

Musculoskeletal Anatomy

Discovering How We Move 2025–2026

INSTRUCTOR: Julie Karyshyn

PHONE:

EMAIL: julie@karyshyn.com AGE RANGE: 13–19 years old

CLASS TIME: 1:30 PM.



COURSE DESCRIPTION

Explore the incredible design of the human body in this hands-on anatomy class focused on bones, muscles, and movement. Students will learn how the musculoskeletal system works together to support and power every motion. They'll get a closer look at structure and function through creative activities like sculpting anatomical models. Celebrate the wonder of how we're wonderfully made. "For in him we live and move and have our being." As some of your own poets have said, "We are his offspring." Acts 17:28

COURSE OBJECTIVES

- 1. Understand the structure and function of the skeletal system
- 2. Understand the structure and function of the muscular system
- 3. Learn the location of different muscles and how they create different movements

EXPECTATIONS AND ACCOMMODATIONS

To receive maximum benefit from this course, each student is expected to attend class regularly and consistently, along with completing homework assignments that are assigned each week. Each student is expected to arrive on time, ready to learn, and prepared to participate fully.

REQUIRED MATERIALS

Students should bring their own single-subject notebook, writing utensils, and anatomy coloring book (provided first day of class). It is optional if the student would like to bring tools for shaping clay to use with the skeleton models they will work on during class.

COURSE TIMELINE

Fall Semester



9/5 Week 1: Skeletal System Overview

Objective: Introduce the full skeletal system and its purpose

What Student should bring: Notebook and writing utensils

Activity: Put together paper skeleton

9/12 Week 2: Joints and Muscle System Overview

Objective: Introduce the different types of joints of the skeletal system and an overview of the

purpose of the muscular system

What Student should bring: Notebook and writing utensils

Activity: Set up skeletal models to be used each class going forward

9/19 Week 3: Bones and Muscles of the Head

Objective: Learning about the different parts of the skull and the primary muscles used for

eating

What Student should bring: Notebook, writing utensils, clay tools (optional)

Activity: Clay on skeleton model

9/26 Week 4: Muscles of Facial Expression

Objective: Learning about the different muscles used to make facial expressions

What Student should bring: Notebook, writing utensils, clay tools (optional)

Activity: Clay on skeleton

10/3 Week 5: Muscles of the Neck

Objective: Learning about the primary muscles of the neck that control movement of the head

What Student should bring: Notebook, writing utensils, clay tools (optional)

Activity: Clay on skeleton

10/17 Week 6: Shoulder

Objective: Learning about the primary muscles that keep the arm attached to the body

What Student should bring: Notebook, writing utensils, clay tools (optional)

Activity: Clay on skeleton



10/24 Week 7: Upper Arm

Objective: Learning about the primary muscles of the upper arm and what movement they

create

What Student should bring: Notebook, writing utensils, clay tools (optional)

Activity: Clay on skeleton

10/31 Week 8: Lower Arm

Objective: Primary muscles of the lower arm and how they are connected to the hand

What Student should bring: Notebook, writing utensils, clay tools (optional)

Activity: Clay on skeleton

11/7 Week 9: Hand

Objective: Main muscles of the hand and thumb that help us do our everyday tasks

What Student should bring: Notebook, writing utensils, clay tools (optional)

Activity: Clay on skeleton

11/14 Week 10: Work on final project/Test

Objective: Test on parts of the skeleton and some of the primary muscles

What Student should bring: Notebook, writing utensils, and chosen movement for final project

Activity: Work on final project- identifying muscles used in a chosen movement

11/21 Week 11: Final Project Presentations (Half Class)

Objective: Students demonstrate their understanding

What Student should bring: Presentation materials

Activity: Half of the class presents their chosen movement and muscles involved (demonstrates

the movement, and lists the muscles)

12/5 Week 12: Final Project Present (Rest of Class)

Objective: Students demonstrate their understanding

What Student should bring: Presentation materials

Activity: Rest of the class presents their final projects



Spring Semester

1/16 Week 1: Skeletal System and Muscle System Review

Objective: Review the two body systems

What Student should bring: notebook and writing utensils

Activity: Paper skeleton labeling

1/23 Week 2: Bones and Muscles of the Chest

Objective: Learning the main bones and muscles of the chest

What Student should bring: Notebook, writing utensils, clay tools (optional)

Activity: Clay on skeleton

1/30 Week 3: Abdomen

Objective: Covering the main muscles of the abdomen

What Student should bring: Notebook, writing utensils, clay tools if they would like

Activity: Clay on skeleton

2/6 Week 4: Deep Muscles of the Back

Objective: Cover the deep muscles of the back

What Student should bring: Notebook, writing utensils, clay tools if they would like

Activity: Clay on skeleton

2/13 Week 5: Superficial Muscles of the Back

Objective: Covering the larger muscles of the back

What Student should bring: Notebook, writing utensils, clay tools if they would like

Activity: Clay on skeleton

2/20 Week 6: Bones and Muscles of the Hip

Objective: Cover the bones and muscles of the hip

What Student should bring: Notebook, writing utensils, clay tools if they would like

Activity: Clay on skeleton



2/27 Week 7: Bones and Muscles of the Upper Leg

Objective: Cover the bones and muscles of the upper leg

What Student should bring: Notebook, writing utensils, clay tools (optional)

Activity: Clay on skeleton

3/13 Week 8: Lower leg

Objective: Covering the bones and muscles of the lower leg

What Student should bring: Notebook, writing utensils, clay tools (optional)

Activity: Clay on skeleton

3/20 Week 9: Muscles of the Foot

Objective: Cover the bones and muscles of the foot

What Student should bring: Notebook, writing utensils, clay tools (optional)

Activity: Clay on skeleton

3/27 Week 10: Test and Final Project Work

Objective: Students demonstrate their understanding through a test and start work on final

projects

What Student should bring: Notebook, writing utensils, presentation ideas

Activity: Test, picking movements to present

4/10 Week 11: First Half Presents

Objective: Students demonstrate their understanding

What Student should bring: Presentation materials

Activity: Half the class presents their final projects

4/24 Week 12: Second Half Presents

Objective: Students demonstrate their understanding

What Student should bring: Presentation materials

Activity: Rest of the class presents their final projects