

# Functional Anatomy Home Study Course

21 CE Hours  
Online Study Guide

Presented by the:  
*Center for Massage Therapy Continuing Education*

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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 and functional anatomy.

## **Instructions for the Functional Anatomy Home Study Course**

Thank you for investing in the Functional Anatomy home study course, a 21 CE hour course designed to introduce you to anatomy, kinesiology, and palpation for massage therapists. This guide will contain all the instructions you will need to complete this course.

This is a 21 CE hour course, so that means it should take you approximately 21 hours to read the text, watch the companion online videos, complete the exam and course evaluation.

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

- 1. Review the textbook and exam. Your textbook will be mailed to you.**
- 2. Access the online “how to” palpation videos by following the instructions on the card located in the front inside cover of your textbook.**
  - a. There are about 30 minutes of video clips demonstrating how to palpate different muscles.**
  - b. The ONLY thing completed on the publisher’s website for this course is the viewing of the videos. You are not required to complete the workbook activities.**
- 3. Access the online examination in your account at [www.massagetherapyceu.com](http://www.massagetherapyceu.com).**
- 4. 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. 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 textbook while taking the exam. 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.

This course uses the textbook *Functional Anatomy, 2<sup>nd</sup> Edition* by Christy J. Cael. There are no trick questions on the exam. All the answers can be found in the textbook and there is only one answer per question.

If you have any questions please feel free to contact us at 866-784-5940, 712-490-8245 or [info@massagetherapyceu.com](mailto: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 Functional Anatomy home study course.

# Functional Anatomy Examination

## Chapter 1

1. Which plane divides the body into superior and inferior regions?
  - a. Sagittal plane
  - b. Frontal plane
  - c. Transverse plane
  - d. Coronal plane 21
  
2. What are reticular fibers?
  - a. Thin proteins that branch into tiny nets capable of resisting force in multiple directions
  - b. Long, straight strands of protein wound together like rope
  - c. Fibers that contain the protein elastin and appear branched and wavy
  - d. Cells that produce and secrete proteins that make up the fibers in the extracellular matrix
  
3. Which type of muscle tissue is voluntary?
  - a. Smooth muscle
  - b. Skeletal muscle
  - c. Cardiac muscle
  - d. Nervous tissue
  
4. Which layer of the skin contains hair follicles, glands, nerves, blood vessels, and tiny muscles?
  - a. Epidermis
  - b. Dermis
  - c. Hypodermis
  - d. Superficial fascia
  
5. What are lymph nodes?
  - a. Immune cells that help the body fight infection and disease
  - b. The space between tissue cells
  - c. Nerves that monitor the internal and external environment and relay this data to the brain
  - d. Tiny organs that cleanse fluid of foreign particles, viruses, and bacteria
  
6. Which type of cartilage makes up part of the disks between the vertebrae and the menisci between the femur and tibia at the knee?
  - a. Elastic cartilage
  - b. Hyaline cartilage
  - c. Fibrous cartilage
  - d. Articular cartilage

## Chapter 2

7. What is osteology?
  - a. The process of blood cell production
  - b. The study of bones which examines how bones develop and respond to our environment
  - c. The study of joints and how and why joints move the way they do
  - d. The study of muscles
  
8. The carpals of the wrist and the tarsals of the ankles are classified as which type of bones?
  - a. Short bones
  - b. Long bones
  - c. Flat bones
  - d. Irregular bones
  
9. What type of bone marking is a rounded extremity protruding from a narrow neck?
  - a. Facet
  - b. Ramus
  - c. Head
  - d. Condyle
  
10. What are syndesmoses?
  - a. Continuous periosteal connections between bones
  - b. The specific fibrous joints at which teeth fit into sockets in the jaw
  - c. The most mobile of all the joints
  - d. Fibrous joints held together with a cord or a sheet of connective tissue
  
11. Which of the following is an example of a saddle joint?
  - a. Coxal joint
  - b. Radioulnar joint
  - c. Glenohumeral joint
  - d. First carpometacarpal joint (thumb)

## Chapter 3

12. What is myology?
  - a. The study of muscles
  - b. The study of joints
  - c. The study of bones
  - d. The study of the nervous system

