Neuromuscular Therapy Home Study Course

20 CE Hours
Online Study Guide

Presented by the:

Center for Massage Therapy Continuing Education

PO Box 117 • Elk Point, SD 57025 866-784-5940 • www.massagetherapyceu.com

1

Table of Contents

INSTRUCTIONS	. 3
EXAM (for review before taking the online exam)	. 4
VIDEO CONTENTS	

Center for Massage Therapy Continuing Education

© 2024, Center for Massage Therapy Continuing Education PO Box 117 Elk Point, SD 57025 www.massagetherapyceu.com Ph: 866-784-5940 info@massagetherapyceu.com

Published by the Center for Massage Therapy Continuing Education

The author grants permission to photocopy this outline for personal use only. Beyond this consent, no portion of this outline may be copied or reproduced in any form without written permission from the Center for Massage Therapy Continuing Education.

It is the responsibility of the practitioner to determine the appropriateness of the principles presented in terms within the scope of practice. This information is in no way meant to diagnose or treat medical conditions. This course is not meant to teach advanced hands-on massage techniques. Written medical opinions are always the best way to resolve any questions regarding contra-indications to massage therapy.

PLEASE CAREFULLY READ THE DIRECTIONS ON PAGE 2

Instructions for the Neuromuscular Therapy Home Study Course

Thank you for investing in the Neuromuscular Therapy home study course, an advanced 20 CE hour course designed to further your knowledge in neuromuscular therapy and how it can be used in massage therapy. Although the subject of neuromuscular therapy is not necessarily advanced, the textbook uses advanced terminology and is recommended for those with a background in anatomy and medical terminology.

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 read the text, watch the online video clips, complete the exam and course evaluation.

The following are steps to follow in completing this course:

- 1. Read the instructions on this page and review the exam starting on page 4.
- 2. If you chose to download the course, download the textbook located in files numbered 2-15 in your online account. If you chose to have the textbook mailed to you, disregard this step.
- 3. To watch the online video clips, go to www.chaitowonline.com.
 - a. Once there, under the "already registered" heading, enter the username: massagetherapyce and the password: massage and click "sign in".
 - b. Then click on the "Modern Neuromuscular Techniques, Third Edition" at the bottom to view the video clips.
- 4. When you are ready to test online, access the online examination in your member area at www.massagetherapyceu.com.
- 5. 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 a 70% or better to pass this home study course. Feel free to review the textbook and online video clips while taking the exam. You are allowed to access and take the exam up to 3 times if needed. There is no time limit when taking the exam. This course uses the textbook "Modern Neuromuscular Techniques", by Leon Chaitow. There are no trick questions on the exam. All of the answers can be found in the textbook.

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.

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 Neuromuscular Therapy home study course.

Neuromuscular Therapy Examination

- 1. What is the term somatic dysfunction used to describe?
 - A. All lesions of the musculoskeletal system osseous and soft tissue
 - B. A neuromuscular technique used to assess musculoskeletal tissue for dysfunction
 - C. Healthy musculoskeletal tissue
 - D. An autoimmune disorder of the body
- 2. Sometimes somatic dysfunction is the primary cause of pain, however sometimes it generates reflexive symptoms, or may act as a perpetuating feature.
 - A. True
 - B. False
- 3. Which of the following is a mechanism that may alter proprioception in the body?
 - A. Ischaemic or inflammatory events at the receptor site
 - B. Physical trauma
 - C. Loss of muscle force (and possible muscle wasting)
 - D. All of the above
- 4. What is the definition of the term neuromuscular technique (NMT) according to the textbook?
 - A. The manual application of generalized (usually) broad pressure strokes, most commonly applied by palm or forearm contact
 - B. The manual application of specialized (usually) digital pressure and strokes, most commonly applied by finger or thumb contact
 - C. The passive application of generalized (usually) pressure, most commonly applied by heat or cold packs
 - D. The manual application of specialized (usually) movement techniques, where the therapist moves the client through a series of motions
- 5. NMT attempts to do all of the following EXCEPT:
 - A. Deactivate myofascial trigger points
 - B. Prepare for other therapeutic methods such as exercise
 - C. Deactivate lymphatic and general circulation and drainage
 - D. Relax and normalize tense, fibrotic muscular tissue
- 6. How does general adaptation syndrome (GAS) differ from local adaptation syndrome (LAS)?
 - A. GAS (which is triggered when a stressor is introduced to the body) affects specific stressed area of the body; LAS (which is also triggered when a stressor is introduced to the body) affects a the organism as a whole
 - B. GAS (which is triggered when a stressor is introduced to the body) affects the organism as a whole; LAS (which is also triggered when a stressor is introduced to the body) affects a specific stressed area of the body
 - C. GAS (which is triggered when a stressor is introduced to the body) affects only the brain and spinal cord; LAS (which is also triggered when a stressor is introduced to the body) affects the entire nervous system
 - D. All of the above

