## Common Course Outline MASS 110 Musculoskeletal System: Structure and Function 3 Credits

# **Community College of Baltimore County**

#### **Description**

MASS 110 – Musculoskeletal System: Structure and Function provides an in-depth exploration of musculoskeletal anatomy and physiology to create foundational knowledge that is regularly used in massage therapy practice. Students gain a full comprehension of how muscles and bones function together in the body to produce movement, provide protection, and contribute to homeostatic balance. Manual palpation techniques are presented and applied in lab practice as an essential component of this course.

3 Credits: 2 lecture hours per week; 2 laboratory hours per week

**Prerequisites :** Admission to the Massage Therapy Program and MASS 101, ALHL 109, and BIOL 109 with a grade of "C" or better, or permission of Program Director

Co-requisite: MASS 210

#### **Overall Course Objectives**

Upon successful completion of this course, students will be able to:

- 1. describe the anatomy, physiology, and classification of skeletal muscles from gross to microscopic levels;
- 2. distinguish between smooth, cardiac, and skeletal muscle characteristics;
- 3. identify and palpate superficial and intermediate levels of skeletal muscles, tendons, ligaments, and joints;
- 4. determine and demonstrate the functional movement actions of skeletal muscles;
- 5. recognize the developmental aspects of skeletal muscle tissue from embryo to old age;
- 6. describe the major structures and functions of the skeletal system, and the development of bone tissue;
- 7. classify bones according to shape, structure, movement, and skeletal division in the body;
- 8. identify and palpate major skeletal landmarks, especially as they relate to skeletal muscle groups and muscular attachments; and
- 9. investigate major skeletal disorders and the indications and contraindications for palpation in massage therapy.

#### **Major Topics**

- I. Functions and Structures of the Skeletal System
  - A. Classifications of Bones
  - B. Bones of the Axial and Appendicular Divisions
  - C. Bone Landmarks
  - D. Bone Development Growth and Repair
- II. Functions and Structures of the Muscular System
  - A. Muscle Classifications Cardiac, Smooth, and Skeletal
  - B. Attachments and Actions of Superficial and Intermediate Muscles of the Body by Area
    - i. Shoulder & Arm
    - ii. Forearm & Hand
    - iii. Spine & Thorax
    - iv. Head, Neck, & Face
    - v. Pelvis & Thigh
    - vi. Leg & Foot
- III. Palpation Skills for Massage Therapy
  - A. Indications and Contraindications for Palpation
  - B. Palpation Technique and Proper Use in Bodywork
  - C. Distinguishing Between Palpable Structures and Textures
    - i. Bone
    - ii. Ligament
    - iii. Tendon
    - iv. Joint Structure

#### **Course Requirements**

Grading procedures will be determined by the individual faculty member but will include the following:

#### Grading/exams:

- Minimum of four formative assessments which can include daily class drills, palpation feedback, homework assignments, or in-class activities
- Minimum of two other summative assessments which can include quizzes, unit exams, and/or a midterm exam
- One in-class presentation and/or written assignment
- Final Exam
- One palpation practical exam

Written Assignments: Students are required to utilize appropriate academic resources.

### **Other Course Information**

This is a required course in the Massage Therapy Program. A grade of "C" or better is required for all Massage Therapy courses. Students must pass both the lecture and lab components in order to satisfactorily complete this course. This course may not be offered in all semesters; see registration schedule.