13. Which of the following is an example of a triangular muscle arrangement?
- Biceps brachii
  - Orbicularis oris
  - Pectoralis major
  - Brachialis
14. Which of the following describes muscle tissue's ability to propagate electrical signals, including action potentials?
- Elasticity
  - Conductivity
  - Contractility
  - Excitability
15. What is a power stroke?
- A ratcheting action that occurs as the myosin heads, bound to actin, pull the sarcomere together
  - The binding of the myosin heads to the active receptor sites on the actin filament
  - A gap that prevents the signal from crossing to the muscle on its own
  - The events that follow production of the muscle action potential
16. What are isometric contractions?
- Contractions that occur when tension is generated in a muscle, but the muscle length and joint angle don't change
  - Muscle contractions that change the length of the muscle and create movement
  - Contractions that shorten muscle and initiate or accelerate movement and overcome some external resistance like gravity
  - Contractions that lengthen muscle and decelerate and control movements and produce greatest force at high speed
17. What type of lever is characterized by a central axis with the force on one side and the resistance on the other?
- First-class lever
  - Second-class lever
  - Third-class lever
  - Fourth-class lever
18. What is proprioception?
- The process of recruiting more and more motor units
  - Describes the relaxation of one muscle while the opposite contracts
  - A term used to describe the extent of movement possible at a joint
  - An overall awareness of body position

19. What is springy endfeel?
- The contact of two bones is limiting
  - The joint capsule provides a firm limitation
  - The stretching of muscles and tendons limits joint motion
  - When the body runs into itself

#### Chapter 4

20. What muscle attaches to the scapula and ribs, acting as an important stabilizer of the shoulder girdle and an accessory muscle of respiration?
- Pectoralis major
  - Serratus anterior
  - Biceps brachii
  - Deltoid
21. What is the name of the prominent ridge that divides the scapula diagonally and forms an attachment point for the trapezius and deltoid muscles?
- Acromion process
  - Coracoid process
  - Spine of the scapula
  - Glenoid fossa
22. When palpating the coracoid process of the scapula, what position should the client be in?
- Supine
  - Seated
  - Prone
  - Fowler's
23. What ligament connects the scapula's coracoid and acromion processes and stabilizes the humeral head during overhead movements?
- Coracoclavicular ligament
  - Glenohumeral ligament
  - Sternoclavicular ligament
  - Coracoacromial ligament
24. What is the brachial plexus?
- The prominence that forms the superior and lateral corner of the scapula
  - Horizontally-oriented, slender, S-shaped bones that provide a branching system for the front of the shoulder girdle
  - A large bundle of nerve fibers that runs deep to the clavicle and pectoralis minor muscle before descending to the arm
  - A large, triangular-shaped muscle that covers the back of the neck and shoulder girdle

25. Which of the following movements is NOT available at the scapulothoracic joint?
- Elevation
  - Depression
  - Flexion
  - Retraction
26. Which of the following are actions the deltoid muscle produces?
- Abducts, flexes, internally rotates, and horizontally adducts the shoulder
  - Flexes the shoulder and extends the shoulder from overhead position
  - Flexes and adducts the shoulder
  - Fixes the clavicle inferiorly or elevates the first rib
27. What artery supplies blood to the coracobrachialis?
- Pectoral artery
  - Brachial artery
  - Thoracoacromial artery
  - Subscapular artery
28. What muscle fixes the clavicle inferiorly or elevates the first rib?
- Pectoralis minor
  - Trapezius
  - Coracobrachialis
  - Subclavius
29. What muscle originates at the transverse processes of C1-C4 and inserts on the superior angle of the scapula?
- Rhomboid major
  - Latissimus dorsi
  - Levator scapulae
  - Trapezius
30. What muscle is a direct synergist to the latissimus dorsi because they share all of the same actions: extension, adduction, and internal rotation of the shoulder?
- Pectoralis minor
  - Levator scapulae
  - Teres minor
  - Teres major



31. What four muscles make up the rotator cuff functioning as a unit to stabilize the humeral head in the glenoid fossa?
- Supraspinatus, infraspinatus, teres major, serratus anterior
  - Supraspinatus, infraspinatus, teres minor, subscapularis
  - Levator scapulae, trapezius, teres major, serratus anterior
  - Levator scapulae, trapezius, teres minor, subscapularis
32. Which of the following are actions the triceps brachii produces?
- Internally rotates the shoulder
  - Extends and adducts the shoulder and extends the elbow
  - Initiates abduction of the shoulder
  - Externally rotates, extends, and horizontally abducts the shoulder