- 7. Which of the following are elements that may contribute to the stress cycle, often leading to musculoskeletal pain?
 - A. Congenital factors and/or acquired malalignment or asymmetry
 - B. Postural stresses and/or chronic negative emotional issues
 - C. Reflexive factors and/or pathology
 - D. All of the above
- 8. In the absence of pathology (disease or injury), according to Barlow, muscular pain may result from any of the following EXCEPT:
 - A. Regular, healthy exercise performed at least three times per week
 - B. Acid build-up within the muscles and inflammatory responses
 - C. Joints, which can become restricted and over-approximated
 - D. Neural irritation, which can be produced spinally or along the course of the nerve as a result of chronic muscular contractions
- 9. In skeletal muscle, ischaemia results in interference with normal energy (ATP) production, which leads to disturbance of normal calcium pump activity, preventing actin and myosin filaments from releasing their contracted state. This is the possible cause of taut bands which are a key feature of myofascial trigger points.
 - A. True
 - B. False
- 10. Which of the following is a characteristic of stabilizer muscles?
 - A. They are more deeply situated in the body
 - B. They have a tendency to weaken and lengthen if deconditioned
 - C. They contain mainly slow twitch fibers
 - D. All of the above
- 11. Which of the following is an example of the more superficial, fast-twitch muscles which have a tendency to shortening?
 - A. Sternocleidomastoid
 - B. Iliopsoas
 - C. Hamstrings
 - D. All of the above
- 12. All of the following are examples of phasic muscles, which weaken (are inhibited), and may lengthen in response to dysfunction EXCEPT:
 - A. Rhomboids
 - B. Gluteals
 - C. Biceps femoris
 - D. Extensors of the arms
- 13. The fascia is comprised of several disconnected networks in the body, from the fascia attached to the inner aspects of the skull to the fascia in the soles of the feet.
 - A. True
 - B. False

- 14. Which of the following is a function of fascia?
 - A. It provides, by fascial planes, pathways for nerves, blood and lymphatic vessels and structures
 - B. Deep fascia ensheaths and preserves the characteristic contour of the limbs and promotes the circulation in the veins and lymphatic vessels
 - C. Connective tissue represents an important neutralizer or detoxicator to toxins
 - D. All of the above
- 15. All of the following are properties of fascia outlined by Cathie (1974) EXCEPT:
 - A. It does not contain nerve endings
 - B. It is vitally involved in all aspects of motion
 - C. It aids in circulatory economy, especially of venous and lymphatic fluids
 - D. It is a major arena of inflammatory processes

- 16. Who was the developer of European NMT?
 - A. Leon Chaitow
 - B. Peter Lief
 - C. Stanley Lief
 - D. Raymond Nimmo
- 17. The key to successful use of NMT is an ability to sense accurately what it is that the hands are feeling while at the same time having a clear picture of what the particular movement or technique being employed is aimed at achieving.
 - A. True
 - B. False

- 18. In order to properly treat symptoms, it is a priority to first differentiate between pain and referred symptoms that are of spinal and nerve root origin and those that have different aetiologies.
 - A. True
 - B. False
- 19. Box 3.1 outlines different types and causes of muscular pain; they include which of the following?
 - A. Local muscular pain deriving from local pain receptors
 - B. Neuropathic muscle pain derived from a nerve lesion or dysfunction in the spinal or dorsal root nerves
 - C. Muscular tension deriving from biochemical factors rather than neural infleuences
 - D. All of the above
- 20. Which of the following is an example of sensitization?
 - A. The process of using NMT to treat an heal injuries
 - B. A repetitively pressed, or rubbed, or knocked area of the body which eventually becomes painful
 - C. A loss of motor power of the muscle of a damaged tissue resulting in paralysis
 - D. The loss of the patellar reflex after an acute injury

