

MIDDLE SCHOOL ANATOMY

Tuesdays, September 1-December 8 (no class Sept 22, Nov 3, Nov 24; 12 weeks)

11:15am-12:45pm

Ages 11-14

Students develop an understanding of the relationships between the structures and functions of the human body through microscopy, dissection and other hands-on science activities. A brief review of relevant material starts each lab, followed by a lab period which includes lab preparation, experimentation and clean-up. All dissections are optional. An Anatomy Coloring Book {affiliate link or similar} is recommended, but not required to help learn anatomical names. All lab costs are included in registration fees.

Instructor: Peyton White, MSc

Location: STEM Lab (suite 21)

Course fee: \$285 OR \$28/lab (plus \$0.99 AH fee)

10% member discount

10% sibling discount

Register for full semester or individual labs.

LAB SCHEDULE:

Microscopy and Cells – Tuesday, September 1

This week, we learn how to properly use a microscope, study basic cell structure, and compare the cells of different tissues throughout the body.

Skin Science - Tuesday, September 8

Students learn about the largest organ of the body, the cells that make up our skin and how it protects us from germs.

Skeletal System – Tuesday, September 15

We study bones this week by examining x-rays, and learning the names of some bones in our skeleton.

Muscular System – Tuesday, September 29

In lab today, we learn about three types of muscle cells and where they are located, and dissect chicken wings to investigate how tendons connect skeletal muscle to bone.

Nervous System – Tuesday, October 6

Students have the chance to investigate a mammalian brain to learn the parts of the nervous system. We also learn about our senses and what part of the brain is responsible for interpreting the world around us.

Blood and Blood Types – Tuesday, October 13

In this lab, we study what makes up our blood, look at blood cells under a microscope, and test synthetic blood to see how blood types are characterized.

Circulatory System – Tuesday, October 20

Students investigate how blood moves through the body as they study a real mammalian heart, and look at heart tissue and blood vessels under a microscope.

Respiratory System – Tuesday, October 27

Learn how and why we breathe, study the organs that make up our respiratory system, and create a model of our trachea, lungs and diaphragm.

Digestive System – Tuesday, November 10

In this fun, gross lab, we discuss the function of the digestive system, learn the organs involved in the digestion process, and make a model of our digestive system to see how it works.

Immune System and Germs – Tuesday, November 17

We study germs and the immune system in lab this week. Students test their hand-washing skills, investigate bacteria under a microscope, conduct a bacterial growth study, and learn how our body fights off germs.

Genetics and DNA – Tuesday, December 1

This week we investigate our genetic code. Students learn what DNA is and where it is located in a cell, build a model of DNA and extract DNA from strawberries.

Surgery – Tuesday, December 8

Students test their skills at surgically removing foreign objects embedded in their “patients” without scarring them.