## Chapter 5

33. What muscle lies between the brachioradialis and palmaris longus?
- Biceps brachii
  - Flexor carpi radialis
  - Flexor carpi ulnaris
  - Extensor digitorum
34. Which joint is a hinge joint allowing flexion and extension at the elbow?
- Humeroulnar joint
  - Proximal radioulnar joint
  - Radiocarpal joint
  - Intercarpal joints
35. When palpating the medial epicondyle of the humerus, what position should the client be in?
- Client supine with elbow flexed and forearm pronated
  - Client supine with elbow bent and forearm neutral
  - Client supine with elbow flexed and forearm supinated
  - Client supine with elbow relaxed and forearm pronated
36. On what bone does the flexor digitorum profundus originate?
- Ulna
  - Radius
  - Humerus
  - Scaphoid

37. What is the primary function of the interosseous membrane in the forearm?
- Connects the head of the radius to the humerus between the lateral epicondyle and the capitulum
  - Captures the radial head and maintains its position snug against the ulna as the forearm pronates and supinates
  - Prevents the medial border of the humeroulnar joint from separating
  - Prevents the shafts of the radius and ulna from pulling apart or “bowing”
38. Which muscles are located deep in the hand and control fine finger movements like segmented flexion and opening and closing of the hand?
- Anconeus and extensor digitorum
  - Lumbricals
  - Extensor carpi ulnaris and extensor digitorum
  - Supinator and pronator quadratus
39. Which of the three olecranon bursae lies between the skin and the tendon of the triceps brachii?
- Subtendinous
  - Intratendinous
  - Subcutaneous
  - Anconeus
40. Which of the following movements is NOT available at the wrist?
- Flexion
  - Extension
  - Radial deviation
  - Supination
41. When performing passive wrist flexion, which two places should you be grasping the client?
- Wrist and elbow
  - Hand and forearm
  - Wrist and forearm
  - Hand and elbow

42. When performing resisted finger flexion, how should you be grasping the client?
- Place one hand under the client's forearm to stabilize it and place the fingers of your other hand on the pads of the client's fingertips
  - Place one hand under the client's forearm to stabilize it and place the fingers of your other hand on the backs of the client's fingers
  - Place one hand under the client's wrist to stabilize it and place the pad of your other thumb on top of the client's thumb
  - Place one hand under the client's wrist to stabilize it and place the pad of your other thumb on the pad of the client's thumb
43. What artery supplies blood to the brachioradialis?
- Recurrent radial artery
  - Ulnar artery
  - Anterior interosseous artery
  - Recurrent interosseous artery
44. Which of the following is NOT an action of the flexor carpi ulnaris?
- Flexes the wrist
  - Flexes proximal interphalangeal joints of digits 2-5
  - Ulnarly deviates (adducts) the wrist
  - Slightly flexes the elbow
45. Which muscle crosses the anterior forearm proximal and lateral to the flexor carpi radialis and functions to rotate the forearm to pronate the palm?
- Flexor digitorum profundus
  - Flexor pollicis longus
  - Pronator teres
  - Supinator
46. What is the primary function of the anconeus?
- To assist triceps brachii in extending the elbow
  - To work with biceps brachii and brachioradialis to supinate the forearm
  - To extend the four fingers
  - To flex the fingers at the middle joints
47. What muscle originates on the lateral epicondyle of the humerus and inserts on the middle and distal phalanges of digits 2-5 (dorsal side)?
- Extensor carpi ulnaris
  - Extensor carpi radialis brevis
  - Extensor indicis
  - Extensor digitorum

48. Which muscle is just distal to the supinator and crosses diagonally from the ulna to the radius before inserting on the first metacarpal?
- Extensor pollicis brevis
  - Extensor indicis
  - Extensor digiti minimi
  - Abductor pollicis longus
49. What is the action of the abductor pollicis brevis?
- Adducts the first carpometacarpal joint and flexes the first metacarpophalangeal joint
  - Abducts thumb, opposition
  - Flexes pinky finger at metacarpophalangeal joint
  - Opposition of pinky finger
50. During twisting movements, which two muscles turn the forearm from palm down to palm up?
- Pronator teres and pronator quadratus
  - Pronator teres and flexor carpi radialis
  - Biceps brachii and supinator
  - Palmaris longus and pronator quadratus