- 21. What is facilitation?
 - A. The processes that lead to the formation of fibrotic and adhesive tissue in injured structures
 - B. The process of diagnosing and treating somatic dysfunction in soft tissues
 - C. The processes that lead to hyperirritability and hyperactivity of specific neural structures
 - D. The process of using NMT to assess soft tissue dysfunction
- 22. When palpating for facilitated spinal tissues, which of following are soft tissue layers that need attention?
 - A. The skin, subcutaneous tissue, superficial and deep musculature and deep fascial layers
 - B. The skin, osseous tissue, the origin of the musculature and the dorsal nerve root
 - C. Subcutaneous tissue, superficial and deep musculature layers and reflex points on the feet
 - D. The skin, nerve root lesions, deep fascial layers and osseous tissue surrounding the area
- 23. A trigger point is a localized, palpable area of soft tissue that is painful on pressure and that refers symptoms, usually including pain, to a predictable target area some distance from itself.
 - A. True
 - B. False
- 24. Which of the following is a common site for trigger points to be located close to?
 - A. Muscular origins and insertions
 - B. Muscle belly
 - C. Motor end-point
 - D. All of the above
- 25. Travell & Simons (1983, 1992) have identified that trigger points do not impede lymphatic function.
 - A. True
 - B. False
- 26. All of the following can be signs of trigger points according to Kuchera & McPartland (1997) EXCEPT:
 - A. Altered cutaneous temperature and humidity
 - B. A jump sign
 - C. Soft pliable tissue
 - D. Small nodular or spindle-shaped thickening representing trigger point locality
- 27. All of the following are techniques which may deactivate trigger points EXCEPT:
 - A. Inhibitory compression such as neuromuscular therapy
 - B. Chilling techniques and/or muscle energy techniques
 - C. Light effleurage and/or over the counter medications
 - D. Myofascial release methods and/or self help strategies

- 28. In method 1 of compression on a trigger point (box 3.5), how long should the firm digital compression be held?
 - A. 2-3 seconds
 - B. 5 seconds
 - C. 10 seconds
 - D. 1 minute
- 29. Which of the following is a possible effect of digital compression on tissues?
 - A. Ischaemia
 - B. Pain relieving endorphin and enkephalin release occurs
 - C. Taut bands associated with trigger points release spontaneously
 - D. All of the above
- 30. All of the following are similarities of fibromyalgia syndrome (FMS) and myofascial pain syndrome (MPS) EXCEPT:
 - A. Both conditions will benefit from exercise programs
 - B. Both conditions are affected by cold weather
 - C. Both conditions have tension headaches and parasthesia as a major associated symptom
 - D. Both conditions are unaffected by anti-inflammatory pain killing medication

- 31. All tender points are myofascial trigger points.
 - A. True
 - B. False
- 32. A study done by Dorsher (2004) concluded that trigger points are very similar to acupuncture points and are essentially a rediscovery of the 2000 year old acupuncture tradition.
 - A. True
 - B. False
- 33. Which of the following is a conclusion made by Bosey (1984) about the presence of acupuncture points?
 - A. Points are situated in palpable depressions
 - B. Connective tissues lie below at varying layers
 - C. Fascia and aponeurosis are noted and a passage of vessels and nerves, through the fascia, is very often found under the acupuncture point
 - D. All of the above
- 34. What are alarm points?
 - A. Painful points that arise spontaneously that are not listed on a meridian map
 - B. Key points that are most likely to become painful in relation to particular visceral function
 - C. Terminal points of the meridians
 - D. All of the above

- 35. All of the following are characteristics of Chapman's reflexes EXCEPT:
 - A. Small and smooth
 - B. Firm
 - C. Discretely palpable
 - D. Approximately 4 mm in diameter
- 36. Which of the following describes the clinical value of Chapman's reflexes?
 - A. They are of value as diagnostic aids
 - B. They can be utilized to influence the motion of fluids
 - C. Visceral function can be influenced through the nervous system by manipulating Chapman's reflexes
 - D. All of the above
- 37. What does connective tissue massage involve?
 - A. Manipulating reflex points on the feet and hands in order to achieve reflex effects
 - B. Firm digital compression for a specific amount of time on tissues in order to achieve reflex and local effects
 - C. Rolling (or stretching using shear forces, or lifting) the tissues in order to achieve reflex and local effects
 - D. All of the above
- 38. Clinical research indicates that NMT ischaemic compression techniques and muscle energy methods are as likely as traditional needling to produce benefit when treating periosteal pain points.
 - A. True
 - B. False

- 39. When using palpation to assess the skin before adding lubricant, which of the following should you be looking for?
 - A. Skin changes and/or induration
 - B. Temperature changes and/or tenderness
 - C. Oedema and/or localized contractures
 - D. All of the above
- 40. In acute dysfunction, a localized ______ in temperature may be evident on the skin.
 - A. Decrease
 - B. Increase
- 41. As well as trigger points, there exist a number of palpable and often visible zones of soft tissue alteration, in which diseased or distressed organs negatively influence soft tissues para-spinally and elsewhere.
 - A. True
 - B. False

