acute phase of an injury, such as an ankle sprain?
  - a. The athlete will still be experiencing pain in movement
  - b. The athlete will still be experiencing bruising and edema
  - c. The athlete will have pain free movement and minimal to no swelling
  - d. None of the above
- 102. What benefit will performing circular friction on the lateral portion of the ankle in the sub-acute phase of an inversion ankle sprain produce?
  - a. It will help create functional scar tissue
  - b. It will help decrease adhesions
  - c. It will help increase range of motion
  - d. All of the above

#### Low Back Pain

- 103. Carefully assessing the tissues before providing any treatment to the lower back is essential because so many muscles are involved with moving the hips and low back.
  - a. True
  - b. False
- 104. What are you looking for when testing the psoas and the iliacus musculature?
  - a. Resistance in the side you are assessing indicating no tightness is present
  - b. The opposite hip and leg to follow indicating tightness in the iliopsoas muscle
  - c. The opposite hip and leg to remain still indicating tightness in the iliopsoas muscle
  - d. All of the above
- 105. The sciatic nerve passes directly underneath which muscle in the gluteal area?
  - a. Gluteus maximus
  - b. Gluteus medius
  - c. Piriformis
  - d. Gluteus minimus
- 106. What region and direction will you need to treat in order to directly address the piriformis muscle?
  - a. Laterally, from the sacrum to the greater trochanter
  - b. Medially, from the iliac crest to the 5<sup>th</sup> lumbar vertebrae
  - c. Working downward from the floating rib to the iliac crest
  - d. All of the above

- 107. Although not addressed in the DVD, in order to protect your thumbs, fingers and wrists from injury while working on the gluteal region (especially on an athlete with dense muscle tissue) you can and will want to use which of the following?
  - a. Fists
  - b. Forearms
  - c. Elbows
  - d. All of the above
- 108. Which of the following areas will you examine in order to assess the quadratus lumborum muscle?
  - a. The transverse processes of the lumbar spine
  - b. The posterior iliac spine alignment
  - c. The greater trochanter alignment
  - d. None of the above
- 109. After evaluating the quadratus lumborum musculature, how will you treat this area on an athlete?
  - a. By performing broadening and stretching strokes along with point specific work on the contracted or higher side
  - b. By performing broadening and stretching only the lengthened or stretched side
  - c. By treating both sides equally
  - d. All of the above

## **Tennis Elbow**

- 110. Which of the following is a common cause of tennis elbow, or elbow tendonitis in athletes?
  - a. Poor back hand technique
  - b. Too small of a grip on a racket
  - c. Using a racket which is strung to tight
  - d. All of the above
- 111. When treating an athlete with tennis elbow, which of the following muscle groups will you be primarily be working with?
  - a. Wrist flexors
  - b. Wrist rotators
  - c. Wrist extensors
  - d. All of the above
- 112. What is the purpose of holding moderate pressure on the tendons of the wrist extensors while having the athlete extend and flex their wrist?
  - a. Relieve tension in the lateral epicondyle and the extensors of the wrist
  - b. Increase circulation in the lateral epicondyle and the extensors of the wrist
  - c. Both A and B
  - d. None of the above

#### **Swimming Injuries**

- 113. Because swimmers train for hours at a time in the water, most of the injuries you encounter will be from overuse.
  - a. True
  - b. False

## **Rotator Cuff**

- 114. When treating an athlete with a rotator cuff injury, what is the best way to position the athlete in order to begin the massage and address the necessary musculature?
  - a. Sitting up
  - b. Side lying
  - c. Supine
  - d. All of the above
- 115. Which of the following muscles should you treat in an athlete with a rotator cuff injury before actually treating the musculature of the rotator cuff?
  - a. Serratus anterior
  - b. Lattisimus dorsi (lats)
  - c. Ouadratus lumborum
  - d. Both A and B
- 116. Externally and internally rotating the shoulder at the humerus while holding pressure on the subscapularis will help to loosen the muscle and bring blood to the area.
  - a. True
  - b. False
- 117. Where are the rhomboids located in relation to the trapezius muscle?
  - a. The rhomboids are located superficial to the trapezius
  - b. The rhomboids are located deep (underlying) to the trapezius
  - c. The rhomboids are located in the lumbar region
  - d. All of the above
- 118. What are the four muscles of the rotator cuff?
  - a. Teres major, teres minor, levator scapula and serratus anterior
  - b. Teres minor, serratus anterior, infraspinatus and spinalis
  - c. Supraspinatus, infraspinatus, teres minor and subscapularis
  - d. Supraspinatus, infraspinatus, teres major and spinalis
- 119. What can you do, as far as positioning, in order to help treatment of the rotator cuff be more comfortable for the athlete?
  - a. Place the muscles in a lengthened state by dropping the elbow
  - b. Place the athlete in a supine position
  - c. Place the muscles in a shortened state by raising the elbow
  - d. All of the above
- 120. What is the purpose of performing circular friction on the infraspinatus muscle?
  - a. To bring blood to the area
  - b. To increase elasticity to the tendons
  - c. Decrease inflammation
  - d. Both A and B
- 121. What is the insertion of the supraspinatus?
  - a. Greater tubercle of the humerus
  - b. Supraspinatus fossa
  - c. Glenoid fossa
  - d. All of the above

- 122. What is the purpose of treating the deltoid in a swimmer with a rotator cuff injury?
  - a. The anterior deltoid muscle is responsible for internal rotation, which is the main action of a freestyle swimmer
  - b. There is no reason to treat the deltoid muscle of a swimmer
  - c. The anterior deltoid muscle is responsible for external rotation, which is the main action of a swimmer
  - d. All of the above

## **Extras**

- 123. Who was the instructor in the DVD?
  - a. Sean Riehl
  - b. Donna Sunday
  - c. Molly Verschingel
  - d. Geri Riehl

This completes the Sports Massage examination. We hope you have enjoyed the DVD. We appreciate your feedback, so please use the course evaluation to give your opinions and comments.