## Chapter 6

51. What bone is commonly known as the cheekbone?
- Frontal eminence
  - Mandible
  - Frontal bone
  - Zygomatic bone
52. What bone is a slender facial bone that forms part of the nasal septum?
- Vomer
  - Ethmoid bone
  - Sphenoid bone
  - Maxilla
53. Which prominent process of each of the vertebrae (except C1) can be palpated as the ridges of the spine?
- Dens (odontoid process)
  - Transverse process
  - Spinous process
  - Uncal process

54. On which bone is the insertion point of the masseter muscle?
- Temporal bone
  - Mandible
  - Nasal bone
  - Frontal bone
55. Which of the following ligaments join adjacent vertebrae between the laminae and help stabilize the cervical spine?
- Interspinal ligaments
  - Ligamenta flava
  - Transverse ligament
  - Alar ligaments
56. What superficial cervical muscle can be seen from the side and tips the head back, juts the head forward, laterally bends the head, and rotates the head away from the shoulder?
- Sternocleidomastoid
  - Trapezius
  - Mylohyoid
  - Digastric
57. Which structure is commonly called the “Adam’s apple”?
- Thyrohyoid membrane
  - Thyroid gland
  - Thyroid cartilage
  - Hyoid bone
58. Which of the following movements are NOT available for the jaw?
- Elevation
  - Depression
  - Retraction
  - Flexion
59. How should you hold the client's head when performing resisted cervical flexion?
- Hold the back of the client’s head with the palms of both hands
  - Place one hand on the right side of the client’s head as the table stabilizes their body
  - Place one hand on the left side of the client’s head as the table stabilizes their body
  - Place one hand on the client’s forehead as the table stabilizes their body

60. Which of the following is NOT an action of the platysma?
- Depresses the mandible
  - Flexes the head and neck
  - Draws lower lip and angle of mouth downward
  - Tenses skin of anterior neck and chest
61. What two arteries supply the digastric muscle?
- Superior thyroid and lingual arteries
  - Facial and suprascapular arteries
  - Ascending cervical and inferior thyroid arteries
  - Facial and occipital arteries
62. Which muscle originates at the spinous processes of T3-T6 and inserts on the transverse processes of C1-C3?
- Splenius cervicis
  - Splenius capitis
  - Digastric
  - Semispinalis
63. What four muscles comprise the suboccipital group that maintains alignment between the skull and the upper cervical vertebrae?
- Digastric, infrahyoids, splenius capitis, and splenius cervicis
  - Digastric, infrahyoids, rectus capitis anterior, and rectus capitis lateralis
  - Rectus capitis posterior major, rectus capitis posterior minor, obliquus capitis superior, and obliquus capitis inferior
  - Splenius capitis, splenius cervicis, rectus capitis anterior, and rectus capitis lateralis
64. Which muscle is a broad, fan-shaped muscle that covers the temple and functions to elevate and retract the mandible?
- Temporalis
  - Masseter
  - Semispinalis
  - Platysma
65. Which of the following are the actions of the lateral pterygoid muscle?
- Rotates the head and neck toward the same side
  - Depresses the mandible, protracts the mandible, moves the mandible contralaterally
  - Laterally flexes the head and neck
  - Elevates the mandible, retracts the mandible

66. What three muscles are involved in jaw elevation?
- Temporalis, masseter, and medial pterygoid
  - Suprahyoids, digastric, and lateral pterygoid
  - Sternocleidomastoid, longus colli, and longus capitis
  - Scalenes, rectus capitis anterior, lateral pterygoid

## Chapter 7

67. Which structure segments the fibers of the rectus abdominis vertically, runs from the xiphoid process to the pubic symphysis, and marks the midline of the anterior trunk?
- Thoracolumbar aponeurosis
  - Lamina groove
  - Umbilicus
  - Linea alba
68. How many thoracic vertebrae are present in the human body?
- 5
  - 7
  - 12
  - 14
69. Which structure on the lumbar vertebrae forms a bridge from the vertebral body to the transverse processes?
- Superior vertebral notch
  - Inferior vertebral notch
  - Pedicle
  - Spinous process
70. When palpating the posterior ribs, how should the client be positioned?
- Supine
  - Prone
  - Supine or side-lying
  - Fowler's
71. Which ligament connects adjacent transverse processes and limits lateral flexion of the spine?
- Intertransverse ligaments
  - Interspinous ligaments
  - Supraspinous ligaments
  - Ligamentum flavum