- 42. Which of the following is an assessment method used in connective tissue massage (CTM) to assess for hyperalgesic skin zones as well as to determine the mobility and consistency of various layers of connective tissue?
 - A. Lifting skin folds
 - B. Stretching superficial tissue
 - C. Skin distraction
 - D. All of the above
- 43. Which of the following techniques can be used to assess for and treat Chapman's reflexes?
 - A. Light and deep petrissage
 - B. Tapotement
 - C. Variable thumb or finger pressure
 - D. Light effleurage
- 44. Chapman's reflexes that are not painful should always be treated as part of a neuromuscular therapy session.
 - A. True
 - B. False
- 45. In neuromuscular therapy, what is the purpose of becoming familiar with Chapman's neurolymphatic areas, Bennett's reflexes, Mackenzie's reflex areas, connective tissue zones and trigger points?
 - A. Knowledge of their existence enables treatment to be more effective and broadens the practitioner's awareness of the range of assessment and therapeutic possibilities
 - B. Knowledge of their existence enables treatment to be more effective and gives practitioners the qualifications necessary to diagnose their client's conditions
 - C. Knowledge of their existence enables treatment to be less effective and narrows the practitioner's awareness of the range of assessment and therapeutic possibilities
 - D. All of the above

- 46. What is the definition of neuromuscular technique?
 - A. The manual application of Swedish massage techniques, usually delivered by the palm or forearm, which have a therapeutic treatment objective
 - B. The passive application of generalized pressure, usually delivered by a tool or object, which has a therapeutic treatment objective
 - C. The manual application of specialized pressure and strokes, usually delivered by a finger or thumb contact, which have an assessment mode or a therapeutic treatment objective
 - D. The manual application of specialized pressure and strokes, usually delivered by physiotherapy machine, used only for assessment purposes
- 47. A unique aspect of NMT is that along with treating the body in many different therapeutic ways, it provides assessment information at the same time and can be integrated into many treatment modalities.
 - A. True
 - B. False

- 48. Which of the following does the author state is probably the most important single feature of NMT?
 - A. Keeping your pressure the exact same all the time
 - B. Variation of applied digital pressure
 - C. Deep digital pressure no matter the tolerance level of your client
 - D. All of the above
- 49. Which of the following is a characteristic of the NMT thumb technique?
 - A. A single stroke covers between 2 and 3 inches
 - B. The thumb never leads the hand but always trails behind the stable fingers
 - C. A stroke or glide of 2-3 inches usually takes about 4-5 seconds
 - D. All of the above
- 50. When might you use the NMT finger stroke instead of the NMT thumb technique?
 - A. On broader, more dense areas of the back
 - B. When the tissues require firm pressure for deep treatment
 - C. When the width of the thumb prevents the degree of tissue penetration needed
 - D. All of the above
- 51. Lubricant should never be used in NMT.
 - A. True
 - B. False
- 52. What is the proper position of the treating arm in Lief's basic spinal treatment?
 - A. Flexed at a 45 degree angle
 - B. Relatively straight
 - C. Hyperextended
 - D. Flexed at a 90 degree angle
- 53. If a trigger point is located during the NMT assessment/treatment strokes, what can you do?
 - A. Note the point on a chart or on the skin for later treatment
 - B. Treat the point immediately using various NMT techniques
 - C. Apply heat therapy to the area followed by effleurage
 - D. All of the above
- 54. In its assessment mode, the basic spinal NMT treatment can usually be completed in _____ minutes.
 - A. 5
 - B. 10
 - C. 15
 - D. 30
- 55. Which of the following positions can the practitioner best access the upper trapezius muscle?
 - A. Standing at the head of the table
 - B. Standing on the left side of the table
 - C. Standing at the right side of the table
 - D. Standing at the bottom of the table

- 56. Which of the following body meridian's acupuncture points lie in two lines running parallel with the spine?
 - A. Liver
 - B. Bladder
 - C. Heart
 - D. Small intestine
- 57. Which of the following connective tissue zones may be involved in the lower lumbar, gluteal and lateral thigh areas?
 - A. Those that involve arterial and venous disturbance of the legs
 - B. Those that involve constipation
 - C. Those that involve the liver and gall bladder
 - D. All of the above
- 58. Which of the following is recommended for the frequency of NMT application in chronic conditions?
 - A. One to two treatments weekly for several weeks
 - B. Daily if possible until ease is achieved
 - C. One to two treatments a month for several months
 - D. All of the above

