



Tour: Longhorn STEM & History
Destination: Dallas & Ft. Worth, Texas
Itinerary: 6-days / 5-nights
Specialization: Biology, Ecology, Physics, Tech, Design, Space Science, History & Culture
Dates: Year-round

Longhorn STEM & History: Dallas & Fort Worth, Texas

Day	Morning		Afternoon		Evening	
1	Travel to Dallas, Texas, transfer to Hotel and check-in			Welcome, Safety & Orientation	Dallas Sightseeing Walking Tour	Welcome Dinner
2	Perot Museum of Nature & Science with specialized Master Class		Spark! Creativity + Workshop Program	Trinity River Audubon Center Naturalist Hike	Medieval Times Dinner Show	
3	AT&T Cowboy Stadium - STEM & Tech Stadium Tour	Texas Motor Speedway - Racing Physics Tour	Texas Christian University - Campus Visit	Monnig Meteorite Gallery at TCU	Dinner & Bowling / Main Event	
4	American Airlines CR Smith Museum OR Frontiers of Flight Museum at Dallas Love Field		Botanical Research Institute of Texas & Master Class Tour		Local Dinner	Free Time
5	The Herd: Stockyards Heritage Historical Walking Tour, Herd Demonstration, Texas Cowboy Hall of Fame & Cowtown Cattlepen Maze			JFK Historical Tour & 6th Floor Museum at Dealey Plaza	Farewell Dinner	
6	Depart Dallas-Fort Worth area for home					



As with all sample itineraries, please be advised that this is an 'example' of a schedule and that the activities and hotels shown may be variable dependent upon dates, weather, special requests and other factors. Itineraries will be confirmed prior to travel.



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 A Hammock Expeditions Company
 North Carolina, USA

P: 984.223.9866
 E: info@STEMstudytours.com
 W: www.STEMstudytours.com

Day 1

Dinner included

Travel to Dallas, Texas arriving in the late afternoon. After check-in, we'll have our **Welcome, Safety & Orientation meeting** and get settled in.

Dallas... "Dallas, the 'Big D', is Texas' most mythologized city, rich in the stuff of which American legends are woven. For a time, the eponymous TV series Dallas served to define the USA to the world, while the Cowboys and their cheerleaders remain iconic. Unlike many Texan cities, Dallas has avoided the boom-and-bust cycle of the oil industry, to the point where this is one of the country's fastest-growing metropolitan areas. There's money here a-plenty, and conspicuous consumption is very much the norm." – Lonely Planet



Everything you associate with Texas can be found in **Dallas – Fort Worth**. This is where you come to see the Dallas Cowboys play and the Fort Worth cowboys rope – where big hats, big hair and big horns are the norm. But stereotypes are just the tip of the DFW iceberg: The Metroplex is a hotbed of history, art, sports and family-centric exploits. You're going to love the time you spend in this warm-hearted Texas town. While some are still disappointed that Main Street isn't full of horses, the vast majority of tourists are pleasantly surprised to find a metropolitan city that is bursting with culture and pride. Add in more shopping malls than any other American city, an easy to navigate road network, and plenty of accommodation options, and you've got one of the hidden gems of American travel.

Sample Hotel: Springhill Suites Dallas Central Expressway – Settle in stylish accommodations with an all-suite hotel that seamlessly blends design and functionality offering the modern amenities to stay refreshed and focused. Located in one of the South's most charming cities, SpringHill Suites offers spacious suites with many amenities including free local high-speed wireless Internet access, outdoor swimming pool, a 24-hour fitness center and more. Room amenities include mini-fridges, microwaves, coffee makers, hair dryers and luxury bedding. Breakfasts are taken at the hotel. Students generally sleep 4 to a room sharing 2 queen beds; staff sleep 2 to a room.



After getting settled, we're off for a city tour to learn all about this amazing metropolis!



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Dallas Sightseeing Walking Tour - Discover Dallas' fascinating history, incredible architecture, and unrivaled charm in this 2-mile walk. Our journey starts at the West End Historic District, the oldest part of the city, where we will visit Dealey Plaza, the Old Red Court House, and Founders' Plaza to hear about the city's beginnings and its founder. Further down our route, we will visit the former Dallas Morning News headquarters, the famous Mobile Oil Pegasus and the spectacular Pioneer's Plaza which features larger-than-life bronze sculptures, a recreation of a Texas cattle drive with Texas longhorn steers being driven by three cowboys astride horses. We will walk through Main Street's incredible architecture and rich history, Tony Tasset's iconic Eyeball, The Adolphus, The Magnolia Building and the original Neiman Marcus. Finally, we will walk the Arts District, the largest of its kind in the USA. There is lots to see and experience in this area, from the city's most important art institutions to the incredible Klyde Warren Park. Put on your walking shoes!

