# Ontario College of Health & Technology Accelerated Massage Therapy Program Anatomy Modules: Content

### MANA 103 Musculoskeletal Anatomy 103

#### **GENERAL BONY ANATOMY**

- · Describe the anatomical position.
- · Relate the anatomical names and the corresponding common names for various regions of the body.
- · Define each directional term used to describe the human body.
- · Describe how the skeleton is organized into axial and appendicular divisions.
- · Histology of bone
- · Classify bones based on their shape or location.
- · Describe the principal markings on bones and the functions of each.

#### SPECIFIC BONY ANATOMY

- · Bones, locations, surface features: cranium
- · Bones, locations, surface features: face
- · Bones, locations, surface features: vertebral column
- · Bones, locations, surface features: thorax
- · Bones, locations, surface features: pectoral girdle, upper limb
- · Bones, locations, surface features: pelvic girdle, lower limb
- · Practical Component: palpation of all bones, bony landmarks

#### GENERAL ARTHROLOGY

- · Describe the structural and functional classifications of joints.
- Describe the structure and functions of the three types of fibrous joints.
- · Describe the structure and functions of the two types of cartilaginous joints.
- · Describe the structure of synovial joints.
- · Describe the structure and function of bursae and tendon sheaths.
- Describe the types of movements that can occur at synovial joints.
- · Describe the six subtypes of synovial joints.
- · Describe the six factors that influence the type of movement and range of motion possible at a synovial joint.
- Identify the major joints of the body by location, classification, and movements.

## SPECIFIC JOINT and LIGAMENTOUS ANATOMY

- · Describe the anatomical components of the joints and explain the movements that can occur at these joints: skull
- Describe the anatomical components of the joints and explain the movements that can occur at these joints: TMJ
- Describe the anatomical components of the joints and explain the movements that can occur at these joints: cervical, thoracic, lumbar
- · Describe the anatomical components of the joints and explain the movements that can occur at these joints: scapula, upper limb
- · Describe the anatomical components of the joints and explain the movements that can occur at these joints: pelvis, lower limb

## MANA 203 Musculoskeletal Anatomy 203

#### **GENERAL MUSCULAR ANATOMY**

- Describe the relationship between bones and skeletal muscles in producing body movements.
- · Define lever and fulcrum and compare the three types of levers based on location of the fulcrum, effort and load.
- · Identify the types of fascicle arrangements in a skeletal muscle and relate the arrangements to strength of contraction and range of motion.
- · Explain how the prime mover, antagonist, synergist, and fixator in a muscle group work together to produce movement.
- · Explain the seven features in naming skeletal muscles.

#### **MUSCLES OF THE AXIAL SKELETON**

- $\bullet\,$  Origin, insertion, action, and innervation of the muscles of facial expression.
- · Origin, insertion, action, and innervation of the muscles of the TMJ
- · Origin, insertion, action, and innervation of the muscles of the anterior neck
- Origin, insertion, action, and innervation of the muscles of the posterior neck
- · Origin, insertion, action, and innervation of the muscles of the posterior trunk and vertebral column
- · Origin, insertion, action, and innervation of the muscles of the anterior trunk and abdomen.

# NERVE AND BLOOD SUPPLY OF THE AXIAL SKELETON

- · Major routes that blood takes through the head, neck, trunk, vertebral column and abdomen.
- Distribution of nerves in the head, neck trunk vertebral column and abdomen.

## MANA 303 Musculoskeletal Anatomy 303

#### MUSCLES OF THE APPENDICULAR SKELETON

- Origin, insertion, action, and innervation of the muscles of the hip and thigh
- Origin, insertion, action, and innervation of the muscles of the lower leg and ankle
- · Origin, insertion, action, and innervation of the muscles of the foot
- Origin, insertion, action, and innervation of the muscles of the shoulder and arm
- · Origin, insertion, action, and innervation of the muscles of the forearm and hand

# NERVE AND BLOOD SUPPLY OF THE APPENDICULAR SKELETON

- Major routes that blood takes through the pelvis & lower limb, and scapula & upper limb
  Distribution of nerves in the head, neck trunk vertebral column and abdomen (brachial plexus, lumbar plexus, sacral plexus)