- 59. All of the following are objectives for the use of NMT on abdomino-pelvic tissues EXCEPT:
 - A. To improve function when the area has been traumatized
 - B. To promote edema and swelling of the associated structures
 - C. To attempt to improve function of the abdomino-pelvic organs by directly influencing circulatory and drainage functions
 - D. To improve diaphragmatic and respiratory function
- 60. Treating the intercostal spaces between the 7th and 12th ribs on the left side will have what effect?
 - A. Stimulation of the colon
 - B. Stimulation of the liver
 - C. Stimulation of the spleen
 - D. Stimulation of the prostate
- 61. In the neuromuscular abdominal technique (as in figure 7.5), most techniques are performed:
 - A. From lateral to medial
 - B. From medial to lateral
 - C. From caudal to cephalic
 - D. In any direction you prefer
- 62. Which of the following techniques best addresses tender points located in the lower abdominal area associated with flexion strains of the lumbar and lower thoracic spine?
 - A. Effleurage
 - B. Positional release methods
 - C. Acupuncture
 - D. Petrissage

- 63. Which of the following modalities/techniques is frequently used in conjunction with NMT (box 8.1)?
 - A. Deep tissue release
 - B. Muscle energy techniques
 - C. Strain/counterstrain
 - D. All of the above
- 64. What is the objective of performing chill-and-stretch technique?
 - A. To chill the surface tissues while the underlying muscle housing the trigger point is stretched
 - B. To penetrate deeply into thick musculature in preparation for NMT
 - C. To relax the tissues with gentle pressure using the whole hand
 - D. To chill the surface tissues while using isometric contraction to activate the muscle housing the trigger point
- 65. What type of pressure is used for the induration technique?
 - A. Deep pressure
 - B. Medium to deep pressure
 - C. Medium pressure
 - D. Very light pressure
- 66. Direct pressure, used in ischaemic compression and trigger point release, should be avoided or used with care in which of the following cases?
 - A. Inflammation
 - B. In cases of malignancy
 - C. In cases of excessive pain
 - D. All of the above
- 67. All of the following statements are true of muscle energy technique (MET) EXCEPT:
 - A. MET has been shown to improve joint range of motion
 - B. MET has been shown to improve muscle extensibility more effectively than passive, static stretching
 - C. MET has been shown to cure fibromyalgia, carpal tunnel syndrome and chronic arthritis
 - D. Myofascial trigger point deactivation has been shown to be enhanced by use of MET
- 68. Neuromuscular therapy incorporates neuromuscular technique (NMT), myofascial release, connective tissue massage, muscle energy techniques (MET) and positional release methods.
 - A. True
 - B. False
- 69. Which of the following is the correct sequence for treatment in neuromuscular therapy?
 - A. Always begin with NMT, then proceed to using exercise and other modalities of massage
 - B. Correct sequencing will be individual but requires an understanding of the causes of the dysfunction
 - C. Begin with various types trigger point release, including NMT, percussion and chill-and-stretch; assess for changes and then proceed to exercise and lifestyle changes
 - D. All of the above

- 70. In traditional Chinese medicine (TCM) percussion techniques are performed using:
 - A. Toes
 - B. Elbow and forearm
 - C. Fingers and thumb
 - D. Palm and forearm
- 71. All of the following are contraindications to western percussion EXCEPT:
 - A. Osteoporosis and malignancy
 - B. Inflammation and recent trauma
 - C. Mild soreness and tension
 - D. Pain during treatment
- 72. Which of the following may be a sign of piriformis muscle syndrome?
 - A. Persistent, severe, radiating low back pain extending from the sacrum to the hip joint, over the gluteal region and the posterior portion of the upper leg and down to the popliteal space
 - B. Persistent external rotation of the upper leg and/or shortening of the leg on the affected side due to contraction of the piriformis muscle
 - C. Pain which follows the distribution pattern of the sciatic nerve to the level of the popliteal space and sometimes to more distal branches of this nerve
 - D. All of the above
- 73. To locate the insertion of the piriformis muscle, the practitioner must draw imaginary lines between which of the following bony landmarks?
 - A. ASIS and the ischial tuberosity and the PSIS and the most prominent point of the trochanter
 - B. ASIS and the tip of the coccyx and the PSIS and the most prominent point of the trochanter
 - C. PSIS and the tip of the coccyx and the ASIS and the most prominent point of the trochanter
 - D. PSIS and the ischial tuberosity and the ASIS and the most prominent point of the trochanter
- 74. The psoas muscle may be involved in which of the following conditions?
 - A. Marked lumbar lordosis
 - B. Scoliosis
 - C. Sciatic cases
 - D. All of the above
- 75. Release of the pectoralis minor muscle as described in the text has been clinically shown to do what?
 - A. Produce shortening of the intercostal muscles
 - B. Produce an increased range of movement for the upper ribs
 - C. Produce an improvement in rotator cuff injuries
 - D. All of the above