72. What is the function of the pancreas?
- Primary organ of digestion and absorption
  - Produces digestive enzymes and hormones that regulate blood glucose
  - Stores bile which helps to break down fats
  - Transports food wastes for elimination from the body
73. Which artery begins at the heart and descends into the abdomen and is the largest artery in the body?
- Superior vena cava
  - Femoral artery
  - Superior mesenteric artery
  - Aorta
74. What is lordosis?
- An exaggeration of the normal lumbar curve that is common during the later months of pregnancy and in people who are overweight
  - A pathologic exaggeration of the normal thoracic kyphotic curve that is commonly seen in clients with significant loss of bone density (osteoporosis)
  - An inherited condition that becomes most noticeable during the adolescent growth spurt
  - A pathologic lateral curvature of the spine
75. What happens during inhalation?
- Compression of the ribcage increases air pressure within the thoracic cavity, causing air to rush out of the lungs
  - Expansion of the ribcage decreases air pressure within the thoracic cavity, causing air to rush into the lungs
  - Compression of the ribcage increases air pressure within the thoracic cavity, causing air to rush into the lungs
  - Expansion of the ribcage decreases air pressure within the thoracic cavity, causing air to rush out of the lungs
76. What muscle originates on the external surfaces of ribs 5-12 and inserts on the anterior crest of the ilium, pubic tubercle, and abdominal aponeurosis?
- Rectus abdominis
  - Transverse abdominis
  - Internal oblique
  - External oblique



77. What is the action of the external intercostals?
- Compresses and supports abdominal organs
  - Flexes the vertebral column (bilateral action)
  - Elevates the ribs during inhalation
  - Depresses the ribs during exhalation
78. What three muscles are part of the erector spinae group of muscles?
- Iliocostalis, longissimus, and spinalis
  - Diaphragm, external intercostals, and internal intercostals
  - Rectus abdominis, external oblique, and internal oblique
  - Rectus abdominis, transverse abdominis, and diaphragm
79. Which arteries supply the serratus posterior superior muscle?
- Cervical, vertebral, and intercostal arteries
  - Lumbar, sacral, iliolumbar, and subcostal arteries
  - Posterior intercostal arteries
  - Intercostal and lumbar arteries
80. Which of the following muscles is NOT part of the transversospinalis group that works together to stabilize and steer the vertebrae as the spinal column moves?
- Semispinalis
  - Interspinalis
  - Multifidi
  - Rotatores
81. Which of the following muscles is NOT involved in trunk flexion?
- Iliocostalis
  - Rectus abdominis
  - External oblique
  - Internal oblique

## Chapter 8

82. Which muscle is part of the quadriceps and has a teardrop shape just superior and medial to the knee?
- Rectus femoris
  - Vastus lateralis
  - Gracilis
  - Vastus medialis

83. What is the coxal joint?
- A modified hinge joint that allows flexion, extension, and slight rotation at the knee
  - A joint where the patella glides inferiorly as the knee flexes and superiorly as it extends
  - Formed between the head of the femur and the acetabulum, it is a stable ball-and-socket joint that allows movement in all planes
  - A large, stable union between the lateral sacrum and medial ilium
84. What ligament is the inferior margin of the aponeurosis of the external oblique muscle and the superior border of the femoral triangle?
- Inguinal ligament
  - Iliolumbar ligament
  - Iliofemoral ligament
  - Sacroteruberous ligament
85. Which structure is a crescent-shaped cartilage that cushions the tibiofemoral joint and increases joint continuity?
- Lateral meniscus
  - Patellar tendon
  - Femoral groove
  - Lateral collateral ligament
86. Where are the popliteal nodes located?
- Inferior to the inguinal ligament
  - Embedded in the popliteal fossa of the posterior knee
  - Alongside the femoral artery within the femoral triangle
  - Deep to the inguinal ligament and through the femoral triangle
87. Where is the sciatic nerve located?
- It lies lateral to the head of the fibula
  - It lies within the popliteal fossa, along with the tibial nerve
  - It lies on the medial thigh and runs proximally to join the femoral vein
  - It lies deep to the piriformis muscle and runs down the thigh before branching into the common peroneal and tibial nerves at the popliteal fossa
88. How should you be holding the client when performing resisted hip adduction?
- Place the palm of one hand on top of the client's thigh
  - Place the palm of one hand on the medial thigh of the client's bottom leg and support the top leg with your other hand
  - Place the palm of your hand on top of the client's thigh as you stabilize the pelvis with the other hand
  - Place the palm of one hand on the client's leg as you stabilize the pelvis with the other hand