This evening, we will have a welcome dinner and then the night is ours for exploration.

Day 2




Breakfast & dinner included; lunch on own

Rise and shine Dallas! Today we will be visiting the incredible Perot Museum of Nature & Science.

Perot Museum of Nature & Science - Known for its stunning features and eco-friendly design, the Perot Museum of Nature and Science is a jewel in the heart of Downtown Dallas. Learn about the solar system, build your own robot or go head-to-head in a race with NFL Running Back, Jamaal Charles. Once you're inside, you'll discover five floors that are packed with hands-on-activities, interactive kiosks, eleven permanent exhibits and a state-of-the-art 3D theater. From the fossil record to the expanding universe, your team will have a blast learning about the many different fields of science and technology.



While here, groups will also participate in a Master Class. Teachers will select one Master Class prior to travel. Current options are listed below but please understand that they are subject to change.

-  **AMUSEMENT PARK PHYSICS** - Learn how physics plays a role in our favorite amusement park rides. Students will examine a variety of forces in action, collect and graph data describing an object's motion, explore Newton's laws, and investigate conservation of energy. (45-minutes)
-  **BRAIN POWER: THE BRAIN DISSECTION** - Gain insight on basic brain anatomy and functions through this guided sheep brain dissection. Working in teams of four, students will uncover how the brain controls all our bodily functions and how a sheep brain compares to that of a human. Program includes one brain per four students. Additional brains may be purchased for \$20 each. (45-minutes)
-  **LOOK OUT: THE EYE DISSECTION** - During this guided dissection program, your students will work in pairs to gain a better understanding of vision by exploring the basic structures of a cow's eye, its connection to the brain, and how the parts of the eye work together. (45-minutes)



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- ✚ **PUMP UP: THE HEART DISSECTION** - During this guided dissection of a sheep's heart, students will work in pairs to learn about the structure and function of a mammal's heart, as well as how oxygen, nutrients, and hormones are transported throughout the body. (45-minutes)
- ✚ **DNA FINGERPRINTING** - Learn how scientists compare DNA samples using DNA fingerprinting. Students will use models to review the structure and function of DNA, gain experience using micropipettes and other laboratory equipment, and perform the separation techniques of paper chromatography and gel electrophoresis. (90-minutes)
- ✚ **CRETACEOUS PERIOD: LIFE AND EXTINCTION** - What can fossils and geological evidence tell us about Earth during the Cretaceous Period? This program utilizes paleontology conducted by the Perot Museum in Alaska and local fossils of dinosaurs and other life collected around Dallas-Fort Worth to reveal the ancient world. Through an experiment, students will investigate the possible cause of the terminal Cretaceous extinction. (90-minutes)

In the afternoon, we will visit Spark!

SPARK! Adventures in Creativity - SPARK! provides students with a fully immersive creative environment and hands-on learning that develops their self-definition as creative individuals. Strategically located in the sub-basement of the historic South Side on Lamar building near a large population of low-income families, SPARK! provides a fully immersive learning environment, layering a myriad of creative disciplines to spark the imagination, expand the mind, and engage the body. Through an endless roster of activities, students exercise their creativity and learn from creative experts, innovators, and artists. While here, your time is split evenly between instructor-led activity and free, unstructured play. Teachers select one program to participate in prior to travel. Current options include:



- ✚ **Design & Build a Vehicle Challenge** - Participants plan and test model vehicles using various materials and learn about force, motion, gravity, and energy while working on teams and creating original designs as a form of creative expression. Participants then review the parts of the scientific method and use it to test their vehicle and learn about independent, dependent, and controlled variables.
- ✚ **Roller Coaster Design Challenge** - The Roller Coaster Design Challenge inspires ingenuity by the combination of simple materials such as plates and flat wooden sticks with physics. Participants learn about force, motion, gravity, and energy while team working to design and build a roller coaster track for a marble. Through their roller coaster design, participants illustrate a creative expression and show original artwork.
- ✚ **Can Mirrors: Transform art designs through compressed reflections** - Create your own anamorphic art to explore how light travels in a straight line until it strikes an object and travels to one medium to another such as reflection in a mirror. Participants observe the many forms and patterns of energy and explore light as a form of energy that can be compressed and reflected onto another surface. Participants use recycled materials and exaggerated and morphed imagery to create original artwork that is compressed when mimicking a cylindrical mirror.