- 76. All of the following are contraindications to pump techniques EXCEPT:
 - A. Hepatitis
 - B. Lymphatic stasis
 - C. Osteoporosis
 - D. Fractures
- 77. Essentially, what happens to the skin/tissue when performing the skin rolling technique?
 - A. The tissue is effectively compressed and lengthened
 - B. The tissue is chilled in an attempt to deactivate trigger points
 - C. The tissue is effectively lifted, stretched and squeezed
 - D. The tissue is compressed to the point of ischaemia
- 78. The skin overlying regions or points of reflex activity will frequently be found to have markedly reduced elasticity and to adhere to underlying structures and to be areas of increased sensitivity, know as hyperalgesic skin zones (HSZs).
 - A. True
 - B. False
- 79. Which of the following is an example of an "S" bend technique?
 - A. Tension loading
 - B. Compression loading
 - C. Rotation loading
 - D. Bending loading
- 80. What is the basic methodology of myofascial release (MFR)?
 - A. MFR requires that the techniques be applied slowly
 - B. MFR requires that the techniques be applied rapidly
 - C. MFR requires that the techniques be applied with very light force
 - D. MFR requires that all techniques be performed very deeply
- 81. Before any specific release techniques are performed on the abdominal area, a general neuromuscular treatment should be performed to relax and identify areas that feel indurated or contracted.
 - A. True
 - B. False
- 82. What is the basic methodology of performing positional release techniques, such as strain-counterstrain?
 - A. Applying deep digital pressure on a tender point/trigger point and holding it until a release occurs
 - B. Actively having the client moving the painful joint/tissue through its full range of motion
 - C. Identifying the direction in which a painful joint/tissue should be moved so that a release may occur
 - D. Using ice to chill a painful joint/tissue and then applying release techniques, such as compression and/or friction to the area

- 83. Which of the following ways is pressure correctly applied when performing the "twig snap" and the "piston thrust" tensor fascia lata release techniques?
 - A. With the muscle fibers
 - B. Against the muscle fibers
 - C. Against the osseous structures
 - D. All of the above

- 84. Thinking contextually will allow a therapist to consider many or all of the associated aetiological and environmental factors of a client's condition, not just the cause and effect of symptomatology.
 - A. True
 - B. False
- 85. Which of the following methods (appropriate for massage therapists) has been advocated for treating trigger points?
 - A. Ischaemic compression
 - B. Chilling and stretching of the muscle in which the trigger lies
 - C. Active or passive stretching
 - D. All of the above
- 86. In most cases, once a trigger point has been initially treated, there is no need for further correction to achieve lasting results.
 - A. True
 - B. False
- 87. The successful use of NMT calls for the applied thought of the practitioner.
 - A. True
 - B. False
- 88. All of following are true about applying NMT to the body EXCEPT:
 - A. NMT can be applied with infinite gentleness or with robust enthusiasm, as it is possible to use the same techniques, with a marked difference in the degree of force applied.
 - B. A general rule should be that no part of the whole should be considered without the whole also being considered
 - C. In restoring total structural and postural integrity to the body, it is not necessary to apply NMT to all the supporting structures
 - D. Structural and functional changes are interdependent: they follow each other causally as well as therapeutically
- 89. Which of the following is the correct sequence for method 1 of the INIT sequence?
 - A. Ischaemic compression, holding at a position of ease for at least 20 seconds, isometric contraction for 5-7 seconds, stretching
 - B. Isometric contraction for 5-7 seconds, stretching, ischaemic compression, holding at a position of ease for at least 20 seconds
 - C. Stretching, ischaemic compression, isometric contraction for 5-7 seconds, holding at a position of ease for at least 20 seconds
 - D. Ischaemic compression, stretching, holding at a position of ease for at least 20 seconds, isometric contraction for 5-7 seconds

