



8th Grade Course Offerings

CSI: Endangered Wildlife ♦

Texas Parks and Wildlife game wardens and U.S. Fish and Wildlife Service agents, acting on a tip, have located a site along the Trinity River where animals appear to have been processed. They suspect that some of the evidence collected may have come from an endangered species. Some of the evidence has been forwarded to the Museum to be analyzed; our task is to determine if any of the evidence comes from an endangered species. Your students will use DNA testing as the primary mechanism to help the Museum determine the classification of the unknown animal and solve this mystery.

Duration: Premium 90-minute Classroom Program

Class Size: 15-30 students

Available at your school or MNS

TEKS: 8th Grade: 1a, 2abce, 3a, 4ab

Diagnosis: The Body in Question ♦

We are the sum of all our parts. Take a tour of some human body systems and learn how they interact. This program is taught from the perspective of a patient brought into a hospital emergency room to provide your students with a real-world experience unlike any other.

Duration: Standard 50-minute Classroom Program

Class Size: 15-30 students

Available at MNS or your school

TEKS: 8th Grade: 1a, 2ace, 3a, 4a

Electric Theater ✂

Explore the world of electricity and magnetism through this exciting (and “shockingly” cool) demonstration led by one of our educators. Student volunteers will join our presenter on stage to demonstrate the workings of Van der Graff generators, electromagnets, step-down transformers, Tesla coils and more!

Duration: 50 minutes

Class Size: 15-175 students at MNS, 30–250 as outreach

Available at MNS or your school

TEKS: 8th Grade: 2ab, 3a, 4a, 5a

Farming for Fuel ♦

In this hands-on, center based program, students will conduct experiments to understand the carbon cycle as well as how biofuels made from non-food plants are appropriate for transportation. Students will use these inquiry-based activities to understand the balance of energy on our planet and ways to improve and maintain that balance through the use and

production of biofuels. This program is made possible by a grant from the U.S. Department of Energy and the BioEnergy Science Center in Oak Ridge, Tennessee.

Duration: Standard 50-minute classroom program

Class Size: 15-30 students

Available at MNS or your school

TEKS: 8th Grade: 1ab, 2ab, 3abc, 4ab

Fire and Ice ✂

This explosively entertaining program teaches about the states of matter in a unique way. Student volunteers help the presenter explore how temperature affects matter. Both physical and chemical changes are demonstrated using fire and liquid nitrogen.

Duration: 50 minutes

Class Size: 15-175 students at MNS, 30–250 at your school

Available at MNS or at your school

TEKS: 8th Grade: 1a, 2ab, 3a, 4ab

Ice Age: Last Extinction 🌐

Earth's last major extinction event affected large mammals during the Pleistocene Era, some 12,900 years ago. The possible causes of this event are currently under debate. Students will explore evidence for one hypothesis by conducting hands-on investigations, collecting and comparing data, and reaching a conclusion on the validity of the hypothesis.

Duration: Premium 90-minute Classroom Program

Class Size: 15-30 students

Available at MNS or your school

TEKS: 8th Grade: 1a, 2ce, 3b, 4a

Look Out: The Eye 🦋

Discover the inner workings of the eye and vision. By dissecting a cow eye, students will see how an eye works. Comparing cow and human eyes will provide "insight" into differences and similarities among species. This program is customized for each grade level and is adapted to meet your class needs.

Duration: Premium 50-minute Classroom Program

Class Size: 15-30 students

Available at MNS or your school

TEKS: 8th Grade: 1a, 2ab, 3a, 4ab

Pump Up: The Heart 🦋

Explore the fascinating world of the heart through this hands-on guided dissection of a pig heart! Students will have an up-close encounter with real hearts as they learn about heart structure and function as well as the need to stay healthy. If you want students to learn about their heart, this program can't be "beat"! This program is customized for each grade level and is adapted to meet your class needs.

Duration: Premium 50-minute Classroom Program

Class Size: 15-30 students

Available at MNS or your school

TEKS: 8th Grade: 1a, 2ab, 3a, 4ab

Roller Coaster Physics! ✂

Have you ever wondered why you lose your stomach, don't fall out of your seat on loops and get stuck against the side of a roller coaster car while riding your favorite ride? Join us in building your own mini coaster to find out why you don't really need to wear a seat belt on roller coasters! Using Vernier data logging sensors, find out how much force it really takes to have some fun!

Duration: Premium 2-hour Classroom Program

Class Size: 15-30 students

Available at MNS only

TEKS: 8th Grade: 2ab, 3a, 4a, 6abc

Spend the Day with DNA ♦

Explore the fascinating and rapidly expanding world of forensic science as your students perform hands-on DNA isolation and separation using gel electrophoresis. Each student will have an opportunity to isolate a spool of actual DNA during the class, and applications of DNA technology such as criminal forensics and gene therapy will be discussed.

Duration: Premium 3-hour Classroom Program

Class Size: 15-30 students

Available at MNS or your school

TEKS: 8th Grade: 1a, 2abce, 3a, 4ab

StarLab 🌍

We will bring the stars to you with our state-of-the-art digital portable planetarium. Students will be guided through their discovery of constellations to the immense size of the universe. They will explore star movement, color and brightness, and learn how to locate stars and constellations. This program is well suited for both cultural and scientific studies.

Duration: 50 minutes

Attendance: 10 - 30 students (depending on students' age)

Requirements: large air-conditioned indoor room with dimensions of at least 25 ft. X 25 ft and 13 ft. overhead clearance; 110 V electric outlet

Available at your school only

TEKS: 8th Grade: 1a, 3abcd, 7ac, 8abde, 10a

Urban Nature Walk ♦

Join one of the Museum Naturalist for a guided walk in our own backyard! With the aid of field guides and binoculars, students will identify and learn about urban wildlife, explore various habitats and learn about the diversity of life within the confines of the Metroplex. This program can be adapted for all grades and helps to reinforce food webs, pond ecology, adaptations and biodiversity. The nature walk is available any season, please dress accordingly.

Duration: Standard 50-minute outdoor program

Class Size: up to 25 students

Available at MNS only

TEKS: 8th Grade: 1a, 2a, 11ab