- ✚ **Constructing Thaumatrope** - Explore continuous streams of motion and illusions of motion with optical Illusions that operate by switching between two images so rapidly that the images appear as one image. This unit explores continuous streams of motion and illusions of motion. Participants learn that forces cause change and energy exists in many forms by investigating the phenomenon of persistence of vision. Create thaumatropes that go along with your unit or from the examples provided. Students will be able to do express-motion animation through their self-created art thaumatrope as an original artwork.

In the late afternoon we will travel to the Trinity River Audubon Center.



Trinity River Audubon Center Guided Hike – The Trinity River Audubon Center is a nature center in the Great Trinity Forest, a large urban open space park in Southeast Dallas. The center is your gateway to explore the amazing resources of the 6,000-acre Great Trinity Forest, the largest urban hardwood forest in the United States. Get to know a diverse community of plant and animal species and the unique mixture of bottomland hardwood forest, wetland, and prairie habitat. The center's 130 acres is a haven for a vast array of birds and other wildlife in an increasingly urbanized metropolitan area. While here we will

participate in a **Guided Hike** as we join a naturalist on an interpretive hike. Additionally, we will also participate in an **Animal Encounter**.

This evening, we're in for an amazingly fun night!

Dinner at Medieval Times – Travel through the mists of time to a forgotten age and a tale of devotion, courage and love—at Medieval Times Dinner & Tournament. Imagine the pageantry and excitement that would have been yours as a guest of the king ten centuries ago. That's exactly what you will experience at North America's most popular dinner attraction. See the electrifying show featuring heroic knights on spirited horses displaying the astounding athletic feats and thrilling swordplay that have become hallmarks of this unique entertainment experience. Enjoy a "hands-on" feast as the dynamic performance unfolds before you. A sweeping musical score and brilliant lights provide a fabulous backdrop for this spellbinding experience that blurs the boundary between fairy tale and spectacle!



Diners will enjoy Garlic Bread, Tomato Bisque Soup, Oven-Roasted Chicken, Spare Ribs, Herb-Basted Potato, Pastry and select beverages. Vegetarian options are available upon request.

Day 3

Breakfast & dinner included; lunch on own

Good morning Texas! Today, we will blend sports with STEM in some exciting ways! First stop – Cowboy Stadium, home to the Dallas Cowboys Football Team.

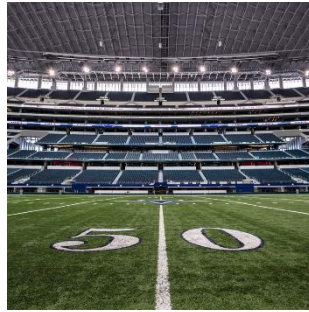
AT&T Stadium / Texas Stadium - AT&T Stadium is a retractable roof stadium and serves as the home of the **Dallas Cowboys of the NFL**. Completed in 2009, it is also the home to the Cotton Bowl Classic and the Big 12 Championship Game. The stadium can also be used for concerts, basketball, soccer, rodeos and motocross and Spartan races. The stadium is sometimes referred to as "Jerry World" after Dallas Cowboys



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owner Jerry Jones. The stadium seats 80,000, making it the fourth largest stadium in the NFL by seating capacity. The maximum capacity of the stadium with standing room is 105,000. The record attendance for an NFL game was set in 2009 with a crowd of 105,121. The stadium also has the world's 29th largest high definition video screen, which hangs from 20-yard line to 20-yard line.



Guided Stadium Tour - AT&T Stadium offers the world's largest lesson plan. While here, we will get a guided tour by an expert to learn about the architecture and the technology and electronics required in this massive facility. [VIDEO](#)

Next, we'll stop by Texas Motor Speedway.

Texas Motor Speedway: Guided Tour – Known as "The Great American Speedway," the 1.5-mile super-speedway plays host to three major series a year showcasing one of the most popular sports in the nation. America's second-largest sports and entertainment facility is home to BIG HOSS—the world's largest HD video board measuring 20,633 square feet, 218-feet wide and about 95-feet high. The stadium, which accommodates 200,000 fans, features more than 10 major racing series, including NASCAR and IndyCar Racing, in addition to year-round tours and championship driving schools. While here, your school will be taking a specialty tour to learn about all the facilities this racetrack offers. On your mark, get set, go!