- 90. The first American protocols of NMT were developed by whom?
 - A. Leon Chaitow
 - B. Stanley Lief
 - C. Raymond Nimmo
 - D. Dewanchand Varma
- 91. All of the following are global factors that affect the whole body systemically EXCEPT:
 - A. Genetic predisposition
 - B. Local ischaemia
 - C. Stress
 - D. Posture
- 92. Which of the following are the original six factors of the American version of NMT?
 - A. Ischaemia, infection, neural interferences, postural and biochemical dysfunctions, nutritional factors, stress
 - B. Pain, trigger points, spinal lesions, postural and biochemical dysfunctions, infection, emotional well-being
 - C. Ischaemia, cardiac output, neural interferences, pain, nutritional factors, emotional well-being
 - D. Ischaemia, trigger points, neural interferences, postural and biochemical dysfunctions, nutritional factors, emotional well-being
- 93. In determining the sequence of techniques for NMT, the two rules to keep in mind are:
 - A. Deeper layers are treated before superficial layers and the proximal portion of any extremity is addressed before the distal
 - B. Superficial tissues are treated before deeper layers and the proximal portion of any extremity is addressed before the distal
 - C. Superficial tissues are treated before deeper layers and the distal portion of any extremity is addressed before the proximal
 - D. Deeper layers are treated before superficial layers and the distal portion of any extremity is addressed before the proximal
- 94. In the American NMT version, the application of lubricated gliding is generally followed by dry techniques.
 - A. True
 - B. False
- 95. Which of the following is an effect of effleurage/gliding?
 - A. Warms the fascia
 - B. Flushes blood through the tissues
 - C. Increases oxygenation and perfusion of nutrients
 - D. All of the above
- 96. What are friction techniques used for?
 - A. To palpate tissues and assess for trigger points
 - B. To lift and separate different layers of muscles and muscle compartments
 - C. To soften fibrotic tissues and to alter the quality of adhesions
 - D. All of the above

- 97. The degree of pressure utilized in static compression usually matches the tension palpated in the tissues. Pressure that is too light may not produce a tissue response, whereas heavy pressure may result in reflexive spasms.
 - A. True
 - B. False
- 98. Which of the following is an appropriate length of time for applying static pressure?
 - A. Around 30 seconds and up to 60 seconds
 - B. Anywhere from about 8 seconds up to 20 seconds
 - C. Around 3-5 seconds
 - D. Anywhere from 90 seconds up to 2 minutes
- 99. The client/patient is in the prone position when treating:
 - A. The trapezius
 - B. The levator scapula
 - C. The posterior mid-thorax and cranium
 - D. All of the above
- 100. When working in the cervical area, which of the following structures requires extra caution?
 - A. The origin of the semispinalis capitis, which exposes the C1 nerve ending
 - B. The upper trapezius, which houses many trigger points
 - C. The suboccipital triangle, which exposes the vertebral artery
 - D. The spinous processes of the cervical vertebrae
- 101. Trigger points in the sternocleidomastoid (SCM) can cause:
 - A. Severe eye pain
 - B. Temporomandibular joint pain
 - C. Mimicking of migraine headaches
 - D. All of the above
- 102. Which of the following is an appropriate stroke when working on the erector spinae musculature?
 - A. Gliding with the thumbs and palms
 - B. Gliding with the elbow
 - C. Cross-fibre techniques using the thumbs, knuckles or a pressure bar
 - D. All of the above
- 103. The NMT American version uses a wider variety of tools, such as elbows and pressure bars, than the NMT European version.
 - A. True
 - B. False

Chapter 11 discusses primarily theories and techniques used in osteopathic medicine. Generally speaking, practicing osteopathic techniques is outside a massage therapist's scope of practice. Some of the theories presented overlap with massage and manual therapy and can be of value to massage therapists. Questions from this chapter will focus on the treatment of soft tissues, not osseous tissues. This course does not allow you to practice osseous tissue manipulation. No questions on this topic matter will be asked.

- 104. What is inhibition?
 - A. A term that describes steady pressure to soft tissues to effect relaxation and normalize reflex activity
 - B. A term that describes steady pressure to body organs to effect relaxation and normalize reflex activity
 - C. A term that describes using medication to effect relaxation and normalize reflex activity
 - D. A term that describes using acupuncture needles on soft tissues to effect relaxation and normalize reflex activity
- 105. Inhibition techniques have similarities with which of the following manual/massage therapy modalities?
 - A. Trigger point therapy
 - B. Acupressure
 - C. Reflexology
 - D. All of the above
- 106. What does the STAR method of assessment look for/stand for?
 - A. Sensitivity, medical diagnosis, symmetry and restriction of motion
 - B. Sensitivity, tissue texture changes, asymmetry and restriction of motion
 - C. Symmetry, tissue texture changes, absence of sensation and restriction of tissue
 - D. Symmetry, tissue density, assessment/diagnosis and range of motion
- 107. Essentially, the PINS (progressive inhibition of neuromusculoskeletal structures) technique is performed in the following way: a primary sensitive point is located; an end point is then located distal or proximal to the primary point (using knowledge of anatomical structures, such as origins and insertions of musculature). Both the primary and end point are pressed simultaneously while obtaining feedback from the client/patient. Once the two points have been compressed for approximately 20-30 seconds, the practitioner seeks another point close to the primary point while maintaining pressure on the end point. The process is continued until the second point is about 2 cm from the end point. Feedback is obtained from the client/patient throughout the entire process.
 - A. True
 - B. False
- 108. According to the textbook, the PINS sequence and treatment time can last anywhere from:
 - A. 30-90 seconds
 - B. 1-5 minutes
 - C. 2-10 minutes
 - D. 10-15 minutes

Chapter 12 incorporates NMT and Thai massage. Please feel free to read through and review this chapter. The course's intention is to focus on neuromuscular therapy alone, so no questions from this chapter will be asked in the multiple choice exam.