89. Which of the following are the actions of the psoas muscle?
- Abducts the hip, internally rotates the hip
  - Flexes the hip, extends the knee
  - Flexes the hip, externally rotates the hip
  - Flexes the knee, internally rotates the knee
90. What artery supplies the tensor fasciae latae muscle?
- Femoral artery
  - Iliac artery
  - Obturator artery
  - Iliolumbar artery
91. What muscle originates at the intertrochanteric line and medial lip of linea aspera of the femur and inserts on the tibial tuberosity via the patellar tendon?
- Sartorius
  - Iliacus
  - Vastus medialis
  - Vastus intermedius
92. Which of the following muscles is NOT part of the adductor group of the thigh?
- Pectineus
  - Adductor brevis
  - Gracilis
  - Vastus intermedius
93. What muscle is one of the most powerful muscles in the body, lies superficial to the gluteus medius, and is large in size and broad in function?
- Adductor magnus
  - Gluteus maximus
  - Gluteus minimus
  - Gracilis
94. Where is the superior gemellus muscle located?
- It lies just inferior to the piriformis and superior to the obturator internus
  - It lies just superior to the piriformis and inferior to the obturator internus
  - It lies just inferior to the obturator internus and superior to the obturator externus
  - It lies just superior to the obturator internus and inferior to the obturator externus

95. Which of the following is the action of the obturator externus muscle?
- Abducts the hip
  - Flexes the hip
  - Extends the hip
  - Externally rotates the hip
96. Where is the origin and insertion of the semitendinosus muscle?
- O: ischial tuberosity I: medial tibial shaft via the pes anserine tendon
  - O: lateral femoral condyle I: proximal posterior surface of the tibia
  - O: ischial tuberosity I: posteromedial portion of medial tibial condyle
  - O: lateral part of ischial tuberosity I: between greater and lesser trochanters of the femur
97. Which of the following muscles is responsible for knee external rotation?
- Sartorius
  - Gracilis
  - Biceps femoris
  - Rectus femoris

## Chapter 9

98. What bone is the bone of the heel?
- Cuboid
  - Calcaneus
  - Tibia
  - Lateral malleolus
99. What is the tarsal tunnel?
- The ligament that connects the calcaneus to the cuboid bone along the sole of the foot
  - A passageway for tendons and nerves of the foot
  - The line of the tibia that marks the attachment of the soleus muscle
  - The “bump” below the knee where the patellar tendon inserts
100. On which bone does the popliteus muscle insert?
- Femur
  - Fibula
  - Tibia
  - Calcaneus

101. Which ligament is deep to the long plantar ligament and connects the calcaneus to the cuboid bone?
- Plantar tarsometatarsal ligament
  - Tibiofibular ligament
  - Plantar intermetatarsal ligament
  - Short plantar ligament
102. Which artery is a continuation of the femoral artery of the thigh, and just inferior to the head of the fibula, it branches into the anterior and posterior tibial arteries?
- Popliteal artery
  - Anterior tibial artery
  - Posterior tibial artery
  - Fibular artery
103. Which of the following movements is NOT available at the foot?
- Foot inversion
  - Foot flexion
  - Toe flexion
  - Foot pronation
104. What muscle is a large, superficial muscle on the front of the leg that functions to dorsiflex the ankle and invert the foot?
- Extensor hallucis longus
  - Fibularis longus
  - Tibialis anterior
  - Fibularis brevis
105. What artery supplies the fibularis longus muscle?
- Fibular artery
  - Anterior tibial artery
  - Sural artery
  - Popliteal artery
106. What is the primary action of the soleus muscle?
- Flexes the knee
  - Everts the foot
  - Dorsiflexes the ankle
  - Plantarflexes the ankle

107. Which muscle flexes the great toe at the metacarpophalangeal and interphalangeal joint?
- a. Flexor digitorum longus
  - b. Tibialis posterior
  - c. Flexor hallucis longus
  - d. Plantaris
108. Which intrinsic muscle of the foot flexes toes 2-5 at the proximal interphalangeal joint to adjust the foot and toe positions for balance?
- a. Flexor hallucis brevis
  - b. Abductor digiti minimi
  - c. Abductor hallucis
  - d. Flexor digitorum brevis

This completes the Functional Anatomy exam.