Next up, we'll head over to Texas Christian University for a campus visit. If your preference is to tour a different campus, please just let us know.

Texas Christian University Campus Tour - TCU is a private Christian university established in 1873 by brothers Addison and Randolph Clark as the Add-Ran Male & Female College. The campus is located on 272 acres about 3 miles from downtown Fort Worth. TCU is affiliated with, but not governed by, the Disciples of Christ. The university consists of eight constituent colleges and schools and has a classical liberal arts curriculum. It is classified among "R2: Doctoral Universities – High research activity". TCU's mascot is Superfrog, based on the Texas state reptile—the horned frog. For most varsity sports, TCU competes in the Big 12 conference of the NCAA's Division I.



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TCU's mission is to educate individuals to think and act as ethical leaders and responsible citizens in the global community. This ideal is the continuation of a quest that began in 1869, when brothers Addison and Randolph Clark dreamed of creating a college where men and women could acquire a classical education and develop character. Within five years, enrollment swelled to 450 students and the Clarks and their spouses sold everything they owned to invest in a larger building. Through strategic planning, vision and generosity, TSU has created a campus that honors history and also looks towards the future. Today, the Horned Frog family is connected through over 90,000 living alumni and nearly 11,000 current students.

While on campus, we will go in search of special rocks....

TCU's Monnig Meteorite Gallery Tour - The Monnig Meteorite Collection is one of the largest university-based meteorite collections in the world. It is located in the Sid Richardson Science Building of TCU. Currently, the Monnig contains nearly 3,000 samples from more than 2,300 different meteorites, and the collection is constantly growing. While the Gallery is the public face of the collection, 95 percent of the samples are not on display and are used for education and scientific research.

Groups visiting will participate in a guided tour of the Gallery and each student will be given a workbook that they are expected to fill in as they travel through the exhibition. Tours will engage students in hands-on, minds-on activities, as they have the opportunity to trace the formation and breakup of planets, asteroids, and comets from which meteorites originated, explore their long journey through space and their fall to Earth, learn about their recovery, and discover the wealth of information they hold for scientists. Plan on a minimum of 1-hour.



After our full day, we will head off to **The Main Event for a dinner, bowling and fun!**



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Day 4

Breakfast & dinner included; lunch on own

Hello Dallas! This morning will be spent learning about aviation. Teachers have a choice between 2 options:

American Airlines CR Smith Museum Tour

The American Airlines C.R. Smith Museum is located on the campus of the American Airlines Flight Academy, which is situated at the southern end of DFW Airport and in close proximity to the world headquarters of American Airlines. During your "flight", your class will learn about the science and technology behind how airplanes fly, about the history of the largest airline in the world, and about the men and women responsible for helping passengers get safely to their destinations. Pilots and flight attendants are perhaps the most well-known careers related to the airline, but a visit to the Museum will reveal to your students an array of careers, interests, and skills necessary to care for people on life's journey and to maintain the airline's operations. From aircraft mechanics to ramp agents, from revenue managers to social media services, crew schedulers, and meteorologists, the airline operations rely on a large diversity of dedicated and passionate professionals.



Frontiers of Flight Museum at Dallas Love Field - The Frontiers of Flight Museum is an aerospace museum where students can experience the stories of aviation and space flight – from the Wright Flyer to the one-of-a-kind Flying Pancake; the Apollo VII spacecraft, 13 historical galleries, and over 35,000 artifacts. The Frontiers of Flight Museum is the perfect place to explore the history and progress of aviation as mankind continues to pursue going higher, faster and farther. [VIDEO](#)

Frontiers of Flight Master Class - While here, students will participate in a specialized Master Class: Emergency Mars Mission - Students form NASA mission control teams to plan a colonizing operation to Mars. Tasks include selecting launch dates, rocket type, and diverse crew members. Their mission is then tested against rigorous scenarios to determine the rate of success and survival.

In the afternoon, we will focus on research.

The Botanical Research Institute of Texas Master Class Tour - Ever have a desire to discover? By nature, that's who we are. At the Botanical Research Institute of Texas, you will find an international scientific research and learning center focused on conservation and knowledge sharing. BRIT and the Fort Worth Botanic Garden are pleased to offer workshops that focus on giving participants hands-on, experience-based education in the fields of plant and wildlife science, conservation, sustainability, and ecology. These unique classes and workshops (most featuring field investigations or lab work) enhance participants' prior education, offering the opportunity to assemble a new set of skills. Participants enjoy interaction with professionals in their field of interest. Sample class programs will be available, based on your specific dates, prior to travel.