This completes the Neuromuscular Therapy exam.

Neuromuscular Video Clip Contents/Guide

Throughout the video segments, Leif's basic spinal treatment, NMT thumb technique, NMT finger technique, practitioner's posture and variable pressure are demonstrated. For specific techniques please use the following guide.

Neuromuscular Techniques

Outlines Box 1.3 on Page 9 of the text

Trigger Point Neurology

Summarizes Page 45 of the text

Segmented Facilitation in Upper Thoracic

Demonstrates palpating for facilitated spinal tissues described on Pages 54-55 of the text

Trigger Points

Discusses trigger points described on pages 56-59 of the text

Trigger Points

Discusses trigger points described on pages 59 of the text

Palpating for Trigger Points

Outlines the STAR and TART assessment techniques located on page 59 of the text

Trigger Point Features

Demonstrates the compression techniques described on page 65 of the text

Application of Pressure

Describes the application of pressure described on page 65-66 of the text

Use of Algometer

Demonstrates how an algometer is used as described on Pages 66 of the text

Evaluating Skin on Fascia Resistance

Demonstrates the palpation exercise described on pages 85-86 of the text

Lewit's Skin Stretching Palpation

Demonstrates the palpation exercise described on pages 85-86 of the text

Skin Drag Palpation

Demonstrates the skin drag palpation exercise described on page 99 of the text

Assessing the Dominate Eye

Demonstrates how to assess the dominant eye described on page 102 of the text

Lifting the Skin Folds (Assessment)

Demonstrates how to lift skin folds described on pages 105-106 of the text

Stretching Superficial Skin (Assessment)

Demonstrates stretching superficial tissue described on pages 106-108 of the text

Please note that there are DVD icons in Chapter 6 of the textbook that were printed in error and have no videos for them. Please see the "Intercostal treatment" for demonstration of the NMT thumb and finger technique. This has been confirmed with the publisher and we apologize for any confusion.

Is the Pain in a Muscle or in the Organ?

Demonstrates how to assess for pain in an organ or muscle described on pages 145-146 of the text

Releasing the Small Intestine

Demonstrates a technique for releasing the small intestine described on page 148 of the text

Intercostal Treatment

Demonstrates the NMT thumb technique and NMT finger technique described on pages 125-128 of the text as well as demonstrating the intercostal treatment located on pages 148-150 of the text

Position of Ease for Flexion Strain of T9

Demonstrates positional release technique (page 152) by placing the body/tissues at a position of ease when treating a flexion strain of T9

Chill and Stretch Technique

Demonstrates the chill and stretch technique described on pages 157-160 of the text

Spray and Stretch Positions

Demonstrates the chill and stretch technique described on pages 157-160 of the text

Spray and Stretch Positions

Demonstrates the chill and stretch technique described on pages 157-160 of the text

Induration Technique

Demonstrates the induration technique described on pages 161-162 of the text

INIT Methods

Demonstrates the INIT method described on page 162 of the text

Eccentric Resistance of Hip External Rotation

Demonstrates the slow isotonic eccentric contraction technique described on pages 170 of the text

Treatment of Tensor Fascia Lata

Demonstrates the MET techniques described on pages 166-170 of the text

Hypertonic Postural Type 1

Demonstrates the slow isotonic eccentric contraction technique described on pages 170 of the text

Sidelying Piriformis

Demonstrates the piriformis method 1 technique described on page 176 of the text

C and S Bends

Demonstrates the C and S bend techniques described on pages 186-187 of the text

Myofascial Cross Arm

Demonstrates the myofascial release techniques described on pages 188-189 of the text

Scar Adhesion Release 1

Demonstrates the specific release techniques described on pages 189-192 of the text **Scar Adhesion Release 2**

Demonstrates the specific release techniques described on pages 189-192 of the text

Position of Ease for a Tender Point

Demonstrates the strain-counterstrain technique described on page 193 of the text

Iliotibial Band Release

Demonstrates the "twig snap" and the "piston thrust" techniques described on page 196-197 of the text

Integrated NMT for Quadratus Lumborum

Demonstrates using integrated neuromuscular inhibition technique (INIT, page 162) technique for assessing and treating pain in the quadratus lumborum muscle

INIT for Upper Trapezius

Demonstrates the INIT methods described on page 216-217 of the text