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This evening, we'll have dinner locally and then free time for relaxation. Perhaps a quiz or contest, a night out, or even swimming at the hotel pool.

Day 5

Breakfast & dinner included; lunch on own

Rise and shine Texas! It's time to "Cowboy Up!" Today starts with a visit to the famed Fort Worth Stockyards.

The Herd: Stockyards Western Experience - The Texas Longhorn and the American cowboy are two of the most enduring symbols of the Old West. They're a big reason why Fort Worth earned the nickname "Cowtown." And they formed the core of the great cattle drives of the late nineteenth century. Now, the romance and mystique of cowboys and cattle drives returns to Fort Worth with The Herd - Texas Longhorns driven by genuine Texas cowhands - offering an unforgettable glimpse into the past. You'll hear the jingle of spurs, the cattle bawling, and the rhythm of the hoofbeats. As the Herd passes, a bygone era comes to life before your eyes every day. The "Western Experience Tour" allows groups to experience the **Fort Worth Herd Demonstration, Historical Walking Tour, Texas Cowboy Hall of Fame** and the **Cowtown Cattlepen Maze**.



As we wrap up our time in Texas, we will have one more prominent tour. We'll step back in time to 1963 to learn the facts about the nation's beloved President John F. Kennedy and his death here in Dallas.

JFK Assassination Historical Walking Tour - This tour delves into one of the most intriguing mysteries of our time: the world-changing assassination of President John F. Kennedy. We explore the facts and examine the incredible coincidences that culminated in the event that shocked the world. During our journey, your guide will revisit the events leading up to November 22nd, 1963 and beyond to provide perspective and new insight into this tragic, very human drama. This tour will visit the many places associated with the assassination and then the last stop will be at the Texas Theater where the "alleged murderer" was captured. At the end of the walk, you will head to the Sixth Floor Museum at Dealey Plaza. Collect your headsets and enjoy a self-guided tour.



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This evening, we will have our farewell dinner and then free time to explore any last interests.

Day 6

Breakfast (dependent upon departure times)

Good morning Dallas! After breakfast, it's off to the airport or coach-ride home. We're hoping that you are inspired and taking home wonderful memories that will last a lifetime! If you would like to add in any last-minute stops, simply enquire with your Ambassador who will make sure you are set up for success.



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Longhorn STEM & History: Dallas & Fort Worth

Minimum Booking Numbers:

20 students

What's Included:

Round-trip flights or motorcoach transfers
5-nights' accommodation
Breakfasts & dinners daily starting with dinner on arrival and ending with breakfast on departure (dependent upon departure time)
Transportation for programmed activities & airport transfers
Dallas Sightseeing Walking Tour
Perot Museum of Nature & Science + Master Class
Spark! Adventures in Creativity Master Class
Trinity River Audubon Center & Naturalist Hike
Medieval Times Dinner Theatre
AT&T Stadium / Dallas Cowboys – STEM & Tech Tour
Texas Motor Speedway – Racing & Physics Tour
University Campus Visit
Monnig Meteorite Gallery visit at TCU
Bowling Night at the Main Event or similar
American Airlines CR Smith Museum Tour **OR** Frontiers of Flight Museum & Master Class
The Botanical Research Center of Texas & Master Class Tour
The Fort Worth Herd Private Tour: Stockyards Heritage Historical Walking Tour, Herd Demonstration, Texas Cowboy Hall of Fame & Cowtown Cattlepen Maze
JFK Historical Walking Tour
Personal Tour Ambassador
Fund-a-Forest: A tree is planted in the name of each guest
Dollar\$ For Scholars: \$2 donation in the name of each guest
24-hour emergency cover

What's Not Included:

Fully comprehensive insurance (mandatory)
Transfers to/from home airport
Transportation for activities not shown in the itinerary
Lunches and other meals/snacks not shown in itinerary
Cost of visas, full or collective passports
Cost of inoculations or medication required for travel
Sightseeing / Entertainment Options not shown in Itinerary
Hotel incidental deposits & bills – meals, mini-bar items, recreation charges, purchases billed to room, etc.
Any gratuities – drivers, hotel services, dive instructors, boat captain and hand tips, ambassador

As always, our staff are always available to you to answer any questions you may have regarding programming.
If we may serve you in any way, please do not hesitate to contact us.



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